Family Stimulation Guide For Child Development

Claudie UNG Montaufray &
MD. MPH Piet De Mey

2/2/19

Cambodian DMAT

Contents

Acknowledgement 5
How to read the information on each page for potential child stimulation activities? 6
Symbols use in this guide when games - activities change for children with disabilities 6
Cambodian Developmental Milestone Assessment Toolkit (cDMAT kit 2019) 7
Social - personal domain (Milestones S1-S33) 9
S1: Look at face (start 0 month) 9
S2: Cry when appropriate 10
S3: Smile spontaneously (start 6 months) 11
S4: Smile responsively 12
S5: Brief interest in toy 13
S6: Observe object in each hand (start 9 months) 14
S7: Recognize its own hands 15
S8: Explore environment (start 12 months) 16
S9: React to play (start 18 months) 17
S10: Seek object fallen on floor 19
S11: Recognize stranger 23
S12: Anxiety to separate 24
S13: Play 'chab chaab' (start 24 months) 25
S14: Hold and drink from the cup 27
S15: Greet with hand clasp 28
S16: Play 'woh …vak-eu' (start 30 months) 29
S17: Indicate wants 30
S18: Imitate activities 31
S19: Use spoon (start 36 months) 32
S20: Ask to use toilet 33
S21: Point to 2 body parts (start 48 months) 34
S22: Comb hair with help (also S32: Comb hair without help) 35
S23: Put on simple clothes with help 36
S24: Parallel play without sharing (also S26 and S29) 39
S25: Wash and dry hand 40
S26: Play well with others (sharing) (start 60 months) (see S24 games) 41
S27: Tell own name and gender 43
S28: Name a friend 44
S29: Play kid games (team / waiting turns) (also S24: non-sharing; S26: sharing) 45
S30: Serve and eat own food (see game S19: eat with spoon) 46
S31: Put on T-shirt without help 48
S32: Dress without help (button-unbutton) 49

DRAFT

S33: Comb hair without help (see game S22: combing hair with help) 50

Fine Motor domain (Milestone F1-F32) 51

F1: Follow object to midline (≤90º) (also F2 & F5) (start 0 month) 51
F2: Follow object passed midline (>90º) (see game F1)..... 52
F3: Grasp big object 52
F4: Play with own body (start 9 months) 53
F5: Follow 180 degrees (see game F1: ≤90º) (start 12 months) 53
F6: Hands together 54
F7: Look at small objects (start 18 months)..... 55
F8: Reach for red string..... 57
F9: Rake lotus seed (1 out of 3) 59
F10: Put object in mouth (start 24 months)..... 60
F11: Take objects in each hand 61
F12: Transfer object between hands..... 63
F13: Thumb-finger grasp (start 30 months) 64
F14: Put block in cup 65
F15: Bang 2 objects together (start 36 months) 65
F16: Pincer grasp..... 67
F17: Tower 2 blocks (also F20: ≥4, F21: ≥6 blocks)..... 69
F18: Scribble with pencil 70
F19: Lift lid of container (start 48 months)..... 71
F20: Tower 4 blocks (see games F17: ≤2 blocks)..... 71
F21: Tower 6 blocks (see games F17: ≤2 blocks)..... 71
F22: Unscrew a jar 72
F23: Take off easy clothes 73
F24: Make string with 3 beads or more (start 60 months) 74
F25: Wiggle one thumb..... 75
F26: Imitate vertical line (<30º) 76
F27: Fold a paper..... 78
F28: Catch soft ball 79
F29: Zip and unzip pant or skirt 81
F30: Tie single knot..... 83
F31: Copy circle 84
F32: Copy square 85

DRAFT

Language / cognitive domain (Milestone L1-L33) 87

L1: Respond to noise (start 0 month) 87
L2: Make sounds 89
L3: Turn head to sounds 90
L4: Laugh aloud (start 12 months) 91
L5: Squeal 92
L6: Turn head to voice (start 18 months) 93
L7: Babble 94
L8: Respond to his name (start 24 months) 96
L9: Ma or pa (non-specific) (also L11: specific) 97
L10: Say play sound (start 30 months) 100
L11: Mak-paa-bong (specific) (start 36 months) 102
L12: One-step command 104
L13: Say 1 word beside “Mak-paa-bong” (also L14 & L17) 105
L14: Say 3 words (see game L13) 107
L15: Two step-command (start 48 months) 108
L16: Point to 2 of 5 pictures (also L21: 4/5 pictures) 109
L17: Say 6 words (see game L13) 110
L18: Speak half understandably (also L26: speak understandably) 111
L19: Name animal (at least 1 out of 5) (also L22: 4/5) 114
L20: Say a 3-word phrase 115
L21: Point to 4 of 5 pictures (see game L16) 115
L22: Name animals (4 out of 5) (see game L19) 116
L23: Know the use of 1 out of 3 objects (also L27 & L30) 117
L24: Three-step command (see game L15) 120
L25: Pick the longest line (3/3) 121
L26: Speak understandably (see games L18) 122
L27: Know use of 2 out of 3 objects (see game L23) 122
L28: Conversation 123
L29: Use pronouns correctly 125
L30: Know the use of 3 out of 3 objects (see games L23) 126
L31: Know 4 animal sounds 127
L32: Name 1 of the 6 colors 128
L33: Count 1 to 5 129

DRAFT

Gross Motor domain (Milestone G1-G31).....130

G1: Equal movement (start 0 month).....130
G2: Lift head (also G3: sideway, G4: ≥45° up) (start 6 months).....131
G3: Turn head aside when lying face down (see game G2).....133
G4: Head up 45 degrees (see game G2).....133
G5: Sit up steadily (≥2 seconds).....133
G6: Bear weight on legs (≥2 seconds) (start 9 months).....135
G7: No head lag when pulled to sit.....136
G8: Roll over (front to back).....137
G9: Chest up with arm support.....138
G10: Standing holding on (≥10 seconds) (start 12 months).....139
G11: Sit without support (≥10 seconds).....141
G12: Crawl (≥ 3 moves).....143
G13: Pull up to stand (≥ 2 seconds).....146
G14: Turn head and trunk in all direction.....147
G15: Getting to sit.....148
G16: Standing alone (≥ 2 seconds) (also G18: ≥ 10 seconds) (start 18 months).....149
G17: Take steps with holding (≥5 steps) (start 24 months).....152
G18: Stand-alone (≥10 seconds) (see G16 games).....153
G19: Walk alone (≥5 steps) (start 30 months).....154
G20: Stoop and recover (start 36 months).....156
G21: Run with good balance (≥2 m).....157
G22: Walk up (≥2 steps).....158
G23: Walk backward (≥2 steps) (start 48 months).....158
G24: Kick ball forward (start 60 months).....161
G25: Jump up with both feet together.....162
G26: Throw object overhand.....163
G27: Balance on each foot 1 second or more (also G29: ≥3 seconds).....165
G28: Jump far (> 20 cm).....166
G29: Balance on each foot for 3 or more seconds (see game G27).....167
G30: Hop on one foot (≥2 times).....167
G31: Heel-to-toe walk on straight line (≥4 steps).....168

Annex 1. cDMAT performance table overview.....169

Annex 2. cDMAT 2019 form.....173

Annex 3. Community Based DMAT (development delay monitoring).....175

DRAFT

Acknowledgement

This resource manual is based on the 'Blue Book' of Handicap International, widely used in Cambodia in the rehabilitation sector. This manual was a review of an already existing Khmer manual called the 'Yellow Book': **"PLAY ACTIVITIES FOR CHILD DEVELOPMENT"** and was developed first in site II camp for displaced Cambodians on the Thai-Cambodian border. It was written for parents of children with disability, as well as for the teachers of the Infant Stimulation Program, operated by the International Rescue Committee (IRC) in the camp.

We would like to acknowledge all the persons involved into the development of these tools such as:

"Yellow Book": Martha Seyler, Luc Delneuville, Mary Pengelley, Marcia Skiff, Amy Talbott, Sok Rem, Bou Phalla, Pok Samon, Cham Mala, Thai Vandi and Chheng Chhean.

"Blue Book": All the staff of CABDIC, Punya Droz, Chheng Chhean, Chan Nith, Chea Phearom Keo Veasna, Kim Phin Ry, Soy Sokhorn, Yeang Bun Eang, Tep Kallyan and Ly Vong Rith, Stephanie Hewett and Lieve Sabbe.

"Blue Box": Some of the resources have been also found in the Blue Box made available by Handicap International. It is a further edition of the blue book.

The development of this resource manual has been supported by the GIZ Improving Maternal and Newborn Care Project.

DRAFT

How to read the information on each page for potential child stimulation activities?

The second row shows from which month-cohort onwards at least 75%, 90% and 100% of the children manage to perform this milestone when they are well nourished and have no obvious disabilities. On the right, it also shows at which age one should start the assessment of the cDMAT with this milestone in order to expect 4 consecutive pass achievement. In case there are no 4 consecutive passed milestones at the start of the assessment in each domain, lower ranked milestones in that domain need to be checked, until there is a clean 4 consecutive passed milestones. It is then agree that lower ranked milestones (lower number) should be all passed, of course when there is no obvious functional limitation which can put this into question.

The third row refers to where to find the stimulation exercises in the Blue Book or Blue Box.

The fourth row explains the detailed steps on how the caretaker needs to prepare the games and activities.

The fifth and consecutive rows, when they exist, describes specific remarks to implement the activities when an impairment is suspected or diagnosed, marked in the left column by a symbol.

P25	P75	P90	P99+	P100	Check cDMAT starting from:
Month cohort	**Month cohort**	**Month cohort**	**Month cohort**	**Month cohort**	**Month cohort**
Testing procedure: The box on the left provides instruction on how to assess the milestone.			**Criteria:** The box on the right describes the criteria needed for the child to pass the milestone and which observation makes it fail.		
Stimulation exercise 1. Explanation of how to create the right conditions for obtaining the conducive play environment; 2. Description of the detailed stepwise explanation to play the simulation game.					
Symbol	**Specific concerns during stimulation of children with specific impairments**				

Symbols use in this guide when games - activities change for children with disabilities

	Adaptations for a child who obviously has some difficulties hearing		Adaptations for a child who obviously has some difficulties to control his body and movement
	Adaptations for a child who obviously has some difficulties seeing		Adaptations for a child who obviously has learning difficulties due to intellectual or mental limitations

Remember: Theses examples of stimulation exercises are made to provide some ideas on how the child can be stimulated to improve his/her developmental skills in a playful

interactive way with the family. With some imagination variations on these stimulation exercises can be created.

Remember: You are encouraged to refer the child for further diagnosis to a medical doctor at the referral hospital in order to evaluate whether the developmental delay is linked to an impairment for which there could be eventually other interventions beneficial.

Remember: In order to be inclusive, you need to ensure to assess which new skill gets the priority by the parents, caregivers, and the child:

1. Which milestone(s) would you like to see improved taking the child and parents' potential to participate into consideration:
   a. Which impairment affects the most the functioning of the child in its environment at this moment, based on your assessment and parents self-reporting?
   b. Which activity is the most important to the child at the moment of the assessment?
   c. What kind of physical, geographic-emotional environment affects the child live?
2. What are the characteristics of the family that would increase or decrease the child's capacity to likely achieve the milestone and catch gradually up with its overall milestone achievement?

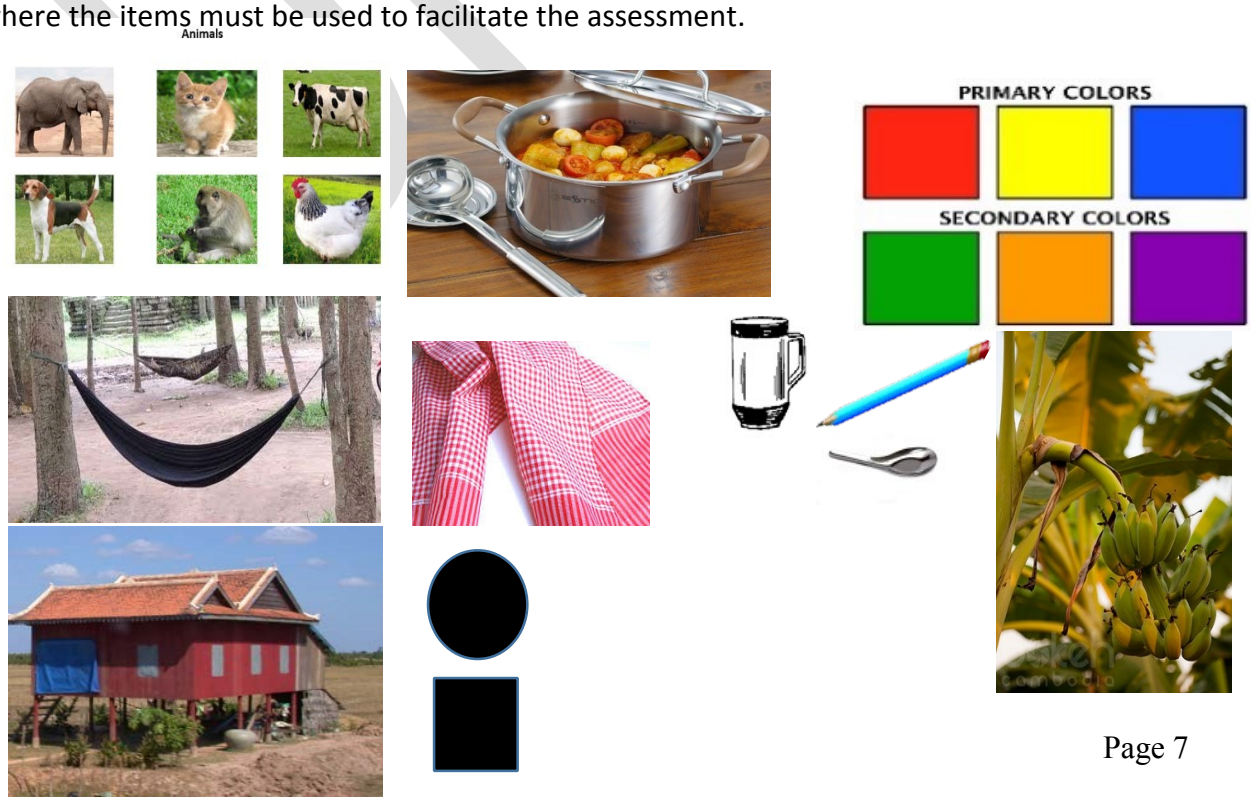
The assessment of the milestones is for both sexes (boys and girls). To make the instruction consistent and easy to read, the male pronoun ('he') and male possessive ('his') is used to mean both gender, except when girls are explicitly mentioned (e.g. ability to dress different clothes).

Children asked to participate in the study are often accompanied by their mother. However, they can be accompanied the children's caretaker, father, grandmother, legal guardian, or bigger brother; sister. To make the instruction consistent and easy to read, this manual refers to all of them as 'caretaker'.

Cambodian Developmental Milestone Assessment Toolkit (cDMAT kit 2019)

The physiotherapist should use the cDMAT kit when using the assessment tool. The kit contains various objects such as toys, papers and pencil that can be used to collect information and demonstrate the children's milestones.

The table below lists the items in the cDMAT kit and the corresponding milestone number where the items must be used to facilitate the assessment.



DRAFT

Items (objects)	Quantity	Purpose
Box with lid (35x35x30 cm)	1	Contains all the items in the kit
Container for big blocks/objects	1	
A4 papers	50	F19, F27, F31, F32 G28
Ball (soft, 10 cm diameter)	1	F28 G26
Beads with holes	10	F6, F9, F13, F16, F23 L33
Blocks (cubes)	10	S6, S10 F4, F10, F11, F12, F13, F14, F15, F17, F20, F21 L33
Chop sticks: short and long	2 sets	L25
Comb	1	S22, S33
Container with press lid	1	F18
Crayon or pencil (sharpened)	2	F19, F31, F32
Cup (small)	1	S14, F14
Jar with screw lid	1	F22
Light or bright colored object	1	F1, F2, F5
Lotus seeds (dry)	15	F6, F9, F13, F16 L33
Marbles	30	S29
Nylon string (30 cm, red)	1	F8, F30
Picture of 5 household objects	1	L16, L21
Picture of animals: cow, dog, cat, hen, duck	1	L19, L22, L31
Picture of circle and square	1	F31, F32
Picture of cup, spoon and pencil	1	L23, L27, L29
Picture of primary & secondary colors	1	L32, L37
Rattle (container with small items, beads, plastic houses)	1	S5, S10 L1, L4
Sharpener for pencil	1	F19, F31, F32
Shirt with button (gender neutral color, size 2-6 years old)	1	S32 F24
Spoon (kids size)	1	S19
String 1-meter	2	F23 G31
Tennis ball	1	G24, G26
T-shirt (gender neutral color, size 2-6 years old)	2	S31
Towel or cloth (small)	1	S27
Pant or skirt with Zip	1	F29

DRAFT

Social - personal domain (Milestones S1-S33)

This section describes the step-by-step procedure on how to assess Social/personal (S) milestones.

S1: Look at face (start 0 month)

P25	P75	P90	P99+	P100	check at
0	0	1	**2**	**(2)**	**0** month

1. Hold the child or put him on his back. 2. Ask the caretaker to look at her child about at 30 cm away from the child's face. 3. Observe the child.	**Pass:** child actually looks at the face by showing eye movements.

If Failed: Child should try the following games in the Blue Book:
Social milestones 2: recognizes mother: p. 20 English - p. 42 Khmer

Game 1: Look at Face

- Make sure the child spends a lot of time with his parents in loving situations.

Have his caretaker stroke, hug, speak kindly to him and look in his eyes.

	If the child cannot see, the caretaker or teacher should encourage him to touch his face (guide his hands) and speak to him.
	If the child cannot hear, the mother should look into his eyes, smile, touch, and stroke him. This is important to be repeated often, even as the child grows and can do other things.

DRAFT

S2: Cry when appropriate

P25	P75	P90	P99+	P100	check at
0	0	1	**5**	**(5)**	**6** months

1. Ask the caretaker if the child cries when he is hungry, in pain (discomfort), needs his diaper (cloth) changed.
2. Listen to caretaker's response.

Pass: caretaker reports that the child cries when feeling hungry or feeling discomfort.

If Failed: Child should try the following games in the Blue Book:
Cognition 1: cry when hungry or uncomfortable: p. 36 English - p. 76 Khmer

Game: Cry when Appropriate

- When the child cries, respond quickly with comforting actions such as talking softly, pulling him up, gentle touching, rocking and holding him close.
- Check the child to see if he is wet or soiled, and clean and dry him if he is wet.
- Smile at the child as you speak to him.
- If crying occurs when you think the child could be hungry, respond quickly and feed him.
- Whenever he smiles (when he's full, relaxed and comfortable), talk and smile at him. Always react positively to smiles, and speak in a friendly, pleasant voice.
- When the child fusses, give physical comfort, food, etc., as needed.

DRAFT

S3: Smile spontaneously (start 6 months)

P25	P75	P90	P99+	P100	check at
0	**0**	1	**6**	**(7)**	**6** months

1. Observe the child for smiling at you or the caretaker without any stimulation (no touch and no sound).
2. If the child does not smile, ask the caretaker 'Does your baby ever smiles at someone first, before being smiled at, talked to or touched?'

Pass: child smiles in response.

If Failed: Child should try the following games in the Blue Book:
Cognition 3: attracts people by vocalizing, smiling: p. 36 English - p. 76 Khmer

Game 1: Smile responsively

- In many different situations, stop playing with or talking to the child, but look and listen to him.
- As soon as the child makes any sound except crying, give your attention back.
- Give attention to the child quickly when he vocalizes (makes sounds).
- This helps him learn that his actions (making sounds) cause others to act (give attention). This is the first step to a child learning to speak.
- Smile when the child looks or smiles at you, and give him attention for a few minutes.

For a child with a difficulty seeing

- Always respond to smiles and sound with physical contact (hugs, pats, stroking) and kind words of encouragement.
- Be aware of other ways (body language) a child with a disability may indicate he wants attention, such as hand movements.
- Respond with attention each time so the child learns that he can be understood this way.

For a child with difficulty hearing

- Be aware of other ways (body language) a child with a hearing impairment may indicate if he wants attention, e.g. through hand movements.
- Respond with attention each time so the child learns that he can be understood this way.

For a child who has difficulty to control his body movements

- Smile when the child looks or smiles at you, and give him attention for a few minutes. For a child with a moving difficulty, this is very important, as he may not be able to speak or make sounds.
- Be aware of other ways (body language) a child with a disability may indicate if he wants attention, such as hand movements.
- Respond with attention each time so the child learns that he can be understood by this way.

DRAFT

S4: Smile responsively

P25	P75	P90	P99+	P100	check at
0	1	2	**6**	**(7)**	**6** months

1. Put the child on his back.
2. Interact with the child by smiling (or ask the caretaker to smile at the child) or making some vocal sounds-talking. Do NOT tickle or touch his face (no physical interaction).
3. Observe the response of the child to social interaction.

Pass: child smiles back at you or the caretaker in response to social interaction without physical stimulation.

If Failed: Child should try the following games in the Blue Book:
Social skill 2: smile when smiled at: p. 20 English - p. 42 Khmer

Game: Smile responsively

- In all situations, it is important to talk to the child, to smile often and to give plenty of affection by holding, stroking, and gently touching him.
- When he smiles, notice what you were doing that caused the smile and respond with happiness to the smile.
- Show the child that you like his smiling by giving a hug or a bounce, or by your words and voice.
- Speak to the child in a happy, active way, and use hand gestures that compliment what you are saying. If he smiles as you speak and gesture, touch him, return the smile and continue speaking.
- Always do this, even if the child cannot smile. This is important.

DRAFT

S5: Brief interest in toy

P25	P75	P90	P99+	P100	check at
1	3	4	**5**	**(6)**	**6** months

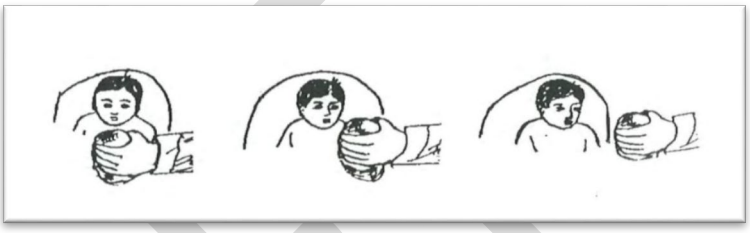
1. Show the child a bright colored toy (rattle).
2. Move the toy away from the child, slowly.
3. Observe the child.

Pass: child turns - pays attention to the toy and tries to follow the toy with his eyes when slowly moving it away from him.

If Failed: Child should try the following games in the Blue Book:
Vision milestone 1: looks at light or bright object: p. 99 English - p. 234 Khmer
Vision milestone 2: looks at bright, moving colorful object: p.100 English - p.234-235 Khmer

Game 1: Brief interest in Toy

- Put the baby or child laying on his back with his head centered.
- Hold an interesting object (silver ball, red wool ball, red flashlight, dark circle drawn on a white board, or small checkerboard) about 12 to 20 cm away from the child's eyes.

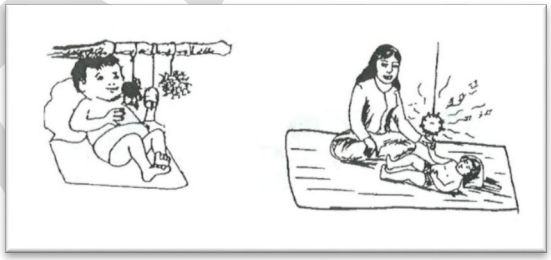


- Wiggle it gently to attract his attention.
- Repeat with a different object.
- When the child looks at a toy for three seconds or longer, three out of five times with different objects on two days, go on to another activity.

Game 2: Brief interest in Toy

Give the child many things to look at.

- If he is lying on his back, hang objects close enough so he can see them clearly. Make them brightly colored and able to move and perhaps even to make noise.



- Always make sure the child has something to look at, whatever position he is in. Use pictures, especially smiling faces.
- Babies like red-colored things.
- It is important for babies and children to have objects around that are easy to see and interesting.
- Take the child out of the house and show him the animals, flowers and children at play. Talk about the things he is seeing. If possible, let him touch, smell and hear them as well. This is important for all children.
- Hang pieces of brightly colored cloth with string. Blow at them so that the child can watch their movements.

- If the child has a difficulty seeing, hang objects that have different textures, and make different sounds, so that they touch or are very close to the child's head, hands or feet.
- Guide the child to move his body to get sound from the objects, as you tell him about the objects and encourage him to touch them.
- **These activities can help children with sight limitations** to learn about the world around them through touching.

DRAFT

S6: Observe object in each hand (start 9 months)

P25	P75	P90	P99+	P100	check at
2	4	5	**6**	**(7)**	**9** months

1. Give a bright colored toy (rattle) to hold in right hand.
2. Observe the child if he looks at the toy carefully (examine)
3. Remove the toy from the child's right hand.
4. Repeat 1-3 with left hand.

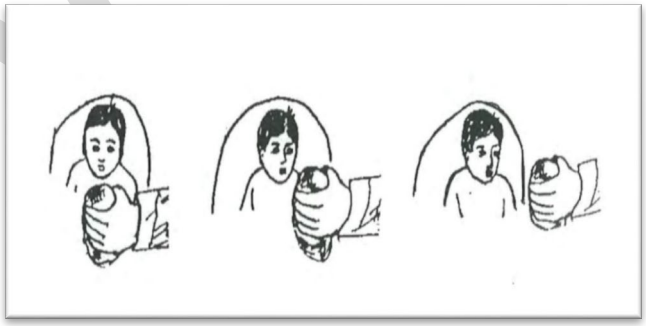
Pass: child looks at the object in each hand at least briefly (about 5 seconds).

If Failed: Child should try the following games in the Blue Book:
Fine Motor milestone 1: grasp object placed in hand: p. 112 English - p. 256 Khmer
Vision milestone 1: look at light or bright object: p. 99 English - p. 234 Khmer

Game 1: Observe object in each hand

- **A baby is usually born with a grasp reflex,** which means that when you place an object or your finger in the palm of his hand, the baby will close his hand tightly around the object.
- By 6 months of age, this reflex that most babies are born with will gradually lessen and be replaced by movement controlled by the child. At birth, when the child grasps objects, he cannot release them.
- As he develops and the reflex fades, he will be able to grasp and release objects.
- Provide him with a toy with sound and color and let him follow it with his eyes.

Game 2: Observe object in each hand



- **To increase the child capacity to observe the object, put the baby or child laying on his back with his head centered.**
- Hold an interesting object (silver ball, red wool ball, red flashlight, dark circle drawn on a white board, or small checkerboard) about 12 to 20 cm away from the child's eyes.
- Wiggle it gently to attract his attention. Repeat with a different object.
- When the child looks at a toy for three seconds or longer, three out of five times with different objects on two days, go on to another activity.

DRAFT

S7: Recognize its own hands

P25	P75	P90	P99+	P100	check at
1	3	6	**7**	**(8)**	**9** months

1. Put the child on his back.
2. Bring his hands in front of his eyes.
3. Observe the child's hands and eyes.
4. If the child doesn't do it by himself, bring the hands in front of his/her eyes.
5. If you do not observe it during the test, ask the caregiver whether he observed him doing so.

Pass: child looks at his own hands for at least 2 seconds.
Fail: when the hands move and the eyes do not follow accordingly

If failed: repeat the assessment several time a day

Game: Recognize own hands

During the first stage of fine motor development**,** the child moves his arms actively.

- Place the child in a comfortable position where he can easily see what is in from of him and make sure his arms are free to move.
- Attach an attractive, shiny or colorful object making noise around his wrist.
- Notice whether the child's arms begin to move or wave. Make sure the child is looking at it. As the child waves his arms, make sure he is looking at it.
  If the child looks at the object but he doesn't move his hand in front of his face, give his arm some guidance.

For the child with a difficulty seeing:

- Search for objects that attract attention and make noise. Hang them close and help him locate the object by its sound.
- It is important to talk all the time about what you are doing with various objects, and to physically guide him in using the objects as you do.

For a child with moving difficulties:

- You may have to do most of the playing while talking about the activities and giving him physical help to do as much as he can.

For a child with problems moving:

- Try placing him on his side so he has one arm free to move.
- Help him gently to touch the object, unless he is too stiff. In that case, use relaxation exercises that the physical therapist can teach you before trying to do this activity.

DRAFT

S8: Explore environment (start 12 months)

P25	P75	P90	P99+	P100	check at
1	4	5	**7**	**(8)**	**12** months

1. Put the child on the floor.
2. Observe if the child moves around and is looking or taking something.
3. If the child does not respond, ask the caretaker if the child is moving around at home exploring his environment 'laphuk' (always observing things around him <u>and</u> moving around <u>and</u> taking things).
4. Observe the child or report the caretaker's answer.

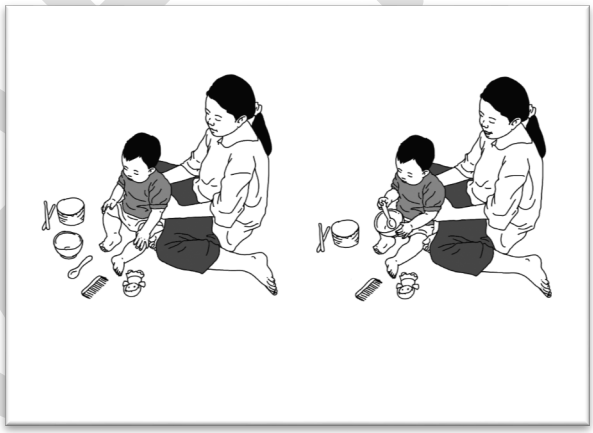
Pass: Caretaker says that the child is 'laphuk' at home and at other places.
Fail if one or more of the three conditions fails: observe, move around and take

If Failed: Child should try the game in Blue Box T7 learning to think and solve problem

What?

- At some point, children start being more mobile. They have more freedom to explore the environment and to learn that their actions have effects on the environment. This is normal behavior.
- Children want to smell, taste, touch, turn down, and shake everything around them. That's how they learn.

How?



- Show the child that an action can provoke an effect. For example, take a spoon and hit a pan with it in order to make noise.
- Then, give the child the objects and look if he understood that "hitting with a spoon on the pan" makes noise.
- Encourage him to hit stronger to make more noise.
- Create an environment where the child has lots of opportunities to explore.
  Make sure dangerous things are out of reach, but lots of interesting things are at reach.
- There is no need for expensive toys, just lots of different elements to give the child opportunities to explore: cardboard boxes, pieces of tissue of different textures, bowls with sand or dry rice, egg cartons, empty plastic bottles filled with some pebbles to make noise, etc.
- Children love mirrors and shiny things such as pieces of tin foil or metal spoons.

- A child that has difficulties to move still needs to explore and control his environment.
- If the child is not very mobile, you have to make sure there are interesting things to play with at reach.
- Think about the position: if the child is in a position where he can hardly see anything nor use his hands, he cannot really explore.
- Try side lying and sitting the child on your lap or in a seat where he can keep a stable posture.
- Remember that even if the child doesn't move a lot, he still needs to play, explore and change the environment.

DRAFT

S9: React to play (start 18 months)

P25	P75	P90	P99+	P100	check at
1	4	6	**8**	**(8)**	**18** months

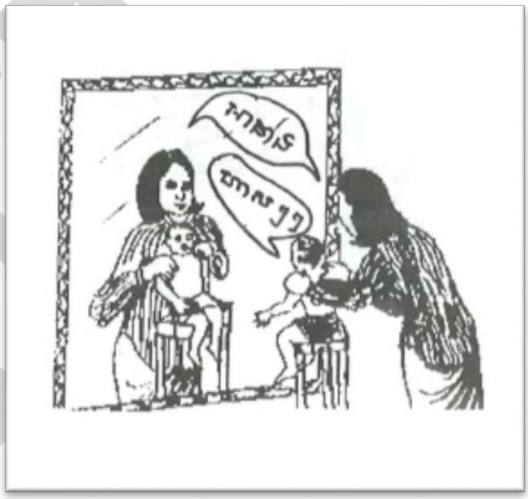
1. Interact with the child or have the caretaker interact with the child as if playing, for example, by tickling him or by other form of physical contact.
2. Observe the child's interaction.

Pass: child plays with the parents by moving his body in response to playing together.

If Failed: Child should try the following games in the Blue Book:
Social skill 5: like to be played with by adults: p. 21 English - p. 45 Khmer

Game 1: React to play

- **Place a mirror in front of the child, so he can see himself, but not you.**
- Observe the child's reactions.
- If the child does not smile when seeing himself, do something with him in front of the mirror that makes him smile.
- Tickle, play peek-a-boo or look into the mirror, so he can see your smiling face.
- Observe the child's response.
- Take the mirror away for a few seconds and repeat the activity.
- Make this a game.
- Do it until the child smiles two or three times when he looks in the mirror on three different days.



Game 2: React to play

- **Put the child in a relaxed position where he can see your eyes easily (good eye contact).** Play simple games.
- When you play, your first goal is to get the child to laugh or smile.
- After he is used to smiling, try to get him more actively involved.
- Some good games are: peek-a-boo, or walking your fingers up his body and then tickling him.

DRAFT

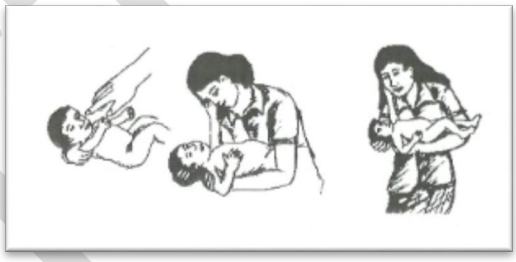
Game 3: React to Play

- **Sing songs that have actions the child can learn to anticipate and get excited about.** For example:

Where is …….. (Child's name)? 2x
Look for the child.
There is …….. (Child's name)? 2x
Point at the child.
How are you today (name)? 2x
Very well, thank you. 2x
Come and play. Gesture come.
Come and play. Clap your hands.

Game 4: React to play

- **Use your fingers to play with the child.**
- Touch him, play with his fingers, hide fingers, and hide hands.
- Let the child play with your fingers.
- Bulge out your cheeks and purse your lips.
- Let the child feel your face.
- Do these activities daily until the child laughs and smiles each time you play these games and sing songs.



DRAFT

S10: Seek object fallen on floor

P25	P75	P90	P99+	P100	check at
3	4	6	**9**	**(12)**	**18** months

1. Show the child a toy (rattle).
2. Play with the toy and draw the child's attention to the toy.
3. While keeping his attention, slowly move it away and let it drop on the floor.
4. Observe the child.
5. Repeat the action 2 more times.

Pass: child seeks the toy after you have dropped it on the floor (try at least 2 times).

If Failed: Child should try the following games in the Blue Book:
Cognition 8: Looks for objects taken out of sight: p. 39 English - p. 85 Khmer
Cognition 11: Looks for objects taken out of sight: p. 42 English - p. 91 Khmer

Game 1: Seek object fallen on Floor

- **Play with the child using some things he likes, for example a ball, rattle, blocks or food.**
- While he is looking, take something and move it behind your back. Ask him, "Where did it go?"
- See if the child looks for the object behind your back or tries to pull your arm in front.
- If the child does not look for the object, bring it back into sight and say, "Here it is!", and let him play with it for a while.
- Repeat this until he looks for the object when it is taken out of his sight.

Game 2: Seek object fallen on Floor

- **Play with the child the same as in game 1 but using a table, bed or chair.**
- As he looks, take something he has been playing with and move it to the edge of the table, bed or chair. Then take the object over the edge, down and out of the child's sight.
- See if the child searches for the object, points or uses his eyes to show you he knows where it is.
- If the child does not look for the object, bring it back into his sight and say: "Here it is!", and let him play with it for a while.
- Repeat this until he looks for the object when it is taken out of sight.

DRAFT

Game 3: Seek object fallen on Floor

- **Hide a toy or food under a cover while the child is watching.** When he uncovers it, place a second cover close by the first cover.
- Take the toy and cover it under the second cover while he is watching. If the child looks under the first cover say, "Oops! Where is it?" Encourage the child to remove the other cover. If he does not, you do it to show the child where the toy is and say, "There it is!".
- Repeat the entire game until the child can find the toy under the second cover. Change the side you place the second cover on.
- Try to make the covers similar in shape so he cannot see which cover is on the toy by the shape.

Game 4: Seek object fallen on Floor

- **Vary this game when the child can find the toy easily under the second cover.**
- Start with two covers and place the toy under one of them.

Say "Where did the ……. go?

- When the child uncovers it, say: “There it is!"
- Then hide the toy under the other cover and play again.
- Keep alternating which cover you use to hide the toy. Let the child play with the toy each time he finds it.
- When the child finds the covered toy easily, go to the next exercise.

Game 5: Seek object fallen on Floor

- **Put one cover in front of the child.** Show him a small object then close your hand over it. Slide your hand under the cover and release the object. Show him your empty hand and say, "Where did it go?"
- Let the child look until he figures it out. Encourage and praise him.
- If the child is successful, put a second cover in front of him. Show the object again and close your hands on it. Put your hand under the first cover, then take it out and put it under the second cover. Sometimes the toy is left under the first cover, and sometimes under the second cover. This makes the game more fun. Encourage the child to keep searching if he

looks under the wrong cover. Help him as necessary. When the child can find the toy under one of the 2 covers for 3 times during 2 different sessions, go to the next activity.

- Another **variation is to add another cover so the child finds the object hidden under one of 3 covers while he watches.** If the child doesn't find the object, encourage him to keep looking and help him if necessary. Praise him each time he finds the toy or food and let him play with the toy or eat the food. When the child can do this activity 3 times a day for 3 days, go to the next activity.

Game 6: Seek object fallen on Floor 6
Put 3 covers in front of the child.

- While he is watching, put an interesting object under the cover on the child's left.
- Take the object out from under the cover and let the child see it.
- Then, put it under the second cover.
- Take it out as before like in exercise 5
- Last, put it under the third cover then say, "There it is!"
- When the child can find the hidden object 3 times a day for 3 days, go on to the next activity.

- Another **variation of finding the hidden toy or food is to cover the object with 3 covers while the child is watching.** Allow the child to remove all three covers until the object is found.

- Use different objects and covers to make the game interesting. If the child does not retrieve the toy, repeat your action by covering the toy and explaining that you are hiding it for the child to find.

Show the child how by moving one cover at a time saying, "Is it under here? No. Is it here?" and so on until the third cover then say, "Here it is!". Give the child physical guidance as needed to remove the three covers.

- When the child can find the toy hidden under 3 covers for 3 times in 3 days, go to the next activity.

Game 7: Teach the child to solve other simple problems, such as how to get objects or toys that have been dropped through a hole in the top of a container.

- First, take a container with a hole in the top and drop one or more object into it, saying: "Where did it go?"
- Wait to see if the child puts his hand in and gets it or dumps it out.
- If the child does not seem to realize that he can get it out, show him how and repeat the game. For other versions, use a box with a whole cut out and put a toy inside, or a box with a cover that can be closed.

DRAFT

	For a child who has difficulty seeing, • Teach the child to solve other simple problems, such as how to get objects or toys that have been dropped through a hole in the top of a container. Toys and containers should be large and colorful. The child should be guided to feel the box. Perhaps put one of his hands on the bottom so he can feel the toy as he drops it into the box. • First, take a container with a hole in the top and drop one or more object into it, saying, "Where did it go?". Wait to see if the child puts his hand in and gets it or dumps it out. • If the child does not seem to realize that he can get it out, show him how and repeat the game. For other versions, use a box with a whole cut out and put a toy inside, or a box with a cover that can be closed.
	• **A child with difficulties moving** may have to learn by observing and hearing the teacher talk about what is happening. • Help him do as much as he is able, but never force stiff-arms and hands. • **If the child has a problem moving**, see if he can point or use his eyes to show you he knows where the thing has gone. • First, take a container with a hole in the top and drop one or more object into it, saying, "Where did it go?". • Wait to see if the child puts his hand in and gets it or dumps it out. If the child does not seem to realize that he can get it out, show him how and repeat the game. For other versions, use a box with a hole cut out and put a toy inside, or a box with a cover that can be closed

DRAFT

S11: Recognize stranger

P25	P75	P90	P99+	P100	check at
1	8	11	**12**	**(12)**	**18** months

1. Take the child in your arms and smile at him for about 10 seconds.
2. Observe the child's mood.
3. When he is distressed, give the child back to his caregiver.
4. Observe the child mood change.

Pass: child starts to cry, appearing to be in distress when you hold the child and stops crying when you give him back to his caregiver.

If failed: Child should try the game in Blue Box T5 Learning to think and Solve problem

What?

- Children recognize quickly the faces of familiar people (his relatives: parents, siblings, neighbors…) and routine objects used for and-or on him (examples: baby bottle, toy, towel, etc.).
- This stage of recognition is important to make the babies manage to link an object to an action or a person to a behavior.

When?

- During play times, when he is awake and alert.

How?

- Spend a lot of time with the child looking at him, talking to him, singing for him to make him get used to your face and your voice.
- Try to be consistent. Consistency means doing things more or less in the same fashion every day, repeating the same words, using the same objects.

This is important as it helps the child to understand the world around him and feel secure.

- If the child has a lot of caregivers (in a center or orphanage), it is positive if there is one or two that act as primary caregivers; and that all of them try to do things in more or less same fashion.
- Observe the reaction of the child. It is a good sign if the child reacts differently to people (happier when he's with his main caregiver). It is a sign of "attachment".

DRAFT

S12: Anxiety to separate

P25	P75	P90	P99+	P100	check at
1	8	12	**13**	**(13)**	**18** months

1. Ask the caretaker whether her child cries when he is separated from a familiar person and stays alone with a non-familiar person. 2. When the caretaker is not sure, at the end of the milestone assessment, ask the caretaker to leave briefly while you hold the child in your arms. Make sure that the child sees the caretaker leaving. 3. Observe the child's reaction.	**Pass:** child cries when the caretaker leaves briefly and stops crying when the caretaker returns. **Fail:** child continues looking around and/or playing in a relaxed way
If Failed: There is no need for exercise for this milestone	

DRAFT

S13: Play ‘chab chaab’ (start 24 months)

P25	P75	P90	P99+	P99+	check at
5	10	13	**14**	**(22)**	**24** months

1. Ask the caretaker to play ‘chab chaab’ with the child (open and close his hands in front of the child like grabbing the air). 2. Observe the child’s reaction.	**Pass:** child starts to play ‘chab chaab’ with the caretaker opening and closing his hand (at least once) as the caretaker.

If Failed: Child should try the following games in the Blue Book:
Social milestone 6: uncovers partially hidden objects: p. 22 English - p. 48 Khmer
Social milestone 8: copies simple actions: p. 24 English - p. 54 Khmer

Game 1: Play Chab Chaab

- **Start with an action the child already does on his own.** Get his attention. As you talk and play with the child, copy a simple action or sound you see him do. Make sure he is watching you. Exaggerate the movements or sounds.

- If the child imitates you, smile and pat him, and show that you are pleased. If he does not imitate you, try to guide him to do the activity. Smile and praise him even as you help him. When he makes the action or sound again, copy him.
- When the Child can imitate a familiar movement most of the time, go on to the next activity.

Game 2: Play Chab Chaab

- **Make sure the child is facing you.**
- Play with him using hand gestures with words. E.g. when saying "up", reach for him. When saying "bye", wave. When it is time to get the child up, say, "Do you want to get up?"
- Help him hold his hands up, then praise him and lift him up. For "bye-bye" guide the child's hand to wave.
- As he learns, gradually reduce the amount of assistance you give.

- Go to the next activity when the child can use the correct gestures for "up" and "bye-bye" without help.

Game 3: play Chab Chaab

Play with the child as above with an imitation game, getting him to imitate some familiar movement.

- Introduce a new movement, saying, "Now do this". If the child does not imitate, show the action again and physically help him do it.
- Respond by laughing, praising or doing whatever is pleasing to him. Use natural gestures and pair them with words like "bye-bye", "eat", "drink", "up". Sometimes a mirror focuses the child's attention on both your action and his own.

DRAFT

	• In order to imitate what someone is doing, you have to be able to observe that person. For a child with limited vision, we need to help him to observe by touching the other person performing the task, so he can also learn. • Try not to forget any action. For instance, if you cross someone you know in the street and you wave “hello”, a child that can see will see you and probably imitate the same gesture. But the child that cannot see has not seen you waving “hello”, so you need to explain to him and help him do the movement with the hand.
	• If he has a difficulty hearing, use hand signs and talk as you play until he can do the action when you use the gestures and signs.

DRAFT

S14: Hold and drink from the cup

P25	P75	P90	P99+	P100	check at
9	12	14	**17**	**(20)**	**24** months

1. Pour water into a cup.
2. Ask the child to drink the water.
3. Observe the child whether he holds the cup himself with one or 2 hands and drinks without spilling.
4. If he does not want to drink, ask the caregiver whether he can drink alone from a cup? Does he usually spill?

Pass: child is able to use the cup to drink without spilling.

If Failed: Child should try the following games in the Blue Book:
Self-Care milestone 6: holds and drinks from cup: p. 160 English – p. 397 Khmer

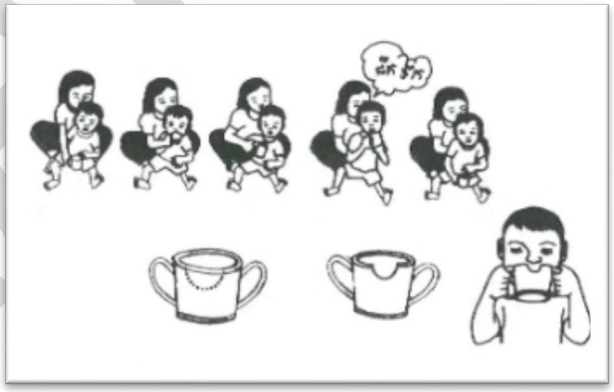
Game: Drink from the cup

To teach the child to hold and drink from a cup

- Get him in a comfortable sitting position.
- Put a small amount of water in a cup and give it to him when he is thirsty.
- Gradually give less help as the child learns to drink by himself.
- Praise his efforts.

If he cannot hold the cup and bring it to his mouth to drink:

- Help him by placing both of his hands on the cup and guiding him to bring the cup to his mouth.
- Then guide the cup back to the table.



DRAFT

S15: Greet with hand clasp

P25	P75	P90	P99	P100	check at
7	12	16	**18**	**(27)**	**24** months

1. At the start of the assessment, ask the caregiver to tell the child to greet you using the Khmer traditional, respectable way by saying 'chumriep suə' while his hands clasped together. The caregiver cannot physically put the child's hands together, but he can demonstrate it using the own hands.
2. Observe the child.
3. The caregiver can also ask him to handclasp when he receives something as a thank-you gesture.
4. The caretaker can also ask him to handclasp when he goes away as bye-bye gesture.
5. If the child does not do either one of the three situations, you can ask the caretaker whether he does it on its own in other occasions.

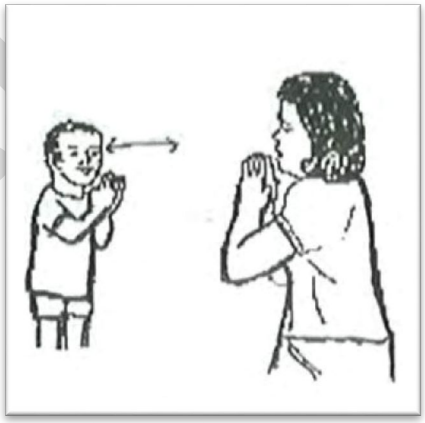
Pass: child is obedient and on request puts his hand together to greet ('chumriep suə'), to thank or to say goodbye. Hand clasping in any of the three situations passes.

Fail: when the caregiver physically needs to put his hands together

If Failed: Child should try the following games in the Blue Book:
Social skill 20: Uses polite expressions: p. 31 English – p. 72 Khmer

Game 1: Greet with hand clasp

- **Encourage the child to follow the customs of your community.**
- Help him "sompeah" (putting hands together in a prayer fashion) when the child meets or leaves people, or shows his thanks.
- Praise the child for doing this even if you have to help him.
- Do these actions to him to show him the way you want him to act toward others.



DRAFT

S16: Play 'woh …vak-eu' (start 30 months)

P25	P75	P90	P99+	P100	check at
8	11	17	**19**	**(22)**	**30** months

1. Play peek-a-boo ('woh…vak-eu') with the child or ask the caretaker to do so.
2. Cover your face with a cloth or your hands and say 'woh'.
3. Remove the cloth and say 'vak-eu'.
4. Observe the child whether he plays along with you or laughs or moves his arms and legs in excitement.

Pass: child react to you playing peek-a-boo by laughing, moving his arms and legs or he is able to play along with you.

If Failed: Child should try the following games in the Blue Book:
Social skill 5a: likes to be played with by adults: p. 21 English - p. 45 Khmer
Cognition 6: uncovers partially hidden object: p. 37 English - p. 79 Khmer

Game 1: Play Woh-Vak-Eu

- **Put the child in a relaxed position where he can see your eyes easily (good eye contact).**
- Play simple games. When you play, your first goal is to get the child to laugh or smile. After he is used to smiling, try to get him more actively involved.
- Some good games are: peek-a-boo, or walking your fingers up his body and then tickling him.

Game 2: Play Woh-Vak-Eu

- **Play a game with the child when he is looking at you, place a cloth over his face and say, "Where's the baby?".**
- Wait **long enough for him to take the cloth off his face by himself.**
- If the child does not pull off the cloth, remove it and say, "There you are!". Watch to see if the child tries to remove the cloth, and then help. As he gets the idea and is able to do more himself, decrease your help.

Game 3: Play Woh-Vak-Eu

- **Play the same game but put the cloth over your own face and say "Where is ... (your name)?".**
- Pause to give the child time to pull off the cloth. If he does, say, "Here I am!" If he doesn't, remove the cloth yourself and smile as your face appears.
- Then cover your face again.
- Help the child if he attempts to remove the cloth but has difficulty. When he can do more himself, decrease your help.

DRAFT

S17: Indicate wants

P25	P75	P90	P99+	P100	check at
9	13	16	**17**	27	**30** months

1. Ask the caregiver if the child usually tells whether he needs something or needs the caretaker's attention. For example, does the child put his arms up in a way indicating that he wants to be picked up?
2. If the caregiver says yes, ask whether the child does express his needs and wants by pointing and/or saying?
3. Also observe during assessment whether the child indicates wants.

Pass: child is able to say or pointing to indicate what he wants, e.g. the child puts his arms up when he wanted to be picked up.

If Failed: Child should try the following games in the Blue Book:
Cognition 9: indicates wants by gesture: p. 40 English - p. 87 Khmer

Game 1: Indicate wants

- Teach the child to indicate what he wants by using **gestures.** When giving toys or food to him, say, "Do you want it?" or a similar phrase, and hold the object where he can see it but not reach it.
- Watch for some indications that the child wants the object; for example, a reaching motion or some movement toward the object with his head or feet if reaching is not possible.
- If necessary, physically guide him to make some gesture like pointing or head nodding toward an object before giving it to him. Be sure to praise any visible attempts the child makes to indicate his desire for something.

Game 2: Indicate wants

- Teach the child to indicate what he wants by **vocalizing** (making sounds). When you are playing with him, place desired objects or toys out of reach where they can be easily seen or heard.
- When the child gives his attention to an object, say or use signs for, "What do you want?".
- The child must make a sound other than a fuss or cry. When he does, give him the object.
- The child will have learned this when he has indicated that he wants three different objects by vocalizing on three different days.

DRAFT

S18: Imitate activities

P25	P75	P90	P99+	P100	check at
9	14	19	**22**	**(30)**	**30** months

1. Ask the caregiver if the child imitates activities around the house, e.g. sweeping, preparing food, talk on telephone.
2. If possible also document when observed.

Pass: caregiver reports that child imitates.

If Failed: Child should try the following games in the Blue Book:
Social skill 12: copies adult behavior in play (not well): p. 27 English - p. 63 Khmer
Social skill 17: copies adult work in play: p. 29 English - p. 68 Khmer

Game 1: Imitate activities

- **When the child plays, he will imitate what he has seen adults do** such as sweeping, putting on hats, shoes or clothes, wiping with a cloth, or pretending a doll or animal is a baby and taking care of it (put it to bed, clean it, and talk to it).
- If a child does not do any of these types of activities, take an object that can be used for "pretend adult activity" and show him what might be done with it.
- Talk about what you are doing, and make it fun!
- Encourage him to imitate.
- If the child does not imitate, physically guide him to imitate as you talk about what you are doing.
- For example, if you have a doll, pretend to put it to bed.
- Guide the child's hands to hug the doll as you say, "Baby, it's time to sleep now".
- Guide him to put the doll down and pat it, saying, "Good night".
- Use your imagination in this type of play.
- Talk to the doll, take it for pretend rides, gives it kisses and praise.

Game 2: Imitates Activities

- **Encourage children to play "shop, house, school, health center" and other make-believe games**, in the style like the above game.

For the child with a difficulty seeing,
- It is important to talk all the time about what you are doing with various objects, and to physically guide him in using the objects as you do.
- E.g. if some water spills, tell him so, and say, "We must wipe up the water".

For a child with a difficulty moving, you may have to do most of the playing while talking about the activities and giving him physical help to do as much as he can.

DRAFT

S19: Use spoon (start 36 months)

P25	P75	P90	P99+	P100	check at
12	18	20	**26**	**(30)**	**36** months

1. Ask the caregiver if the child is able to eat soup alone with a spoon.
2. Ask caregiver how much he usually spills.

Pass: child is able to use a spoon to eat. It is acceptable if the child spills less than half of the food.
Fail: child spills more than half of the liquid.

If Failed: Child should try the following games in the Blue Book:
Self-care milestone 7: eats with spoon: p. 161 English - p. 398 Khmer

Game: Use spoon
To teach a child to feed himself with a spoon.

Check that the child can move his hands from the plate to his mouth. Use his favorite foods when you start, such as biscuits, peanuts, rice, etc. Try to do the following exercises every feeding time.
Place the child in a good position for feeding.
Place the spoon in the child's hands.

Guide his hand to put the spoon in the food.
Help him to get some of the food on the spoon.
Then lead his hand and spoon to his mouth and let him eat.

After some practice, place the spoon in the child's hand and guide it into the food again. Then lead it back to his mouth. Let go of his hand near his mouth and wait to see if he eats from the spoon.
As the child learns, let go of his hand farther away from his mouth. Repeat the exercise until the child can eat without your help.

Some children with difficulties moving may need special help to feed themselves with a spoon.

- If the child has difficulty holding a spoon, make it easier for him by making the handle thicker using sugar cane or bamboo.
- If the baby does not have fingers or cannot use the fingers to hold a spoon, make an armband with a pocket for the spoon.

- Some children may have **difficulties swallowing**. Then you will have to think about posture of the child, texture of the food and how to feed him (normally slowly, little by little and without forcing him).
- Many children with disabilities suffer from malnutrition due to their difficulties for swallowing. If you are having difficulties with your child, please ask for help. There are resources and techniques that may help. You can contact your physiotherapy association for training referral near you.

DRAFT

S20: Ask to use toilet

P25	P75	P90	P99+	P100	check at
9	18	25	**27**	**(30)**	**36** months

1. Ask the caregiver if the child indicates intentionally when he needs to 'poo' or 'pee' by using words or by gestures like pulling on his pants or pointing at the toilet.
2. Report the caregiver's reply.
3. If possible also document when observed.

Pass: if observed during assessment or caregiver reports that child is able to ask to use the toilet when he needs to 'poo' or- and 'pee.'
Peeing in bed at night is not a Fail.
Failed when indicating when it is too late.
Failed when the caretaker understands it from the child's behavior.

If Failed: Child should try the following games in the Blue Book:
Self-care milestone 12: uses the toilet: p. 166 English - p. 411 Khmer

Game: Ask to use the toilet
Use available facilities.

- Encourage the child to watch other children using the toilet.
- Note the times that the child regularly wets or soils himself. It also helps to put the child on the toilet about 10 minutes after a meal.

- Remove the child's clothing and place him on the toilet at those times. Stay with him. Talk to him. Say, "I love you when I ask to use the toilet".
- Take him off the toilet after 10 minutes or he will be tired.
- Do not force him to stay.
- If the child asks and uses the toilet at this time, praise him very much!
- Teach the child to clean himself after using the toilet by using paper and water.
- Encourage the child to tell you when he wants to go to the toilet.
- Praise him if he uses the toilet at this time.
- Important: Everyone in the family must be aware of the child sanitation training.
- Notice when he needs the toilet and help him go.
- Everyone must praise him when he does this.
- Do not scold or beat the child if he messes himself.
- Just say, "I love you when you use the toilet".

S21: Point to 2 body parts (start 48 months)

P25	P75	P90	P99+	P100	check at
14	21	28	**30**	**(39)**	**48** months

1. Ask the child to point to his own body parts: Where is your arm…your hair…your belly?'.
2. Observe the child.

Pass: child can point correctly to at least 2 body parts.

If Failed: Child should try the following games in the Blue Book:
Cognition 19: points to name for 5 body parts: p. 51 English - p. 117 Khmer

Game 1: Point at body part

- **For younger children (18-24 months) who do not know their body parts, say or use signs for "Show me your….."** (hand, hair, eyes, ears, foot, nose, mouth, etc.).
- If the child points to the correct part, praise him and say, "Yes, this (pointing) is your…".
- If the child does not point to the body part you name, guide his hand to touch that part of his own body saying "Here is your…".
- Then guide him to touch the part on your body, saying "Here is my….".
- Use a mirror sometimes so he can see you as you point to the body parts and then name them on his body and your body. Make this a game.

Game 2: Point at body part

- **Play games and sing songs involving various parts of the body.**
- Point to them on yourself so the child can imitate.
- Have him point to them on yourself.
- If necessary, physically assist the child in pointing to them as you name them.
- Check to see which parts of the body the child knows by sometimes naming them incorrectly and observing his response. E.g. when you touch the child's nose, ask "Is this your hair?".
- When the child can name, point to, or indicate five body parts on three separate days, go on to another activity.

- With children who have difficulties hearing, make sure they are looking at you.
- Point to the parts of your body as you speak.
- Use Khmer sign language.

- For a child with a difficulty moving who cannot point, use the mirror and do the pointing yourself so he can learn by hearing, feeling and watching.
- If the child has difficulty moving and cannot point, point yourself and have him indicate "yes" and "no".
- Teach this to the child using whatever sound or movements that he can do (e.g. eye blinks).
- Sing and play games when you touch the body parts.

DRAFT

S22: Comb hair with help (also S32: Comb hair without help)

P25	P75	P90	P99+	P100	check at
13	24	27	**32**	**(42)**	**48** months

1. Give the child a comb.
2. Ask him to comb his hair.
3. Observe the child whether he puts the comb on his head and makes a combing movement.
4. Or ask the caregiver to report whether he can comb his hair by himself.

Pass: child is able to comb his hair even if he needs help to comb properly. The child needs to physically demonstrate.
Fail: no combing movement

If Failed: Child should try the following games in the Blue Book:
Cognition 10a: Combines two or more objects: p. 41 English - p. 90 Khmer

Game 1: Comb hair with help
Teach the child to comb hair.

- Put the child in a comfortable position where he can use his hands and arms.
- Have things like a comb, brush, whistle or mirror nearby.
- Show one object to the child. Be sure he is looking.
- Show how the object is used, e.g. comb your hair with a comb.
- Then give the comb to the child and watch what he does.
- If necessary, help him to use the object as you did.

Game 2: Comb hair with help
- Tell the child how the object should be used.
- Sit with him in front of a mirror and model the use of the object giving physical help for him to imitate if necessary.
- When the child can imitate activities go on to a new activity.

DRAFT

S23: Put on simple clothes with help

P25	P75	P90	P99+	P100	check at
14	24	33	**34**	**(40)**	**48** months

1. Ask the caretaker whether he can put on a shirt and shorts by himself.
2. Also check then carefully the pass criteria.
   - The child needs to start by himself, e.g. covering at least one arm and/ or leg with the respective shirt/ shirt sleeve.
   - It is acceptable for passing if the child receives assistance to complete (finish) putting on both pieces of clothing.

Pass: child can put on simple shirt and shorts by himself. The child may need assistance completely putting on shorts/skirts and shirt.

Fail: child does not start by himself first.

If Failed: Child should try the following games in the Blue Book:
Cognition 20a: follow 3-step simple command: p. 53 English - p. 120 Khmer
Self-Care 11: puts on clothes: p. 164 English - p. 405 Khmer

Game 1: Put on simple clothes with help

- **Encourage the child to help as you dress and bathe him.**
- Let him pull down his shirt when you have placed it over his head and put his hands through the sleeves. Guide his hands if necessary.
- Gradually encourage him to do more, leaving one sleeve for him to put on, then leaving both, and then only putting the shirt over his head and telling him what to do.
- Always talk about the part he is dressing and what a good job he is doing and describe each step that he does.

Game 2: Put on simple clothes with help

- **Teach a child to dress by himself.**

The following activity will teach the child to put on pants or skirts and shirts. Here are some suggestions to help you.

- Break the activity into small steps.

There are three sections in these activities.

- If the child does it correctly, praise and award him like giving him a biscuit or a candy as encouragement. Always praise him even though he doesn't do it correctly. Practice these activities until he can do it correctly then go on to activity. You can use these sections to teach the child to learn dressing other types of clothes but choose clothing that are not very tight and easy to practice first.

DRAFT

Section one: at first you have to do it by yourself, so the child can see. Use an elastic pant or elastic shirt to practice with the child.

- Kneel down behind the child with the child standing in front of you, his back against your chest.
- Pick up each of the child's legs put into the correct trouser legs or skirt.
- Then take your hands to hold both sides of the trouser waist and pull it up to the child's waist.
  Do these activities slowly in order for the child correctly of what you are doing. Praise and hug the child.

Section two:

- Encourage the child and guide both of his hands to do by saying "Hold the waist of your trouser tightly and pick up one of your leg put into one of the trouser leg", as you are talking, help pick up his legs put into the trousers legs. Next, help him pick up the other leg put into another trousers leg, and guide his hands to pull the trousers waist to his waist. Clap your hands for his effort.

Section three: Tell the child "It is time for you to put the trouser on by yourself". At first say, "Take both of your hand to hold both sides of your trouser waist, then pick up your right leg to put into the right leg of the trouser and pick up your left leg and put into the left leg of the trouser.
Next, pull your trousers waist up to your waist to finish".

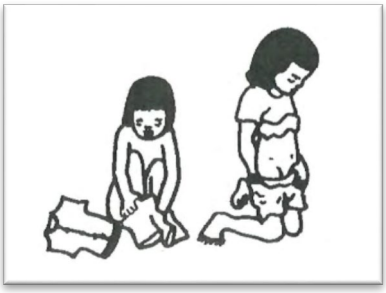
- Help the child if necessary, but wait for a moment before help the child.

Game 3: Put on simple clothes with help
More examples to teach a child how to get dressed by himself.
At first do it by yourself for the child to see and tell him what you are doing, by choosing untighten clothes and easy to practice with the child first like T-shirt, underwear, elastic pants, elastic shirt etc. See section one.

❖ How to put on underwear:
  - Put the child to stand in front of you and you sit in front of the child. Tell the child to put both of his hands on both sides of your shoulders.
  - Tell the child to put each of his feet into the underwear's waist to his waist. Look at the picture next to the exercise. Praise all of his efforts.

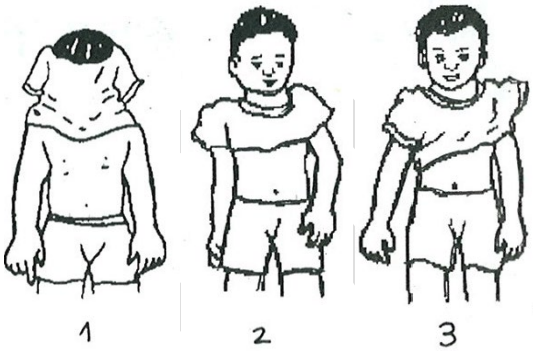
DRAFT

- Tell the child to put on his underwear by himself by following your words.
  - Put the child in a comfortable position.
  - Both of his hands hold both of the underwear's waists and he puts each of his feet into the underwear's legs, then he pulls it up above his ankles.
  - Then tell him to pull up above his knees, tell him to kneel down and pull the under wear to his waist. Give him anything he likes.

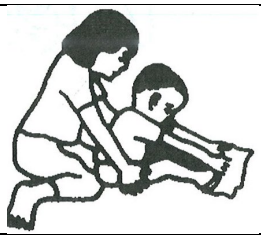


How to teach the child to put on a shirt.

- First help the child to put the shirt over his head and take each of his hands put into the sleeves, then pull the shirt's body down. Do these activities slowly for the child to follow each step carefully.
- Help put the shirt over the child's head, tell him to put his hands one at a time into the sleeves and let him pull down the shirt's body. Help the child if he has difficulties. Do this until the child can do without help.
- Then tell the child to put the shirt over his head when the child tries to pull the shirt down from his face, you say, "Peek-a-boo", until the child pulls of his face completely. He will be happy when you do this. Continue to encourage the child to put his hand into the sleeve and pull down the shirt's body. Always praise and reward the child.
- Help the child to use zipper by letting the child practice on an old clothing. Tell and guide him (as needed) to pull the zipper up and down.



Help the child if he has difficulties to control his body and try to comfort him when he wants to quit what he is doing. Do not force the child when he isn't happy. Give him more time to practice these activities.



If the child has a problem learning, it will help you to use praise with other rewards such as food to encourage him to learn. Rewards may help children with other problems learn faster, too.

DRAFT

S24: Parallel play without sharing (also S26 and S29)

P25	P75	P90	P99+	P100	check at
Parallel play: 8	30	40	**41**	**(52)**	**48** months
Shared play: 13	24	41	**43**	**(59)**	**60** months
Team game: 19	27	40	**64**	**(71)**	**60** months

1. Ask the caretaker if the child plays by himself when playing with other kids and does not interfere with other kids, even though he is interested in other kids' toy.
2. If possible also document through observation.

Pass: if observed during assessment or caretaker reports that child plays by himself, without involving other kids or sibling.
S24: without sharing,
S26: sharing
S29: team game.

If Failed: Child should try the following game in the Blue Book:
Social 10: plays next to other kids: p. 26 English - p. 61 Khmer

Game: Parallel play without sharing

- **Give the child many opportunities to be around other children.**

WATCH FOR:

- New and different behaviors (example: longer or shorter attention span, more looking around) in the presence of other children,
- Positive responses to being with other children, or play that is not disruptive to other children. This can be playing alongside other children for 10 to 15 minutes.
- Reward any of these activities by telling the child how nicely he is playing near other children.

- It is very important for children with disabilities to be around other children and to have the opportunity to play with them to the best of their abilities.
- If the child likes to compete, make up special games that the disabled child can compete in. For example: If the child has to use a walker, make walker "races" or walker courses for the children to follow. For a blind child, make a game out of who can be first to find different objects in a container. Adapt games to the child's abilities.
- It may be necessary to help children with disabilities to participate in games with other children.
- Try to arrange activities that they can do with other children. Tell stories, sing songs and play music, so the children can talk, sing, dance or clap together.
- Encourage other children in the family to play with children with disabilities. Also encourage a few children in the neighborhood to visit and play with them. Give them simple materials such as stones, leaves, cups, sticks, pictures, old clothes, basins of water or pieces of wood.
- When you encourage other children to come and play with the children with disabilities, tell them about the children's difficulties in moving, hearing, speaking, learning and-or seeing. Explain how they can communicate with children with disabilities.

DRAFT

S25: Wash and dry hand

P25	P75	P90	P99+	P100	check at
18	35	40	**40**	**(46)**	**48** months

1. Ask the caretaker whether her child can wash his hands independently.
2. Or ask the child to demonstrate how he washes his hands and dries them.
3. Observe the child.

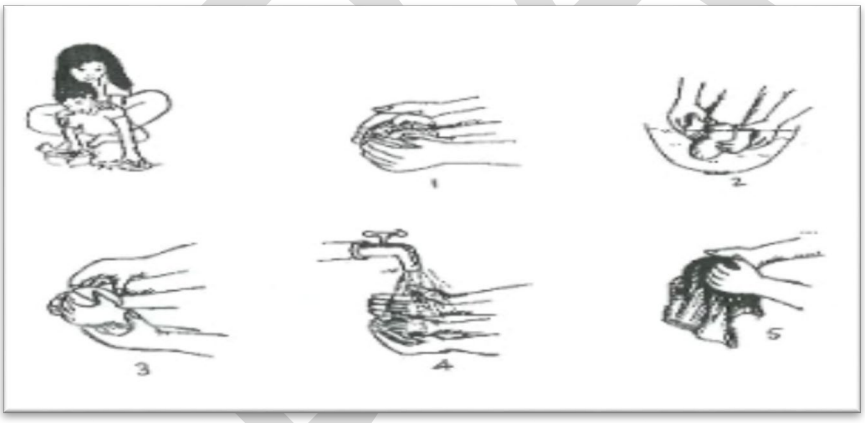
Pass: the child correctly demonstrates how he washes and dries his hands.
Check whether he touches the back of his hands and uses cloth / shirt to dry his hands.
It is okay when he does not do it thoroughly.
Fail: child only puts hands in the water, but does not rub them

If Failed: Child should try the following game in the Blue Book:
Self-care milestone 8: Washes hands: p. 162 English - p. 400 Khmer

Game 1: Wash and dry hand
How to teach the child to wash his hands.

- Have soap and water ready.
- Before meals and at other times, tell the child it is time to wash his hands.
- Wash your hands first to demonstrate.
- Encourage the child to put his hands in the water.
- Help the child by talking to him and showing him at the same time how to wash, rinse and dry his hands. Let him practice as much as possible.
- At first, the child may want to play in the water, as this is enjoyable.
- Give the child time to "practice".

These are the steps to teach the child:



- Prepare a dish with water. Have soap and a towel ready.
- Put the child's hands in the water.
- Put the soap in the child's hands and help him to rub the soap.
- Remove the soap and help the child to wash his hands by rubbing them together.
- Put the child's hands back in the water and help him to rinse them.
- Give the towel to the child and help him to dry his hands.
- Repeat the exercise until the child can do all the steps without help.

Important: Show the child what you want him to do and let him watch other people do it. Gradually help the child less and less as he learns, and always remember to praise him.

S26: Play well with others (sharing) (start 60 months) (see S24 games)

P25	P75	P90	P99+	P100	check at
Parallel play: 8	30	40	**41**	**(52)**	**48** months
Share play: 13	24	41	**43**	**(59)**	**60** months
Team game: 19	27	40	**64**	**(71)**	**60** months

1. Ask the caretaker if the child plays well with other kids and shares his toys with other kids or siblings. 2. Report the caretaker's response OR observe.	**Pass:** child plays well with other kids and shares his toys with others. S24: no sharing S26: sharing S29: kid games waiting turns

If Failed: Child should try the following games in the Blue Book:
Social milestone 10: play next to other kids: p. 26 English - p. 59 Khmer
Social milestone 16: plays cooperatively with other kids: p. 29 English - p. 67 Khmer

Game 1: Play well with others (sharing)
Give the child opportunities to be around with other children.
WATCH FOR:

- New and different behaviors (example: longer or shorter attention span, more looking around) in the presence of other children,
- Positive responses to being with other children, or
- Play that is not disruptive to other children. This can be playing alongside other children for 10 to 15 minutes.

Reward any of these activities by telling the child how nicely he is playing near other children.

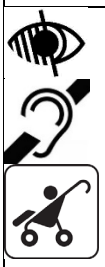
Game 2: Play well with others (sharing)

- **Encourage children to develop sharing and cooperative play.**
- Whenever the child takes an item or toy and places it near or gives it to another child, praise him and say, "Good sharing".
- Encourage him by commenting on the action appropriately.
  E.g. "Are you letting (name) help you make a house?".
- You can encourage children to share and play together by suggesting that "(Name of child) might like to play" or by guiding the child to share items and then praising him and commenting that others like such sharing.

Game 3: Play well with others (sharing)

- If there are other children in the family, they should often play with the child. Otherwise, get together two or three children from the neighborhood.
- In playing with others, the children will learn to cooperate and to share their toys.
- Children will also learn to wait for their turn to do things.
- The other children will also learn to accept the child with a disability as one of them.

DRAFT

Game 4: Play well with others (sharing) • Children enjoy playing to music. • Let them sing and dance, clapping their hands and moving to the rhythm of the music.	
	• It is very important for children with disabilities to be around other children and to have the opportunity to play with them to the best of their abilities. • If the child likes to compete, make up special games that the disabled child can compete in. For example: If the child has to use a walker, make walker "races" or walker courses for the children to follow. For a blind child, make a game out of who can be first to find different objects in a container. Adapt games to the child's abilities. • It may be necessary to help children with disabilities to participate in games with other children. • Try to arrange activities that they can do with other children. Tell stories, sing songs and play music, so the children can talk, sing, dance or clap together. • Encourage other children in the family to play with children with disabilities. Also encourage a few children in the neighborhood to visit and play with them. Give them simple materials such as stones, leaves, cups, sticks, pictures, old clothes, basins of water or pieces of wood. • When you encourage other children to come and play with the children with disabilities, tell them about the children's difficulties in moving, hearing, speaking, learning and-or seeing. Explain how they can communicate with children with disabilities.

DRAFT

S27: Tell own name and gender

P25	P75	P90	P99+	P100	check at
18	34	39	**45**	**(53)**	**60** months

1. Ask the child 'what is your name?'
2. Ask the child 'what are you, a boy or a girl?'
3. Listen to the child's responses.

Pass: child answer BOTH questions correctly. The name can be his usual call name.

If Failed: Child should try the following games in the Blue Book:
Language 17: gives his/her name: p. 75 English - p. 174 Khmer

Game 1: Know his own name and gender 1

- To help a child to learn his own name, use it as often as possible when you speak to him.
- E.g. say, "Sokrem, give me the book, please". Don't just say, "Give me the book, please".
- Say, "Sokrem, come and eat," not just "Come and eat".
- Say, "Phalla, let's go and get some water", not just, "Let's go and get water"
- Say, "Hello, Mala," not just, "Hello".

Game 2: Know his own name and gender 2

- Looking in the mirror with the child in front of you, point to yourself and say, "My name is ....." Then, point to him and say, "Your name is .....".
- Guide his hand to point to you and repeat, "Your name is .....".
- Then, guide his hand to point to himself and say, "My name is .....".
- Make this a game. Say, "Where is .....?" or "Show me .....", using your name or his name.
- If he does not point or touch the right person, guide his hand and say, "This is (Nan)" or "There is (Ang)". Praise his efforts, and make it fun.
- When he points to the person you name, ask him, "Who is this?", and point to him. Ask, "What is your name?"
- If he does not answer, say his name and encourage him to repeat it. Praise him. Repeat several times and practice daily until he can say his name.

For the child with a hearing problem, you can make up signs for his and other people's names by using the first letter of the name or by showing something that represents that person.

- For example, if he has curly hair, you might sign his name by twirling your finger to show a curl. If he is very happy, you could make a smiling mouth with your fingers. If the mother wears glasses, you could use the sign for glasses.
- Once you decide on a name sign, use it each time you talk to him or refer to that person. Look in the mirror, point to him and make his name sign. Then point to yourself and make your name sign. As you use the sign all the time, he will get to know it.

DRAFT

S28: Name a friend

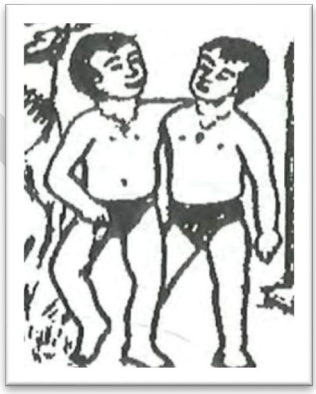
P25	P75	P90	P99+	P100	check at
22	35	39	**45**	**(53)**	**60** months

1. Ask the child to name someone he plays with.
2. Listen to the child.
3. Confirm with the caregiver that the child has named his friend correctly.

Pass: child can name at least one of his friends correctly (confirmed by the caretaker).
It is okay when he names a sibling.
Fail: child says only "bong" or "own"

If Failed: Child should try the following game in the Blue Book:
Social 18: separates easily from the mother: p.21 – p. 69 Khmer
Social 16: plays cooperatively with other children: p. 20 – p. 69 Khmer

Game 1: Name of Friend
It is important for the child to know people outside the family in the community and to have opportunities to be with and play with other children.



Whenever possible, take him out into the community to visit or play with other children so that he can develop friendships and social skills with children his age.

Take the time to ask the child with whom he has played and ask him which one he considers as his friend.

It is very important for the child with disabilities to be around with other children and to have the opportunity to play with them to the best of his ability and develop friendship.

- It may be necessary to help the child with disability to participate in games with other children. Try to arrange activities that he can do with other children. Tell stories, sing songs and play music so the children can talk, sing, dance or clap together.
- Encourage other children in the family to play with the child with disability. Also encourage a few children in the neighborhood to visit and play with him. Give them simple materials such as stones, leaves, cups, sticks, pictures, old clothes, basins of water, or pieces of wood.
- When you encourage other children to come and play with the child with disabilities, tell them about the child's problem moving, hearing, speaking, learning and/or seeing.
  Explain how they can communicate with your child.

DRAFT

S29: Play kid games (team / waiting turns) (also S24: non-sharing; S26: sharing)

P25	P75	P90	P99+	P100	check at
Parallel play: 8	30	40	**41**	**(52)**	**48** months
Share play: 13	24	41	**43**	**(59)**	**60** months
Team game: 19	27	40	**64**	**(71)**	**60** months

1. Interact with the child and ask which Khmer (gender-specific) competitive children game he is able to play involving teamwork or waiting turns.
2. Or observe the child playing.
3. Or ask the caregiver which games he is able to play at home.

Pass: child plays Khmer children game like
e.g. 'chhou' or 'kup sbaekcheung' (shoe bowling or throwing) and 'khnat' (both),
e.g. (for girl) 'leng muck' hopscotch or 'laut enteak'
e.g. (for boy) 'leng khlee' (marbles game).
Fail: not waiting his turn
S24: no sharing
S28: sharing
S33: kid games waiting turns

If Failed: Child should try the following games in the Blue Book:
Social skill 16: plays cooperatively with others: p. 29 English - p. 67 Khmer

Game: Play kid games

- Tell stories, sing songs and play music so the children can talk, sing, dance or clap together.
- Ask them to participate in traditional Khmer game for children such as chhou' or 'kup sbaekcheung' (shoe bowling or throwing) and 'khnat' (both) e.g. 'leng muck' hopscotch or 'laut enteak' (for girl) and 'leng khlee' marbles game (for boy).
- Some children will not like to compete; others will.
  This is part of everyone's nature. Do not try to change the child's nature.

- It is very important for children with disabilities to be around other children and to have the opportunity to play with them to the best of their abilities.
- If the child likes to compete, make up special games that the disabled child can compete in. For example: If the child has to use a walker, make walker "races" or walker courses for the children to follow. For a blind child, make a game out of who can be first to find different objects in a container. Adapt games to the child's abilities.
- It may be necessary to help children with disabilities to participate in games with other children. If the child likes to compete, make up special games that the disabled child can compete in. For example: If the child has to use a walker, make walker "races" or walker courses for the children to follow. For a blind child, make a game out of who can be first to find different objects in a container. Adapt games to the child's abilities.
- Encourage other children in the family to play with children with disabilities. Also encourage a few children in the neighborhood to visit and play with them. Give them simple materials such as stones, leaves, cups, sticks, pictures, old clothes, basins of water or pieces of wood.
- When you encourage other children to come and play with the children with disabilities, tell them about the children's difficulties in moving, hearing, speaking,

DRAFT

	learning and-or seeing. Explain how they can communicate with children with disabilities.

S30: Serve and eat own food (see game S19: eat with spoon)

P25	P75	P90	P99+	P100	check at
24	40	45	**51**	**(76)**	**60** months

1. Ask the caretaker if the child can take rice or rice porridge 'borbor' onto his plate and eat his own food without help. 2. Report the caretaker's response.	**Pass:** child can serve and eat his food by himself without assistance (reported - observed). It is okay when he spills some and/or eats it using his hands. **Fail:** Not meeting any of the pass criteria

If Failed: Child should try the game in:
Blue Box Learning to use hand and tools H16
Blue Book self-care 7: eats with spoon: p. 161 English - p. 398 Khmer

What?

- When children are able to use their hands to play with many different objects, they have to use their skills to become more independent.
- First, they only use a spoon and a soup plate. When they become older, a fork and a regular plate can be used.

Game 1: Serve own food

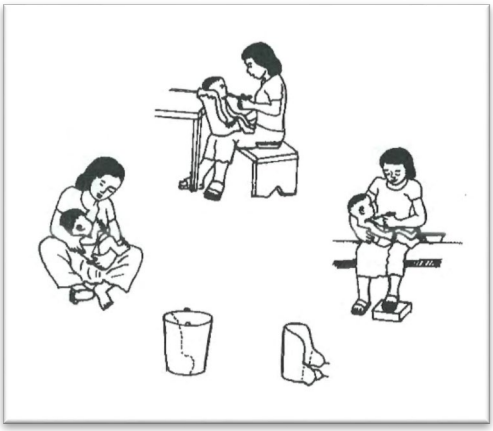
How?

- Let the child explore and play with the spoon or fork. Place the food on a plate in front of the child and tell him what it is. If he doesn't do the movement spontaneously, you can guide him with your hand on his hand. But let him do it on his own as soon as possible.

- Prepare his clothes and the room, so it is not a problem if he spills some food.
- It is alright if at the beginning the child uses both the spoon and hands and fingers interchangeable.
- For drinking, start first to give the child a few sips from a cup. Some families use sip-cups or beakers, but in general a child that is able to sit and has no difficulty swallowing should be able to drink from an open cup.

Game 2: Eat with a spoon: see stimulation S19

- For children with **poor balance while sitting**, you need to find a comfortable seated position. The head has to be straight to help swallowing when eating.
- Some children with **moving difficulties** may need special help to feed themselves with a spoon.
- **If the child has difficulty holding a spoon**, make it easier for him by making the handle thicker using sugar cane or bamboo.



- **If the baby does not have fingers or cannot use the fingers to hold a spoon**, make an armband with a pocket for the spoon. Tie the band to the child's wrist or hand. Then teach him to pick up the food with the spoon and take it to his mouth. Make the band like this out of cloth. It should be as wide as half the length of one finger. Make a narrow pocket on the band. Put the handle of the spoon into this pocket. Then tie the band to the child's hand.

DRAFT

S31: Put on T-shirt without help

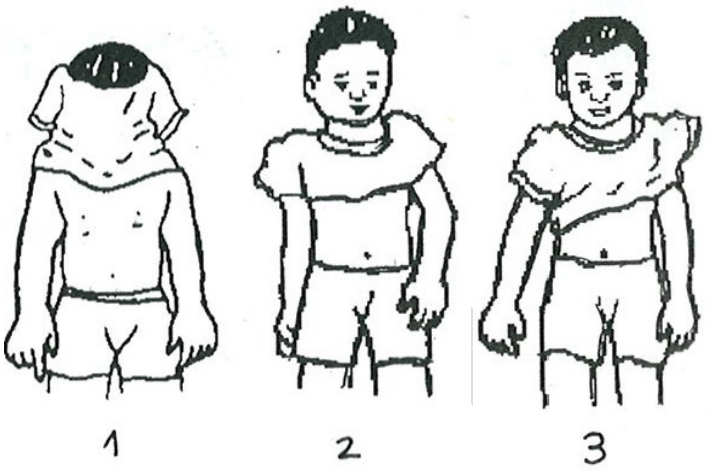
P25	P75	P90	P99+	P100	check at
29	40	45	**51**	**(69)**	**60** months

1. Give a T-shirt to the child.
2. Ask him to put it on by himself.
3. Observe the child.

Pass: child can put the T-shirt on without help.
Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Self-Care milestone 11b: puts on clothes: p. 164 English - p. 406 Khmer

Game: Put on T-Shirt without Help
How to teach the child to put on a T-shirt.



- First help the child to put the shirt over his head and take each of his hands put into the sleeves, then pull the shirt's body down.
- Do these activities slowly for the child to follow all steps carefully.
- Help put the shirt over the child's head, tell him to put his hands one at a time into the sleeves and let him pull down the shirt's body.
- Help the child if he has difficulties.
- Do this until the child can do without help.

- Then tell the child to put the shirt over his head when the child try to pull the shirt down from his face, you say, "Peek-a-boo", until the child pull of his face completely. He will be happy when you do this.
- Continue to encourage the child to put his hand into the sleeve and pull down the shirt's body. Always praise and reward the child.

- Help the child to use the zipper by letting the child practice on old clothing, tell and guide him (as needed) to pull the zipper up and down.

Child with learning difficulty
If the child has a difficulty learning, it will help you to use praise with other rewards such as food to encourage him to learn. Rewards may help children with other difficulties to learn faster, too.

DRAFT

S32: Dress without help (button-unbutton)

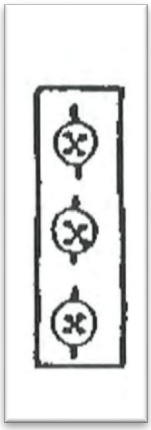
P25	P75	P90	P99+	P100	check at
27	44	51	**52**	**(69)**	**60** months

1. Give the child a shirt with buttons.
2. Ask the child to put it on and button it up.
3. Ask the child to unbutton the shirt and take it off.
4. Observe the child or ask the caregiver whether he can put on and take off a shirt or pants/skirt, including buttoning and unbuttoning it.

Pass: child can button-unbutton his shirt and pants / skirt without help.

Fail: child needs help to (un)button

If Failed: Child should try the game of following the assessment question or Blue Book Self-care milestone 11: puts on clothes: p. 164 English – p. 405 Khmer



Game 1: Dress without help (Button-unbutton)

- On a large piece of thin plywood or heavy cardboard, firmly attach different things the child can open and close, such as buttons and button-hole strip cut from a shirt.
- Play with the child, showing him how to button and unbutton, then encourage him to try himself with a shirt.

Game 2: Dress without help (Button - unbutton)

- Give the child a shirt with big buttons first.
- Ask the child to put it on and button it.
- Ask the child to take off the shirt and unbutton the shirt.
- Practice with the child during morning and night time, before and after nap time every day
- When child can button-unbutton his shirt and pant or skirt with big button without help, try with a shirt with normal button.
- Give assistance when needed but gradually wait to let the child perform before helping.

DRAFT

S33: Comb hair without help (see game S22: combing hair with help)

P25	P75	P90	P99+	P100	check at
25	43	46	**65**	**(72)**	**60** months

1. Give the child a comb.
2. Ask him to comb his hair.
3. Observe the child or ask the caretaker whether he can comb his hair.

Pass: child is able to comb his hair without help to hold the comb (5 strokes).

Fail: Not meeting any of the 2 pass criteria

If Failed: Child should try the following games in the Blue Book:
Language / cognitive skill milestone 10a: p. 41 English - p. 90 Khmer

Game: Comb hair without help

- Put the child in a comfortable position where he can use his hands and arms.
- Have things like a comb, brush, or mirror nearby.
- Show one object to the child. Be sure he is looking. Show how the object is used, e.g. comb your hair with a comb.
- Then give the comb to the child and watch what he does.
- If necessary, help him to use the object as you did.
- Tell the child how the object should be used.
- Sit with him in front of a mirror and model the use of the object giving physical help for him to imitate if necessary.
- When the child can imitate activities related for three consecutive days, go on to a new activity.

DRAFT

Fine Motor domain (Milestone F1-F32)

This section describes the step-by-step procedure on how to assess the Fine Motor (F) milestones.

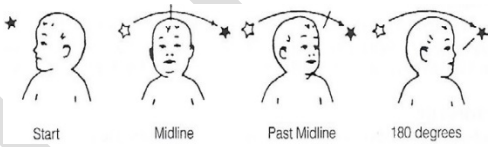
F1: Follow object to midline (≤90°) (also F2 & F5) (start 0 month)

P25	P75	P90	P99+	P100	check at
≤90°: 0	2	3	**6**	**(6)**	**0** month
>90°: 0	3	4	**6**	**(6)**	**0** months
180°: 2	4	5	**8**	**(8)**	**12** months

1. Put the child on his back.
2. Dangle a red object above the child's face at a height he can focus on (usually 20 cm).
3. Shake to attract his attention and move slowly the string in an arc from one side of his head to the other side several times passing the midline and going 180°.
4. The movement of the red string may be stopped to re-attract his attention and then continued.
5. Observe the child's eye and head movement.

Pass: child follows the object passed the midpoint of the arc with eyes only or with head and eyes.

F1: till the midline of the arc = 90°
F2: passed the midline of the arc > 90°
F5: complete arc 180°



Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Gross Motor milestone 1: turn head from side to side: p. 135 English - p. 308 Khmer

Game 1: Follow object to midline

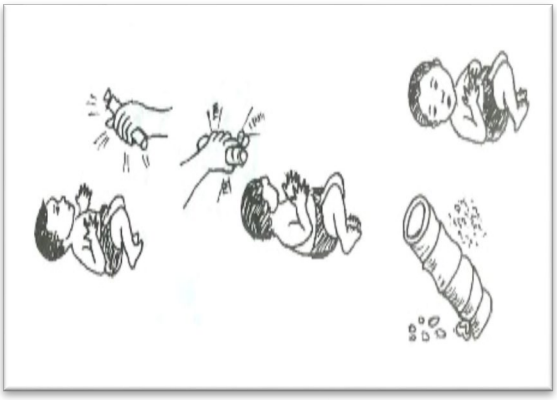
- To encourage the child to turn his head, cradle him in one of your arms and use your other hand to gently stroke the side or his head, face and neck.

Game 2: Follow object to midline

- Line the child on a soft and strong surface.
- Lie down beside the child and make soft noises in the direction of his right ear, then his left ear.
- The child should turn his head towards the noises.

Game 3: Follow object to midline 3

- Put the child on his back
- Dangle a red string above the child's face at a height he can focus on (usually 20 cm).
- Shake to attract his attention and move slowly the string in an arc from one side of his head to the other side several times passing the midline and moving 180°.



DRAFT

F2: Follow object passed midline (>90°) (see game F1)

F3: Grasp big object

P25	P75	P90	P99+	P100	check at
2	4	5	**6**	**(6)**	**0** months

1. Put the child on his back or on the caretaker's lap in a sitting position or on his back. 2. Touch the back or tips of his fingers with a big object. 3. Observe the child.	**Pass:** child grabs the big object for a few seconds. **Fail:** Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Fine Motor milestone 2: reaches for nearby objects: p. 113 English - p. 256 Khmer

Game: Grasp big object

- A baby is usually born with a grasp reflex, which means that when you place an object or your finger in the palm of his hand, the baby will close his hand tightly around the object.
- By 6 months of age, this reflex that most babies are born with will gradually lessen and be replaced by movements controlled by the child.
- At birth, when the child grasps objects, he cannot release them.
- As he develops and the reflex fades, he will be able to grasp and release objects.

DRAFT

F4: Play with own body (start 9 months)

P25	P75	P90	P99+	P100	Check at
0	3	4	**7**	**(7)**	**9** months

1. Put the child on his back.
2. Observe the child whether he plays with his hands and toes (or other parts of his body).

Pass: child brings his hands or toes (or other parts of his body).
Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Fine Motor milestone 3: touches own body: p. 113 English - p. 259 Khmer

Game: Play with own body

- From the time they are a few weeks old, children like to play with their fingers and toes.
- This is the age at which they start to explore using their mouth. They like to suck their fingers. It is important that all children do this, because it teaches them about their bodies.
- Play with the child using your own fingers.
- Touch the child, play with his fingers, hide fingers and hide hands.
- Let the child play with your fingers.
- Puff your cheeks and purse your lips.
- Let the child feel your face.
- Guide his hands if necessary.

F5: Follow 180 degrees (see game F1: ≤90°) (start 12 months)

DRAFT

F6: Hands together

P25	P75	P90	P99+	P100	check at
0	4	6	**7**	**(8)**	**12** months

1. Lay the child on his back.
2. Observe the child whether his hands are brought together at the midline of the body over the chest or at the mouth.
3. Stimulation can be added, e.g. by hanging colorful or noisy toys above the child.

Pass:

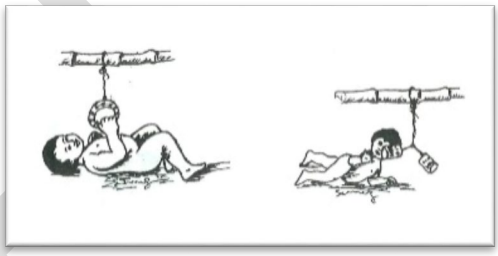
1) Child brings his hands together to the midline of his body (eyes, mouth, chest, belly button)
2) Hands need to touch, but not in a specific way.
3) Child does not have to look at his hands

Fail if not doing, even with stimulation

If Failed: Child should try the following games in the Blue Book:
Gross Motor milestone 2: bring hands to mouth or own body: p. 135 English - p. 311 Khmer

Game 1: Hands together

- Place the child on his side or his back.
- Hang a mobile in a way above the child that it touches the child's chest so he can play with it close to his body**.**



Game 2: Hands together

- Clasp your hands around both of the child hands and slowly, gently bringing his hands to his mouth.
- Positions for the child:
  - On his side - Cradled in your arms
  - Sitting on your lap, or - Laying on a blanket

If the child is stiff (Cerebral Palsy – Spastic)

- Lay the child on his side or sits the child with support.
- Do not lay the child on his back.

For the child who only uses one side of his body

- Help him to learn to use the weak side. Touch the weak side with your hands, and other materials.
- When you hold the child, make sure the healthy side is next to you, so that the child can use and develop his weak side

DRAFT

F7: Look at small objects (start 18 months)

P25	P75	P90	P99+	P100	check at
2	4	5	**8**	**(8)**	**18** months

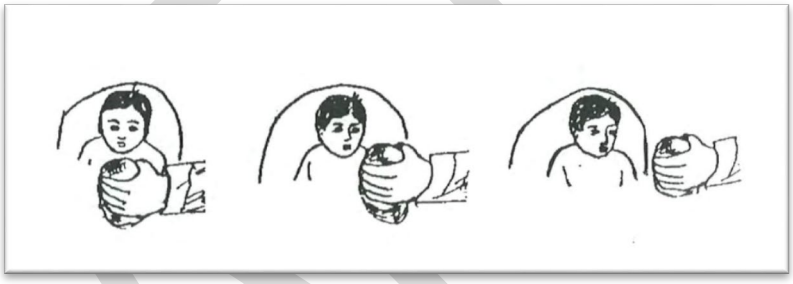
1. Put the child on the caretaker's lap sitting at the table.
2. Place a white A4 paper on the table in front of the child.
3. Place 5 O-shaped small objects (bead or seed) on it.
4. Point at or touch the small objects.
5. Observe the child whether he looks at it.

Pass:
1) Child focuses on the objects by looking at it carefully for several seconds.
2) Child wants to touch objects

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Vision milestone 1a: looks at light or bright object: p. 99 English - p.235 Khmer
Vision milestone 2: looks at bright moving object: p. 99 English - p. 234 Khmer
Cognition 5: Attends briefly to object and sound: p. 37 English - p. 81 Khmer

Game 1: Look at small object



- **Put the baby with shoulders raised** so that he has a better view of things and more control to move his head and hands:
- If he is placed on his stomach, put a pillow roll under his chest and arms to help him look up.
- Hold an interesting object (silver ball, red wool ball, red flashlight, dark circle drawn on a white board, or small checkerboard) above the child's head, approx. 12-20 cm away from the eyes. Wiggle it gently to attract his attention.
- Repeat the exercises with a different object for three times, with different objects on two days, go on to another activity.

Game 2: Look at small object

- **Give the child many things to look at.** If he is lying on his back, hang objects close enough so he can see them clearly. Make them brightly colored and able to move and perhaps even to make noise.
- Always make sure the child has something to look at, whatever position he is in. Use pictures, especially smiling faces. Babies like red-colored things. It is important for babies and children to have objects around, which easily catch their attention.
- Take the child out of the house and show him animals, flowers, and children at play.
- Talk about the things he is seeing. If possible, let him touch, smell and hear them as well. This is important for all children.
- Hang pieces of brightly colored cloth with string. Blow at them so that the child can watch their movements.

Game 3: Look at small object

- Hang bits of brightly colored cloth on a string. Blow at them so that the child can watch their movement.
- It is helpful to have the child in a comfortable position when you do this, generally with his head and shoulders raised, so he has a better view of things and more control to move his head and hands. If he is placed on his stomach, put a pillow roll under his chest and arms to help him look up.

	• If the child has a seeing difficulty, hang objects that have different textures, and make different sounds, so that they touch or are very close to the child's head, hands, or feet. Guide the child to move his body to get sound from the objects, as you talk to him about the objects and encourage him to touch them.
	• Because we must hear sounds and words to be able to copy them and learn to speak, the child who has problems hearing may not understand and learn from sounds or be able to speak clearly or speak at all. If the child has a hearing problem and cannot learn to talk and do activities that rely on hearing ability, he will need to learn other ways to understand and communicate. He will have to learn about the world and life through other senses, especially seeing and touching. • Some children who cannot talk can also learn to communicate through signs. Children who have hearing problems but are quite normal in intelligence can understand, communicate and be much happier if they and their families learn sign language. • Give extra physical guidance as you talk to the child about the activities.
	• Many children who have learning problems can also understand better when sign language is used with speech.
	• For **children with a problem moving**, ask a physical therapist to help you put the child in the best position to look at things or child lying on his back with his head centered. • If the child does not seek out toys or objects and touch them on his own, see the beginning activities in the Fine Motor section. Work on those until the child learns to explore different objects with his fingers. Then go on to these previous activities.

DRAFT

F8: Reach for red string

P25	P75	P90	P99+	P100	check at
3	5	6	**10**	**(10)**	**18** months

1. Put the child on the caretaker's lap so that his hands are level with the table top and his hands are on the table.
2. Put a red string in front of the child within easy reach (15 cm) on a white A4 paper.
3. Encourage the child to pick it up.
4. Observe the child whether he reaches for the string.
5. Allow for two more trials.

Pass: the child tries to reach for the string or at least moves his hands or arms in the direction of the object on the table.

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Fine Motor milestone 2: reaches for nearby objects: p. 112 English - p. 256 Khmer

Game 1: Reach for red string

- During the first stage of Fine Motor development, the child moves his arms actively when he sees or hears an object.
- Place the child in a comfortable position where he can easily see what you hold up, and so that his arms are free to move.
- Hold up an attractive, shiny or colorful object.
- Notice whether the child's arms begin to move or wave or pass near the object.
- Make sure the child is looking at it.
- As the child waves his arms, move the object close to him so he can touch it.
- Make mobiles with objects, strips of paper, cloth, string or whatever you have by hanging them from a stick. Hang the mobile where the child can see it and touch it when he is lying down.
- If the child looks at the object but does not reach for it, give his arm some guidance to reach out and touch it.

Game 2: Reach for red string

- Place the child in a comfortable position that allows him to use one or both hands.
- Hold attractive objects including those that make noise, in front of the child at the level of his chest. Observe the child's responses.
- If he moves one or both arms, bring the toy closer so the child can reach to hit or touch it.
- If the child does not touch or hit the object, bring it closer so it touches his hands. This way, any hand movement the child makes will make the object move.
- When the child hits the toys this way, gradually move the object away little by little so the child has to be more active to make the objects move.

DRAFT

• Give physical help to the child to hit the objects if necessary, but try to give less help as the child gets the idea.	
	• **When doing Game 1 for a child with seeing difficulties,** look for objects that attract attention and make noise. Hang them close and help him locate the object by its sound. • **When playing Game 2 for the child who has seeing difficulties,** use more physical help. You may need to guide his hands to help him locate the objects. Make sure the objects make noise. • **Bring a rough-textured object or toy near the child** and rub your hands on it, and describing what it feels like, e.g. say, "This is bumpy and scratchy". Place the object in the child's hands and see if he touches and feels it in some way. • If he does not, gently rub it on his hands, then on some other body part where he has shown a reaction to touch before. Make it a game, saying, "Here comes the bumpy one, here comes the scratchy one", and so on.
	• **When doing Game 1. For a child with difficulties moving,** try placing him on his side so he has one arm free to move. • Help him gently to touch the object, unless he is too stiff. In that case, use relaxation exercises that the physical therapist can teach you before trying to do this activity. • **When doing Game 2 for a child who has moving difficulties,** lying on his side might be easier.

DRAFT

F9: Rake lotus seed (1 out of 3)

P25	P75	P90	P99+	P100	check at
F9: Rake: 4	6	7	**10**	**(10)**	**18** months
F13: Thumb-finger 7	12	14	**21**	**(31)**	**30** months
F16: Pincer: 11	18	24	**29**	**(29)**	**36** months

1. Put the child on the caretaker's lap so that his hands are on the same level as the table top and his hands are on the table.
2. Put 3 small O-shaped objects (bead or lotus seed) on the table in front of the child within easy reach.
3. Point to or touch the small objects.
4. Demonstrate the child how to pick it up with pincer grasp and drop the item in a container
5. Observe the child racking up small objects grasping it with the entire hand.
6. Allow for 2 more trials.

Pass:

1) Child tries to pick 1 object up, using a raking motion with the entire hand.

2) Make sure the object does not merely stick to his hand, but that he actually picks it up.

Fail: cannot pick up the small object in any way besides sticking accidently to his hand

F9: raking motion

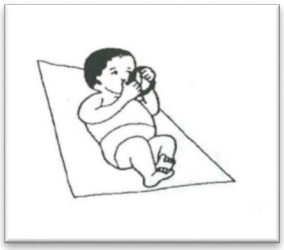
F13: any part of thumb & finger(s)

F16: pincer grasp with thumb & index finger.

If Failed: Child should try the following games in the Blue Book:
Fine Motor milestone 4: grasps and holds objects: p. 114 English - p. 262 Khmer

Game 1: Rake lotus seed

- Give the child toys or safe objects, which he can hold in his hands. The toys should be of different shapes and sizes.
- The child will try to put the toys in his mouth, shake them, bang them on the floor and throw them around. Let him do this, as he is only finding out about the toys and about the world around.



Game 2: Rake lotus seed

- With the child in a comfortable position that allows him to use his hands, place an object in his hands and observe his reactions.
- If he immediately drops it, give it to him again or give him another toy of a different size, shape, weight, etc.
- Watch for the child's fingers to curve around the object and to hold it for 10 seconds or more. There is little you can do to physically assist this response, but it may be possible to encourage it by trying different objects and different ways to place it in his hand.

- If the child has seeing difficulties, try noisy objects with different textures. If the grasp seems like a grasp reflex, try using larger objects or ones with different shapes

- If the child has moving difficulties, put the child on his back or on his side.
- Hold an interesting bright toy or object – especially one that makes noise if shaken or squeezed – in front of the child, close enough so he can reach it.
- Shake or squeeze the toy.
- With your other hand, bring the child's hand to the toy.
- Once his hand is on the toy, shake or squeeze it for him.
- Try to leave the child holding the toy by himself or give a little support with one or two fingers to encourage the child to hold it.

DRAFT

F10: Put object in mouth (start 24 months)

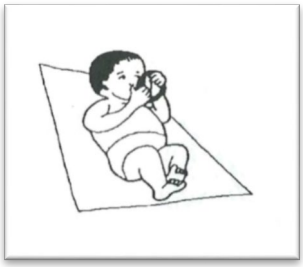
P25	P75	P90	P99+	P100	check at
3	5	7	**13**	**(13)**	**24** months

1. Put a medium size object (block) in front of the child
2. Observe the child moving it to his mouth

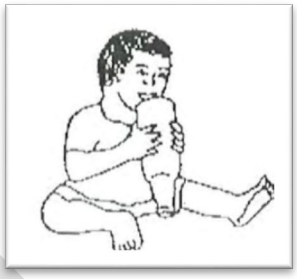
Pass: child picks up the object and puts the object in his mouth
Fail: Not meeting any of the pass criteria

If Failed: Child should try the following game in the Blue Book:
Fine Motor milestone 4: passes object from hand to hand p. 114 English - p. 262 Khmer
Vision milestone 4: explores objects with fingers and mouth: p. 103 English - p. 242 Khmer

Game: Put object in mouth



- Give the child toys or safe objects, which he can hold in his hands. The toys should be of different shapes and sizes.
- The child will try to put the toys in his mouth, shake them, bang them on the floor and throw them around.
- Let him do this, as he is only finding out about the toys and about the world around.



For a child who has difficulty seeing:

- Bring a rough-textured object or toy near the child and rub your hands on it, describing what it feels like, e.g. say, "This is bumpy and scratchy".
- Place the object in the child's hands and see if he touches and feels it in some way.
- If he does not, gently rub it on his hands, then on some other body part where he has shown a reaction to touch before.
- Make it a game, saying, "Here comes the bumpy one, here comes the scratchy one", and so on.

DRAFT

F11: Take objects in each hand

P25	P75	P90	P99+	P100	check at
4	7	10	**14**	**(16)**	**24** months

1. Put 5 blocks in front of the child.
2. Encourage it to pick up the blocks, but do not give them to him.
3. Observe the child picking up several blocks.

Pass: child picks up both blocks and holds one in each hand.
Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Fine Motor 5: passes objects from hand to hand: p. 114 English - p. 263 Khmer

Note: The developmental sequence is that at the beginning, when a child first learns to reach for a second object, he simply drops the first one. After a while, he will usually hold both objects. When you continue to offer toys, he will transfer those from one hand to the other, and take more toys. He cannot hold it in only one hand. This is a developmental sequence.

Game 1: Take object in each hand

- Before the child can hold an object with two hands, he must be able to reach and grasp objects near his body.
- Place an interesting object close to the child and see if he tries to pick it up.
- If he does not pick it up, place it in his hands for a few seconds to get his attention, then take it and put it nearby again.
- If he does not try to get it, physically guide his hand to reach and touch the toy.
- Try both to give him one object to the right hand, and next time you try with the left hand. This will help the child to develop grasping with both hands.

Game 2: Take object in each hand

When the child is able to hold one object at a time with both hands.

- Give him one object to hold. Present another object and encourage him to take it.
- Change the toys around.
- If the child does not take up the second toy, place it in the other hand.
- If he drops a toy, then start over.
- When the child can pick up five or more toys in an hour on three days, go on to another activity.

Work from the beginning of the activities until the child can hold several toys in his hands, and takes more, eventually transferring toys from one hand to another.

DRAFT

	For game 1 **If the child has seeing difficulties** it may be necessary to touch the child's hand with the object, so he will know where to reach. Alternatively, physically guide his hand to touch the toy. **For Game 2** **For a child with a seeing difficulty,** touch him with the object and talk about it. If the child does not take the second toy, place it in his other hand and observe his response. If the child drops one of the toys, take back both toys and give the child the toy that he dropped. Then present the other toy. If he does not take it, place it in his hand and observe.
	For game 1 **Some children with moving difficulties** may never be able to grasp objects smoothly, but should continue to practice. • It is important to let these children practice picking up things with you, giving help only when it is really necessary. A physical therapist can suggest the best positions for the child to be in for this.

DRAFT

F12: Transfer object between hands

P25	P75	P90	P99+	P100	check at
6	9	12	**17**	**(17)**	**24** months

1. Give block to the child.
2. Observe the child exchanging the object between his 2 hands.

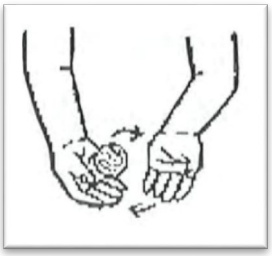
Pass: child transfers the object from one hand to another hand.
Fail: Not meeting any of the pass criteria

If Failed: Child should try to follow the game in Blue Box learning to use hands and tools H8

What?

- Most of the activities need the use of both hands.
- Children have to learn how to use them in a coordinated way.
- Sometimes each hand needs to do a different job, for instance one hand holds a piece of bread and the other hand pinches small pieces of bread.
- Transferring objects also means that the child is crossing the midline (an imaginary line that divides the body from head to feet). This is a good sign that the child's brain is able to integrate his body.

When?



- When the child is able to hold an object.
- During play times
- Practice this until the child is able to pass the object back and forth as much as he likes.

How?

- Prepare several objects that the child can grasp easily and that are attractive.
- Encourage the child to pass the objects to the other hand.
- Gently help him to do it if needed. Reinforce when he does: "Oh, look, you just passed the toy to the other hand!" Let the child release objects from one hand and pick up another one.

For children with moving difficulty:

- Try to look for a posture where his arms can function better (often side-lying).
- Some children will not be able physically to learn this skill. If so, you can physically guide him (your hands on his hands), so he gets the experience and understands that both hands can be used to hold objects.
- You can also try to give the child an object too large to hold with only one hand and encourage him to use the other hand for support.

DRAFT

F13: Thumb-finger grasp (start 30 months)

P25	P75	P90	P99+	P100	check at
F9: Rake: 4	6	7	**10**	**(10)**	**18** months
F13: Thumb-finger 7	12	14	**21**	**(31)**	**30** months
F16: Pincer 11	18	24	**29**	**(29)**	**36** months

1. Put 3 small O-shaped objects (bead or lotus seed) on the table in front of the child within easy reach.
2. Point to or touch the small objects.
3. Demonstrate the child how to pick it up with pincer grasp and drop the item in a container
4. Observe the child racking up small objects grasping it with the entire hand.
5. Allow for 2 more trials.

Pass: child picks up the lotus seed, using any part of his thumb and one or several other fingers (thumb-finger grasp).

Fail: Picking up by raking motion only.

F9: raking motion,
F13: thumb-finger(s) grasp,
F16: pincer grasp with thumb + index.

If Failed: Child should try the following games in the Blue Book:
Fine Motor milestone 9: grasp with thumb and index finger: p. 117 English - p. 321 Khmer

Game 1: Thumb Finger Grasp

- Continue the game of F9, but use smaller objects.

Game 2: Thumb finger Grasp

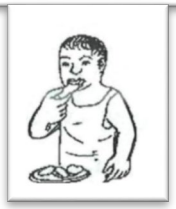
- Make a "busy box" (or basket) with lots of small, interesting objects inside.
- Encourage the child to pick out objects. Also encourage the child to put small objects into containers with small holes.

Game 3: Thumb finger Grasp

- As the child gains lots of experience using his fingers in this way, his grasp will develop from "raking" the fingers toward the palm; to putting the fingers and thumb together; and finally, to neatly using the thumb and the tip of the index finger (pincer grasp).

Game 4: Thumb finger Grasp

- Giving the child small pieces of food to pick up is helpful.
- If the child continues to use the raking motion, hand small objects to him by holding them between your thumb and index finger in such a way that the child cannot get them with the raking movement



DRAFT

F14: Put block in cup

P25	P75	P90	P99+	P100	check at
9	12	15	**21**	**(29)**	**30** months

1. Put a cup and 3 blocks on the table in front of the child.
2. Encourage the child to put the blocks in the cup by using demonstration and words, eventually 3 times.
3. Observe the child.

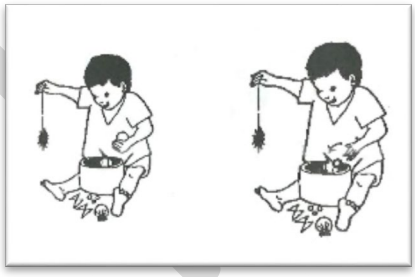
Pass: child can put 1 or more blocks in the cup.

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Fine Motor milestone 11: drops object through small hole: p. 118 English - p. 274 Khmer

Game: Put Block in cup

- Collect various small objects such as sticks, bits of wood, paper you can roll tightly into balls, pebbles (small stones), or leaves, or use small toys or objects you may have.
- Give the child a small box with a hole cut out, a basket or other container with a top opening big enough for the objects to go through.



- Encourage the child to drop the objects into the container through the opening.
- Guide his hands to help him drop objects into the opening if necessary.
- Praise his efforts.
- Talk about the object and the sound it makes when falling inside.
- Shake the container when the objects are inside, and show him how to dump the objects out.
- Repeat the activity until the child can put the objects in by himself.

F15: Bang 2 objects together (start 36 months)

P25	P75	P90	P99+	P100	check at
8	15	18	**23**	**(31)**	**36** months

1. Give 2 blocks to the child, one in each hand.
2. Take 2 blocks yourself and bang them while the child is watching.
3. Repeat the procedure until the child can imitate correctly.
4. Do NOT touch or allow the parents to touch his arms or hands.
5. Observe the child.
6. Ask the caregiver in case no observation can be made.

Pass: child holds one block (object) in each hand and hits (bangs) the blocks together (or when caretaker reports).

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Fine Motor milestone 7: claps hands: p. 116 English - p. 268 Khmer
Then use assessment exercise above like in the assessment instructions

DRAFT

What?

The developmental sequence:

- First the child needs to be able to clap his hands.
- Then he needs to be able to hold objects with his 2 hands.
- Only then he can start banging objects together.

How?

Game 1: Bang two object together

- **Work from the beginning of the activities until the child can clap his hands and learn to hold object in both hands.**
- To encourage the child to clap his hands, clap your hands often. Do this when you like what he has done.

- Play lots of clapping games and sing songs that allow you to clap your hands. If he does not clap along, you can physically guide his hands to clap. As he learns to clap, give him less guidance gradually.
- When the child can clap his hands without guidance two times a day on three days, go on to game 2 as per the assessment.

Game 2: Bang two object together

- Give 2 blocks to the child, one in each hand.
- Take 2 blocks yourself and bang them while the child is watching.
- Repeat the procedure until the child can imitate correctly holding one block (object) in each hand and hits (bangs) the blocks together.

For game 1

- If **the child has seeing difficulties**, it may be necessary to guide the child's hand so he will know where to reach.

For Game 2

- For a **child with a seeing difficulty**, touch him with the object and talk about it. If the child does not take the second toy, place it in his other hand and observe his response. If the child drops one of the toys, take back both toys and give the child the toy he dropped. Then present the other toy. If he does not take it, place it in his hand and observe.

- **Some children with difficulties moving** may not be able to bring their hands together.
- Never force stiff arms or hands to move. A physical therapist can show you relaxation exercises to do with a child who is stiff and cannot clap his hands or clap the toys together.

For game 1:

- Some children with difficulties moving may never be able to grasp objects smoothly, but should continue to practice. It is important to let these children practice picking up things with you, giving help only when it is really necessary.
- A physiotherapist can suggest the best positions for the child to be in for this.

DRAFT

F16: Pincer grasp

P25	P75	P90	P99+	P100	check at
F9: Rake: 4	6	7	**10**	**(10)**	**18** months
F13: Thumb-finger 7	12	14	**21**	**(31)**	**30** months
F16: Pincer 11	18	24	**29**	**(29)**	**36** months

1. Put a lotus seed or small item in front of the child (caution for choking).
2. Ask the child to pick the lotus seed or item.
3. You may give a demonstration how the child can pick it up with the thumb and index finger, and drop the item into the container, then telling him to copy you.
4. Observe how the child picks up the lotus seed or small item using thumb and index finger.

Pass: child can pick up a small object with his thumb and index finger (pass also F9 & F13)
Fail: F9 (raking motion) or F13 (thumb-finger motion) only

If Failed: Child should try the game in Blue Box Use hands and tools H9

What ?

- The "pincer grasp" is a more developed way of using the hand than holding with the whole hand. This skill appears "spontaneously" when the child tries to grasp something that is too small to be held with the whole hand, and it takes years to be properly developed. At the beginning, children are clumsy.
- It is important for many daily living tasks such as feeding himself, buttoning or hand writing.

When ?

- During daily play and activities times
- Warning! Don't let leave the child alone with small objects he can choke on.

How?

- Depending on the age of the child, offer him small, non-dangerous objects.
- A good way to start is with small pieces of food that are attractive to the child and that the child can swallow, such as tiny pieces of fruits, well-cooked beans or peas, crumbs of bread or biscuit.
- You can also use different objects: pebbles, marbles, dried beans , and play to put them in and out of a container.
- In order to strengthen the child's hands, you can practice with a ball of bread dough or clay, asking the child to pinch and to crush between his index and thumb fingers.
- If the child doesn't use the pincer grasp spontaneously, you can cover his hand with cloth or bandage, with only the index and thumb fingers out and the other fingers closed in a fist. Do this only for a short time, and while you are playing with him!

For a child with difficulty moving

- As always, try to find the position where the child can use his arms more easily.

DRAFT

	• Some children will not develop this way of grasping. In this case we have to think in ways the child can still hold small objects. For example, to hold a pencil you can make it larger with cloth or duct tape, so the child can hold it using the whole hand. • If the child uses one hand much better than the other, you can practice the pincer grasp with the hand that doesn't work so well, but don't worry if the child uses mainly his better hand for small objects

DRAFT

F17: Tower 2 blocks (also F20: ≥4, F21: ≥6 blocks)

P25	P75	P90	P99+	P100	check at
2: 13	22	27	**29**	**(35)**	**36** months
4: 17	23	27	**33**	**(39)**	**48** months
6: 20	27	33	**36**	**(42)**	**48** months

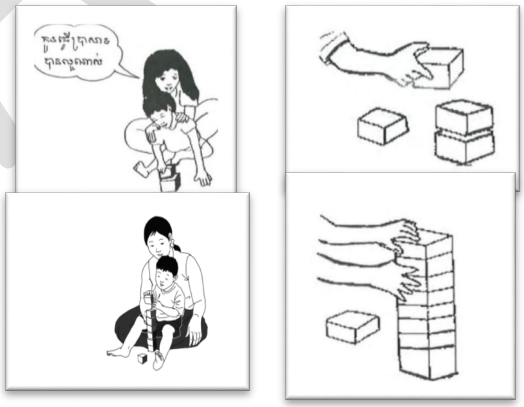
1. Make sure the child sits comfortable and has a stable surface to play.
2. Place 8 squared blocks within arm's reach of the child which are easy to grasp and release (same color if possible).
3. Demonstrate how to make a tower of 2 blocks.
4. Keep your distance from the child.
5. Ask him to put 2 blocks on top of each other.
6. Encourage the child to put more blocks until the tower falls.
7. It may be helpful to hand the blocks to the child one at a time so that he does not make the tower fall by reaching to grab a new block.
8. Count how many the child can put on top of each other without the tower falling down.
9. The child repeats 2 more times, and the highest score is valid.

Pass:
Child is able to place 2, 4 or 6 blocks on top of each other without falling when he removes his hand.

F17: ≥ 2 blocks,
F20: ≥4 blocks,
F21: ≥6 blocks

If Failed: Child should try the following game in the Blue Book:
Fine Motor 12: builds tower 1-4 blocks: p. 118 English - p. 275 Khmer

Game: Tower with Two, Four or Six blocks



- You can make building blocks out of empty matchboxes, other small boxes, or empty film holders (with the tops on), or ask the local carpenter for small leftover pieces of wood.
- Let the child feel and play with these blocks.
- At times, tell him you are going to build a tower. Build a tower with four to six blocks. Then knock it down and check at to build another.
  Then ask the child to help build one with you. Begin with two.
- You may need to guide the child's hand to help him putting one block on top of another.
- Give praise for all the child's efforts.
- Some children will need bigger or smaller blocks depending on their capabilities. Use a size that the child can easily grasp and release.

- **For a child with difficulties seeing**, help him feel the blocks. It may help to have him hold the bottom block(s) with one hand and place the top block with the other hand. He will need a lot of help at first.
- When the child can copy you and build a two or three block tower three times on two separate days, go on to another activity.

DRAFT

F18: Scribble with pencil

P25	P75	P90	P99+	P100	check at
15	26	28	**31**	**(40)**	**36** months

1. Place a plain paper and a pencil on the table in front of the child. You may put the pencil in his hand and encourage him to scribble, BUT Do NOT show him how to scribble. Alternatively, one can also mark a line in the dirt ground.
2. Observe the child scribbling and take care he does not put the pencil in his eyes or mouth.

Pass: child purposely scribbles on the paper or marks a line on the dirt ground (straight or circular line).

Fail: Accidental marks and stabbing with the pencil do NOT pass.

If Failed: Child should try the following games in the Blue Book:
Fine Motor milestone 10: Scribbles: p. 118 English - p. 271 Khmer

Game 1: Scribble with pen

- Have the child in a comfortable position where he can use his arms and hands easily.
- Take a large crayon, marker, pencil, pen, or regular crayon and use a scotch tape to tape around any one of these, to make it thicker and easier for the child to hold.
- Show him how to grasp and hold the marker (If you don't have paper try using a stick to make a mark on the dirt). Draw slowly some easy marks on a piece of paper.
- Put the marker in the child's hand and guide it along the paper to make some marks. Take the marker and hand it to the child, telling him to make some marks of his own.
- Praise any marks he makes. Guide his hands if necessary.
- Try playing simple imitation games involving making marks. You can imitate the marks the child makes, then see if he'll copy your simple lines.

Game 2: Scribble with pen

- **Give the child plenty of opportunities to play with a pencil** or other writing tools and paper.

- Show the child how to scribble on the paper and physically guide his hand to help him scribble if necessary.
- After the child can scribble easily when you show him, just give him the pencil and paper and see what he does.
- If the child does not scribble by his own, show him again and encourage him to scribble.
- If you do not have pencils and paper, use a stick to scribble in the dirt. When the child scribbles three out of four times on three days, go on to another activity.

For game 1

- **For a child with moving difficulties**, you may need to help him hold the marker by taping it in his hand or wrapping lots of tape or a strip of cloth around the marker to make a thick part that he can grasp.

DRAFT

F19: Lift lid of container (start 48 months)

P25	P75	P90	P99+	P100	check at
14	21	27	**36**	**(42)**	**48** months

1. Demonstrate how the child can lift the lid from the container by taking the lid off (no screwing, lid is smaller than the child's palm size).
2. Give the jar with the lid on to the child and ask him to do the same.
3. Observe the child.

Pass: child can pull the lid from the jar.

Fail: Not meeting any of the pass criteria

If Failed: Teach and repeat this exercise with child and caregivers; ask parents to repeat the exercise at home.

Game: lift lid of container

- Give the child a jar with small object or toys inside that he liked to play, e.g. sticks, bits of wood, paper that rolled tightly into balls, pebbles (small stones), or leaves.

- Encourage the child to open the jar by demonstrating.
- Then ask him to pull the lid from the jar. Guide his hands if necessary.
- Praise his efforts and let him play with the toy inside.
- Repeat the activity until the child can put pull the lid off from the jar by himself.

F20: Tower 4 blocks (see games F17: ≤2 blocks)

F21: Tower 6 blocks (see games F17: ≤2 blocks)

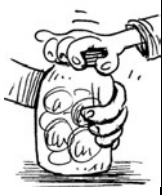
DRAFT

F22: Unscrew a jar

P25	P75	P90	P99+	P100	check at
18	28	30	**41**	**(41)**	**48** months

1. Demonstrate how the child can open and close the jar to get something from inside (unscrew and screw the lid).
2. Give a jar with the lid loosely screwed-on to the child and ask him to take an object out of the jar.
3. Observe the child.
4. Demonstrate up to 3 times

Pass: child can unscrew jar to open it, lift off the lid and screw it back on.



Fail: child tried but missed due to lack of finger strength and/or coordination

If Failed: Teach and repeat this exercise with child and caregivers; ask parents to repeat exercise at home

Game 1: Unscrew a jar

- Give the child a jar with small object or toys that he likes to play with such as sticks, bits of wood, paper you have rolled tightly into balls, pebbles (small stones), or leaves.
- Encourage the child to open the jar by demonstrating first. Then ask him to unscrew the lid from the jar. Guide his hands to help if necessary.
- Praise his efforts and let him play with the toy inside.
- Repeat the activity until the child can screw and unscrew the lid from the jar by himself to play with his toys.

DRAFT

F23: Take off easy clothes

P25	P75	P90	P99+	P100	check at
19	29	37	**42**	**(42)**	**48** months

1. Ask the child to take off his short-skirt (elastic).
2. Observe the child removing his clothes.
3. When not demonstrated, ask the caretaker whether the child can undress himself

Pass: child is able to remove simple clothes from his body, regardless the methodology e.g. lower it to the knees and remove it by kicking the legs.
Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Self-Care milestone 9: takes off clothes: p. 162 English - p. 402 Khmer

Game: Take off easy clothes

- **As you help a child to undress,** leave an easy step for him to do at the end, e.g. pull off most of his pants, before encouraging him to do the rest.
- Guide his hands if necessary. Praise and encourage him to help with undressing, and gradually give him more to do.
- Give physical guidance and instructions as necessary, but be sure to let the child try to do things himself, even if it takes time and is more difficult.

- E.g. when teaching the child to **take off his trousers:**

1. The child stands holding his trousers on each side with his hands, then pulls them down to his thighs (if the trousers have a zipper, unzip them first before pulling them down).
2. The child sits and pulls the trousers down to below his knees.
3. Then pulls the trousers down to his ankles.
4. Next, he pulls one trouser leg off one foot and the other trouser leg off his other foot.

- Repeat the exercise until the child can take off his trousers without help.
- Always remember to praise the child.

F24: Make string with 3 beads or more (start 60 months)

P25	P75	P90	P99+	P100	check at
20	29	37	**41**	**(67)**	**60** months

1. Give the child a string (nylon) and beads with holes.
2. Ask the child to make a chain out of the beads and the string (you may provide a demonstration to the child and ask him to copy you).
3. Observe the child.

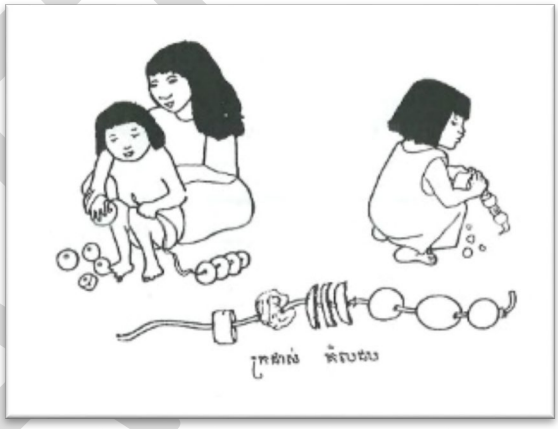
Pass: child can make a chain with at least 3 beads relatively quickly.

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Fine Motor 14e: makes simple puzzles: stringing beads: p. 122 English - p. 283 Khmer

Game: Make string with 3 beads or more

- Stringing beads is another activity that develops good finger movements.
- You can make large beads for the child to string out of cut bamboo, crushed paper, cardboard, straws, or empty thread spools you can get from the tailor. If possible, point or dye them in bright colors.



To teach the child to string the beads, follow these steps:

- Put the string through the bead. Help the child to pull the tip of the string so that the bead goes all the way to the end of the string.
- Put the tip of the string against the hole of the bead. Help the child push the string through the hole and pull the string so that the bead goes all the way to the end of the string.
- Help the child to hold the bead in one hand and the tip of the string in his other hand. Help the child to push the string through the bead, move the bead to the other hand and pull the string so that the bead goes all the way to the end of the string.
- Repeat the exercise until the child can use beads of different sizes and put them on with little help. If the child is having great difficulty, use soft wire or thick wool instead of string. Gradually reduce the help that you give.

	For the child with visual impairment, guide his movements and talk about the activity a lot.
	If the child has a movement problem and his arms and hands are stiff, do not force his movements. Make sure he is in a good position with his hands and arms relaxed. Use bigger beads and a thin stick instead of string.

DRAFT

F25: Wiggle one thumb

P25	P75	P90	P99+	P100	check at
29	39	40	**42**	**(49)**	**60** months

1. Ask the child to form a fist with the thumb up and to wiggle his thumb left to right and back like the tail of the dog (you may demonstrate him how to do it).
2. Ask the child to copy you.
3. Observe the child thumb movements.
4. Let him try his other hand.

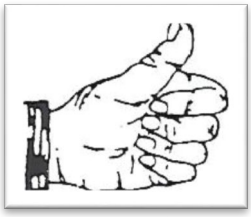
Pass: child can wiggle with one thumb from left to right like the tail of the dog.

Fail: Not meeting any of the pass criteria

If Failed: teach and repeat this exercise with the child and caregivers; ask parents to repeat the exercise it at home

Game: Wiggle one thumb

- Ask the child to form a fist with the thumb up and to wiggle his thumb left to right and back like the tail of the dog (you may demonstrate him how to do it). Sing a song to the child and copy the movement with the other thumb.



- Ask the child to copy you and start a game between your thumb and the child thumb to let them touch each other. Let the child win and praise him.
- Let him try his other hand.

DRAFT

F26: Imitate vertical line (<30°)

P25	P75	P90	P99+	P100	check at
29	41	43	**48**	**(53)**	**60** months

1. The child should be seated at the table at a comfortable writing level.
2. Place a pencil and plain A4 paper in front of the child
3. Draw a straight vertical line on a paper
4. Ask the child to copy you and draw the vertical line next to it on the same paper
5. Observe the child's drawing

Pass: child can imitate a vertical line as shown in the picture within 30 degrees difference (the line can be bit wobbly as in example)

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Fine Motor 10: scribbles: p. 118 English – p. 275 Khmer
Fine motor 16: copies a straight line: p. 127 - p. 285 Khmer
Fine motor 17: copies circles: p. 128 – p. 286 Khmer

Exercises scribbling first, before continuing with copying straight lines, and finally finishing a circle.

Game 1: Scribble with pen

- Have the child in a comfortable position where he can use his arms and hands easily
- Take a large regular crayon, marker, pencil, or pen and use a scotch tape to tape around any one of these to make them thicker and easier for the child to hold.
- Show him how to grasp and hold the marker (If you don't have paper try using a stick to make a mark on the dirt). Draw some slow, easy marks on a piece of paper.
- Put the marker in the child's hand and guide it along the paper to make some marks. Take the marker and hand it to the child, telling him to make some marks by his own.

- Praise any marks he makes. Guide his hands if necessary.
- Try playing simple imitation games involving making marks. You can imitate the marks the child makes, then see if he'll copy your simple lines.
- **Remember**: If you do not have pencils and paper, use a stick to scribble in the dirt.
- When the child scribbles three out of four times on three days, go on to another activity.

Game 2: copy straight lines

- Make simple activities by drawing lines like these and asking the child to follow them with his finger, then with a crayon or pencil.

DRAFT

- After this, ask him to draw a line between two lines you draw.

For game for a child with difficulty moving,

- You may need to help him holding the marker by taping it to his hand or wrapping lots of tape or a strip of cloth around the marker to make a thick part that he can grasp.

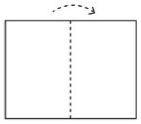
DRAFT

F27: Fold a paper

P25	P75	P90	P99+	P100	check at
33	41	45	**51**	**(53)**	**60** months

1. Fold a paper in half in front of the child.
2. Ask the child to do the same.
3. Observe the child.

Pass: child can fold the paper as demonstrated by you.
It is acceptable if the fold is not a straight or symmetric one.
Fail: Not meeting any of the pass criteria



If Failed: teach and repeat this exercise with the child and caregiver, ask parents to repeat the exercise at home

Game: Fold a Paper

- Give the child a piece of paper.
- Encourage the child to play with the paper.
- Demonstrate how it can be folded and opened again.
- Show him different ways of folding the paper in different shape.
- Then ask him to copy you and guide his hands if necessary.
- Praise his efforts and let him play with the paper after.
- Repeat the activity until the child can fold the paper the way he wants.
- After, show him how to fold the paper in half.
- Guide him again and praise him for his effort.
- As a game, to encourage the child to learn, when the child is able to fold the paper in half, show him how to fold again and again until the paper is too small to be further folded.

DRAFT

F28: Catch soft ball

P25	P75	P90	P99+	P100	check at
27	46	53	**67**	**(70)**	**60** months

1. Ask the child to stand about 2 meters away from you.
2. Throw a soft ball gently and ask him to catch the ball.
3. Alternatively, ask the child to throw the ball up in the air and catch it again.
4. Observe the child.
5. Repeat 2 more times if needed.

Pass: child can catch the ball at least 1 time.

Fail: Just touching the ball but not managing to hold on to it

If Failed: Child should try the following games in the Blue Book:
Fine Motor 19: throws and catches a ball: p. 124 English - p. 289 Khmer
Gross Motor 20: catches ball when standing alone: p. 148 English - p. 376 Khmer
Social skill 9: Rolls ball to adult or child: p. 25 English - p. 57 Khmer

Game 1: Catch a soft ball

- Make a ball of at least 10 cm in diameter, or sew two pieces of cloth together to make a square or circle. Fill this with dry rice, beans, or seeds to make a "beanbag" and sew up the hole.
- Show the child how to throw the ball or beanbag underhand.
- Guide him so he can feel the movements. Encourage him to throw the ball to you this way.
- Put a basket nearby; draw a large circle on the ground or on the wall and ask the child to throw the ball at the target (circle).
- When the child can throw the ball smoothly, get him to practice catching the ball. Show him how to put out both arms and form a cup with the hands to catch the ball (or beanbag). A large ball will be easier to catch.
- The child should keep his eyes on the ball.
- He should stand with his feet apart. His arms should be at waist level with his elbows bent a little so that his arms and chest make a basket shape.
- His elbows should be close enough together so the ball can't drop through.
- As the ball comes to the child, give him as much physical guidance as he needs to help him get the feeling of catching it.
- Stand behind the child and hold his arms in position to give help.
- Have someone throw the ball under hand to the child close by.
- As he learns to catch it, gradually throw the ball from farther away and gradually use a smaller ball or beanbag and give less help.

DRAFT

Game 2: Catch as soft ball

- Help the child to learn to catch a soft ball made of rolled cloth or paper.
- Stand very close to him at first and tell him to hold his hands almost together with his hand palms facing up.
- Throw the ball gently underhand to him.
- Practice as long as the child is interested.

Game 3: Catch a soft ball 3

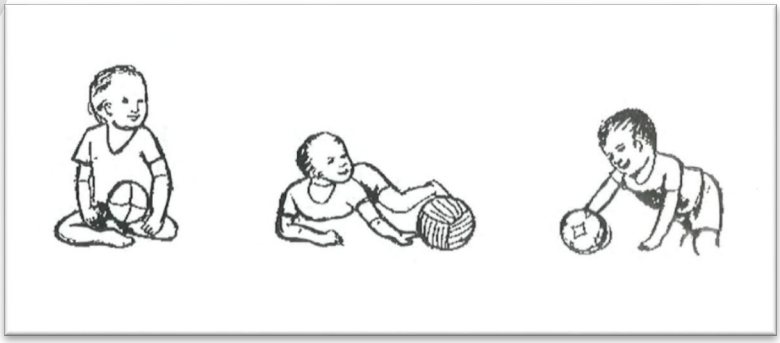
• Use a string to tie a ball or balloon to a tree branch or pole so it hangs at the same level as the child's waist.
• Encourage two or more children to throw and catch the ball or balloon.

Game 1

A child with a **difficulty moving his hands** may not be able to do this or may need large items with parts that are easy to grasp.

If child has **standing difficulties:**

- Start exercising while seating.
- Children like to have toys that can be rolled on the ground.
- Give him brightly colored tins or rubber balls to play with. Let the child throw and roll these around. He will want them again. Let him crawl to pick them up.
- Sit very close facing the child with your legs open. Roll the ball or the can to him.
- If necessary, have someone sit behind him to give support in sitting and help in grasping the ball or can and rolling it back.
- As the child is able to do this easily, increase the distance between the two of you.



DRAFT

F29: Zip and unzip pant or skirt

P25	P75	P90	P99+	P100	check at
37	45	55	**61**	**(70)**	**60** months

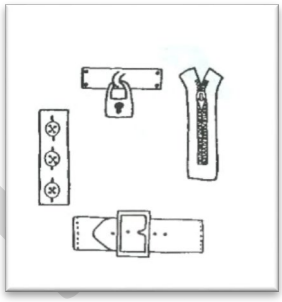
1. Give the child a pant or skirt with a zip.
2. Demonstrate how to zip and unzip by showing clearly what to do with both hands.
3. Ask the child to zip and unzip pant or skirt.
4. Observe the child.

Pass: child can **zip and unzip** the pant or skirt.

Fail: can only either zip or unzip

If Failed: Child should try the following games in the Blue Book:
Fine Motor 14 a: makes simple puzzles: (un)zips: p. 121 English - p. 279 Khmer
Self-Care 11a: puts on the clothes p. 164 English - p. 407 Khmer

Game 1: Zip and unzip pant or skirt



- On a large piece of thin plywood or heavy cardboard, firmly attach different things the child can open and close, such as a zipper, buttons and button-hole strip cut from a shirt, belt buckle, snaps, hooks and eyes and a lock with a key.
- Play with the child, showing him how to open and close each thing, then encourage him to try by himself.

Game 2: Teach a child to dress by himself

The following activity will teach the child to put on pants or skirts and shirts. Here are some suggestions to help you. Break the activity into many small steps.

Section one:

- At first you have to demonstrate by yourself how he should put on the clothes, so the child can see and follow.
  Use an elastic pant or elastic shirt to practice with the child.
- Kneel down behind the child with the child standing in front of you, his back against your chest.
- Pick up each of the child's legs and put them into the correct trouser legs or skirt.
- Then take your hands to hold both sides of the trouser waist and pull it up to the child's waist.
- Do these activities slowly in order for the child to observe carefully of what you are doing. Praise the child.

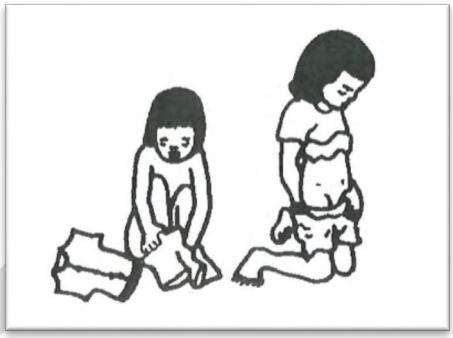
Section two:

- Encourage the child and guide both of his hands to do by saying, "Hold the waist of your trouser tightly and pick up one of your leg put into one of the trouser leg", as you are talking, help by picking up his legs and putting his feet into the trousers legs.

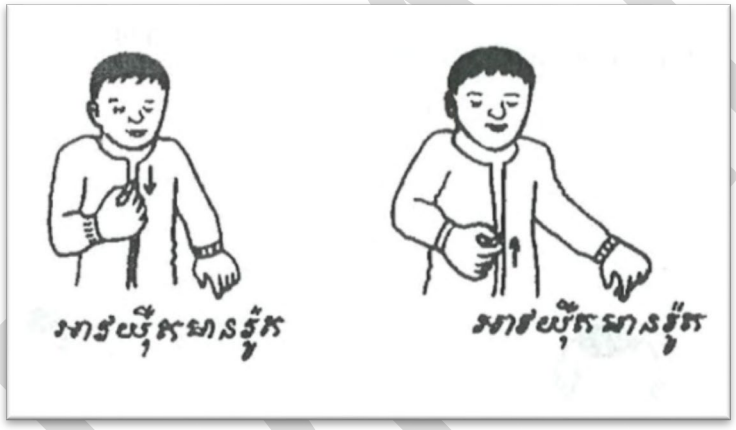
DRAFT

- Next, help him pick up the other leg and put it into another trousers leg, and guide his hands to pull the trousers waist to his waist.
- Clap your hands to praise his efforts.

Section three:



- Tell the child "It is time for you to put on the trousers by yourself". At first say,
  - "Take both of your hands to hold both sides of your trousers waist", then
  - "Lift up your right leg and put it into the right leg of the trousers ".
  - "Lift up your left leg and put it into the left leg of the trouser".
  - "Pull your trousers up to your waist to finish".
- Help the child if necessary, but wait for a moment before helping the child.
- If the child does it correctly, praise and award him like giving him a biscuit or a candy as encouragement.
- Always praise him even though he doesn't do it correctly.
- Practice these activities until he can do it correctly then go on to activity.
- You can use these sections to teach the child to learn dressing other types of clothes, but choose clothes that are not very tight and easy to practice first.



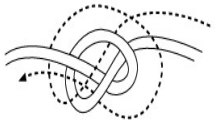
	Game 1 **The child with seeing difficulties** will need lots of physical guidance with talking to explain the items and how to open them.
	Game 1 **For a child with a moving difficulty** - his hands may not be able to do this or may need large items with parts that are easy to grasp (such as a thick rope attached to the zipper).

F30: Tie single knot

P25	P75	P90	P99+	P100	check at
37	52	57	**70**	**(74)**	**60** months

1. Give the child a string.
2. Demonstrate how to make a single knot tie.
3. Ask the child to make one.
4. Observe the child.

Pass: child can make a single knot tie as shown in the picture.

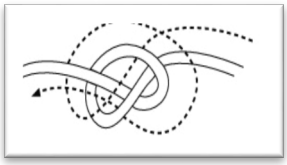


Fail: Not meeting any of the pass criteria

If Failed: teach and repeat this exercise with the child and the caregiver; ask parents to repeat the exercise at home

Game: Tie single knot

- Teach a child to learn how to tie their own shoe laces. Tying shoe laces requires a level of dexterity most kids don't possess until they're between five and seven, so take it slow.
- Teach them how to tie shoe laces by practicing on a shoe with soft laces. It helps to actually color one half of the lace with a marker in a different color, allowing the child to distinguish between the two sides of the lace.



The easy bunny ears method of tying laces

- Two bunny ears help the child tie a square knot, one of the easiest knots to learn.

Try teaching this:

- Fold each end of the lace into a single "bunny ear." You can hold the "ears" in place between your thumb and pointer finger on each hand.
- Cross the bunny ears so that they form an "X" in the air.
- Loop the bottom bunny ear over and through the top bunny ear. This will create a second knot.
- Pull the bunny ears out to the side away from the shoe. This will create a square knot that will not easily come undone and will hold the shoe in place.

DRAFT

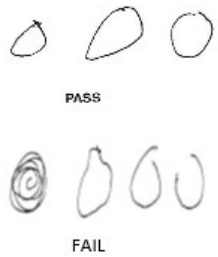
F31: Copy circle

P25	P75	P90	P99+	P100	check at
Circle: 40	54	55	**70**	**(75)**	**60** months
Square: 51	66	71	**73**	**(77)**	**60** months

1. Give the child a paper and a pencil.
2. Show him a picture of a circle without naming the shape or moving your finger-pencil to show how to draw it.
3. Ask the child to copy the picture.
4. Allow the child a maximum of 3 trials.
5. Observe the child's drawing.

Pass: child can draw a nearly complete circle (not need to be perfect shaped) as shown in the picture.

Fail: Continuous spiral motions as in scribbling are not acceptable for passing.



If Failed: Child should try the following games in the Blue Book:
Fine Motor 10: scribbles: p. 118 English – p. 271 Khmer
Fine Motor 16: copies circle: p. 123 English - p. 285 Khmer

Game 1: Copy Circle

- Before the child can draw a circle, he will be able to draw straight and curved lines. Practice these first. Make simple activities by drawing lines like these and asking the child to follow them with his finger, then with a crayon or pencil.

- After this, ask him to draw a line between two lines you draw. Start with straight lines and then use curvy lines. Finish with a circle.

Game 2: Copy Circle

- Cut out circles from cardboard. Show the child how to trace around the shape on paper.
- Talk about going "round and round" the circle.
- When the child can trace the circle outline with a crayon or pencil, go on to the next activity.

Game 3: Copy Circle

- Make dots on a piece of paper in the shape of a circle.
- Show the child how to connect the dots with a crayon or pencil.
- Then ask the child to connect the dots. Guide his hand if necessary.

DRAFT

Game 4: Copy circle

- **Cut out circles from cardboard.** Show the child how to trace around the shape on paper.
- Talk about going "round and round" the circle.
- When the child can trace the circle outline with a crayon or pencil, go on to the next activity.

Game 5: Copy circle

- **Make dots on a piece of paper in the shape of a circle.**

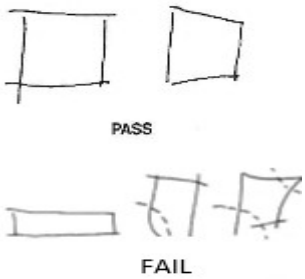
Show the child how to connect the dots with a crayon or pencil. Then ask the child to connect the dots. Guide his hand if necessary.

F32: Copy square

P25	P75	P90	P99+	P100	check at
Circle: 40	54	55	**70**	**(75)**	**60** months
Square: 51	66	71	**73**	**(77)**	**60** months

1. Give the child a paper and pencil.
2. Show him a picture of a square without naming the shape or moving your finger-pencil to show how to draw it.
3. Ask the child to copy the image with 4 single strokes.
4. Allow the child a maximum of 3 trials.
5. Observe the child's drawing.

Pass: child can draw a complete square (straight lines and 4 square corners (not rounded or pointed), Length <2*width as shown in the picture.



Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Blue Book Fine Motor 10: p. 118 English – p. 271 Khmer
Blue Book Fine Motor 16: p. 123 English - p. 285 Khmer
Fine Motor 20: copies square: p. 125 English - p. 291 Khmer

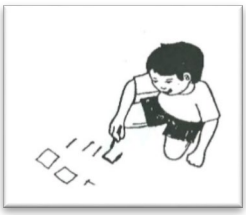
Before the child can draw a square he needs to be able to scribble and to draw straight lines.
See Game: scribble F18
See Game: straight line and cross: F26: Imitate vertical line (<30 °)

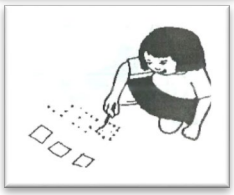
Game 1: Copy Square

- **To help the child to learn copying a square shape,** first draw a square in the dirt with a stick. Then draw three sides of a square and ask the child to draw the last side. Guide his hand if necessary.
- If he can do this, draw a square with two sides and ask the child to complete the remaining two sides.
- Then draw one side and let the child complete the remaining three sides. After this gradual practice, the child should be able to copy your square by himself.

DRAFT

- While he is learning, give the child physical guidance as necessary to complete the square, but do not force him. Go at his speed.





Game 2: Copy square

- Make dots in the shape of a square and show the child how to join them. Make the square out of dots again and encourage the child to join them himself.
- Guide his actions if necessary. Practice until the child is not interested anymore or he can do this alone. Gradually make the dots farther apart, then leave one or more sides without dots. This way, the child will do more and more by his own.

- **For a child with moving difficulty:** for all games, you may need to help him hold the marker by taping it to his hand or wrapping lots of tape or a strip of cloth around the marker to make a thick part that he can grasp.

DRAFT

Language / cognitive domain (Milestone L1-L33)

This section describes the step-by-step procedure on how to assess Language / cognition (L) milestones.

L1: Respond to noise (start 0 month)

P25	P75	P90	P99+	P100	check at
0	1	3	**5**	**(5)**	**0** month

1. When the child appears awake and alert, make a loud noise by shaking the container with small objects, outside the child's line of vision and a little bit behind his ear.
2. Observe the child's reactions.
3. Repeat for the other ear.
4. Ask the caretaker whether the child usually reacts to loud noises at home, e.g. a door slamming

Pass: child responds with ANY reaction to the noise, e.g.

- Crying
- Looking startled
- Change in breathing
- Body movement
- Eye movement
- Change in activity

Or caretaker reporting that the child does this.
Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Hearing milestone 1: reacts to sound: p. 82 English - p. 184 Khmer
Cognition 5: Attends briefly to objects/sounds: p. 37 English -p. 80 Khmer

Game 1: Respond to noise

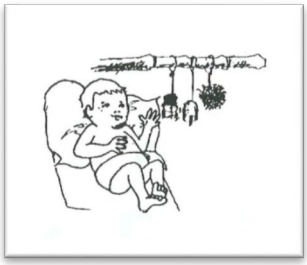
- Have the child in a comfortable position where you can observe his reaction.
- Make sounds with a noisy object (e.g. bell or rattle) about 3 cm away from the child's ear at ear level for three to five seconds.
- Observe the child to see if he becomes quiet, looks for the object with his eyes, moves his head from side to side or becomes more active.
- Use objects that make different sounds so the child will be interested. If the child has a moving difficulty, look for some reaction, even a small change in his face or eyes.

Game 2: Respond to noise

- **Place the child in a comfortable position** on his side or back, giving whatever support is necessary.
- Make sounds with noisy, shiny toys or other objects with interesting appearance and soft, pleasant sounds.
- Make sure the sound is about 3 cm away from the child's ear at ear level. Make the sound for around three to five seconds.
- Observe the child's eyes. If he does not look back and forth for the noise, attract his attention to the object by bringing it in front of him and moving it back and forth to get his attention.
- Then bring it back to the side and make the noise again. When the child searches for it, wiggle the toy, and make sounds.

DRAFT

- When the child searches for the toy for three times on three days, go on to another activity.



Game 3: Respond to noise 3

- **Make toys with brightly colored tins, which make a noise when they move.**
- Hang these close to the child so that the child can see them, hear them and touch them.

	• **A child with a difficulty seeing** may respond with searching movements even though he cannot see the object. Look for this, as it shows attention. If the child with a seeing problem does not search, look for another sign of attention, such as moving his head from side to side or increased general body movement.
	• If the child shows no reaction to sound, he may have a **hearing impairment**. • Try using louder sounds like a handclap behind his head while he is looking at someone else, who can see if he shows any reaction. • If he does not seem to react, show him objects and help him feel them as they make noise by shaking, etc. • **Make sure he is looking at you when you speak to him and show him things.** Use your facial expressions to show feelings and ideas, as well as touch and guidance when you speak.

DRAFT

L2: Make sounds

P25	P75	P90	P99+	P100	check at
0	2	4	**6**	**(7)**	**0** months

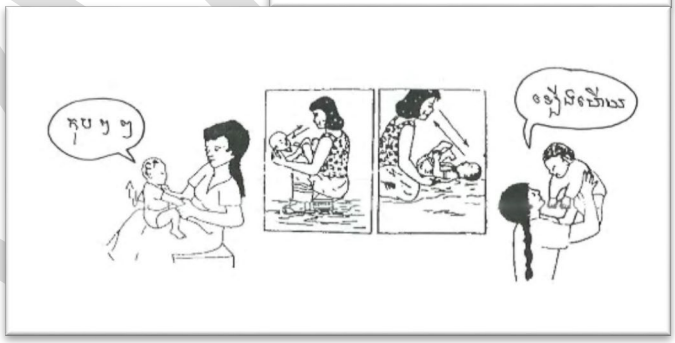
1. Interact with the child.
2. Observe the child and listen for any sound that he makes. If he does not make any vocal sound during the assessment, ask the caretaker if the child makes any sounds.

Pass: child makes any vocal sounds such as 'ooo' or 'aah', as if the baby is happy but not crying,
Or the caretaker reports he does.
Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Language 2: make simple sound: p. 63 English – p. 142 Khmer

Game: Make Sound

- When you are with the child, you should often talk to him. This will encourage him to make sounds, which are the beginning of speech. There may be times when he does not respond to you, but it is very important that you keep talking naturally to him to encourage him to make sounds.
- When he checks at making sounds, which happens when he is only a few months old, show him that you are pleased. Since he will like to see you happy, he will repeat the sound and try to make new ones.
- Children like the feeling of movement. They feel relaxed and comforted if you move them to the rhythm of a lullaby.



DRAFT

L3: Turn head to sounds

P25	P75	P90	P99+	P100	check at
1	3	4	**5**	**(6)**	**9** months

1. Let the child face the caretaker while being seated on their lap or on the table.
2. Approach the child from behind, but stay out of the child's eye sight approx. 20 cm behind his right ear.
3. Make a low soft sound (e.g. clicking of fingers, shaking dry rice in a cup).
4. Observe the head movement of the child.
5. Repeat with the left ear.

Pass: child turns his head for searching where the sound comes to both sides.

Fail: Does no react when sound is made on other side

If Failed: Child should try the following games in the Blue Book:
Hearing milestone 1: reacts to sound: p. 82 English – p. 184 Khmer
Cognition 5: Attend briefly to object and sound: p. 37. English - p. 80 Khmer

Game 1: Turn head to sound

- Have the child in a comfortable position where you can observe his reaction. Make sounds with a noisy object (e.g. bell or rattle) about 3 cm away from the child's ear at ear level for around three to five seconds.
- Observe the child to see if he stays still more or becomes quiet, looks for the object with his eyes, moves his head from side to side or becomes more active.
- Use objects that make different sounds so the child will be interested. If the child has a moving difficulty, look for some reactions, even a small change in his face or eyes.

Game 2: Turn head to sound

- Place the child in a comfortable position on his side or back, giving whatever support is necessary.
- Make sounds with noisy, shiny toys or other objects with interesting appearance and soft, pleasant sounds.
- Make sure the sound is made about 3 cm away from the child's ear at ear level. Make the sound around for three to five seconds.
- Observe the child's eyes. If he does not look back and forth for the noise, attract his attention to the object by bringing it in front of him and moving it back and forth to get his attention.
- Then bring it back to the side and make the noise again. When the child searches for it, wiggle the toy, and make sounds.
- When the child searches for the toy for three times on three days, go on to another activity.

Game 3: Turn head to sound

- Make toys with brightly colored tins, which make a noise when they move. Hang these close to the child so that the child can see them, hear them and touch them.

DRAFT

	• **A child with a seeing difficulty** may respond with searching movements even though he cannot see the object. Look for this, as it shows attention. • If the child with a sight difficulty does not search, look for another sign of attention, such as moving his head from side to side or increased general body movement.
	• If the child shows no reaction to sound, he may have **a hearing impairment.** Try using louder sounds like a handclap behind his head while he is looking at someone else, who can see if he makes any reaction. • If he does not seem to hear, show him objects and help him feel them as they make noise by shaking, etc. • **Make sure he is looking at you when you speak to him and show him things.** • Use your facial expressions to show feelings and ideas, as well as touch and guidance when you speak.

L4: Laugh aloud (start 12 months)

P25	P75	P90	P99+	P100	check at
1	3	4	**6**	**(7)**	**12** months

1. Interact with the child. 2. Try to excite the child by using a rattle or tickling. 3. Observe the child. 4. If not observed, ask the caretaker if child laughs at home and whether he just smiles or also makes a sound.	**Pass:** child chuckles or laughs by making sound. Alternatively, caretaker reports that child chuckles or laughs by making sound. **Fail:** Not meeting the pass criteria

If Failed: Child should try the following games in the Blue Book:
Language 3: laughs: p. 63 English - p. 143 Khmer

Game: Laugh aloud

- Laughing is important! Situations where the baby receives touching or hears noises are the best time to make him laugh.
- Tickle the baby's stomach or face, make popping or funny sounds with your mouth in front of him.
- Toys that make sounds or hand puppets that tickle the baby while you make funny noises are also good.
- Alternatively, blow gently on the child's face, make funny sounds against his stomach or back, or play with his toes.

DRAFT

L5: Squeal

P25	P75	P90	P99+	P100	check at
2	3	4	**7**	**(8)**	**12 months**
1. Interact with the child. 2. Try to excite the child. 3. Observe whether the child squeals. 4. If not, ask the caretaker to report whether the child squeals.			**Pass:** the child makes happy, excited, high pitched squealing sounds (but not crying). Alternatively, the caretaker confirm through reporting. **Fail:** Not meeting any of the pass criteria		
If Failed: It is not possible to train the child in this milestone					

DRAFT

L6: Turn head to voice (start 18 months)

P25	P75	P90	P99+	P100	check at
0	3	5	**8**	**(10)**	**18** months

1. Let the child facing the caretaker, seated on their lap or on the table.
2. Approach the child from behind, but stay out of the child's eye sight, approx. 20 cm behind his right ear.
3. Cover your mouth so that the child cannot feel your breath and use your voice (e.g. softly call his name, make cooing or other interesting noises).
4. Observe the head movement of the child.
5. Repeat with the left ear.

Pass: child turns his head towards the voice on both sides.

If Failed: Child should try the following game in the Blue Book:
Social skill 3: reacts to caretaker's voice: p. 20 English - p. 44 Khmer
Hearing 2: reacts to caretaker's voice: p. 83 English - p. 187 Khmer

Game: Turn head to voice
When the child is in the quiet room not paying attention to the caretaker, have the caretaker call his name softly or speak to him in a normal voice.
Observe the child's reaction.
If he turns toward the caretaker, have him talk to him and pick him up, giving affection to him or playing with him.

A child with a seeing difficulty may respond with searching movements even though he cannot see the object. Look for this, as it shows attention.

- If the **child with a seeing difficulty** does not search, look for another sign of attention, such as moving his head from side to side or increased general body movement.

For a child with a hearing difficulty,

- Make a name sign; when the caretaker is standing in the child's sight, have the caretaker use the name sign as a way of "calling" his name.
- If the child looks up at the caretaker, give encouragement through the actions described above (affection, attention, etc.). Continue encouraging this response. This is especially important for the child with hearing difficulties and will make it easier for teaching him other signs later on.

- **For a child with a moving difficulty**, observe any change in his face or activity when the caretaker calls his name. It is important for the family to show pleasure when the child demonstrates small actions or changes, as this may be all he can do to react.

DRAFT

L7: Babble

P25	P75	P90	P99+	P100	check at
2	6	9	**12**	**(13)**	**18** months

1. Interact with the child.
2. Listen to the child for speech-like sounds, made of consonant and vowel strings, e.g. bababa, nanana
3. If we cannot observe, ask the caretaker to report whether the child babbles already.

Pass: child makes at least one consonant-vowel string like 'ba…ba' or 'pa…pa' or 'da…da' or 'ke kor'.
Fail: makes only vowel sounds or only emotional sounds like cooing, squealing, gliding

If Failed: Child should try the following games in the Blue Book:
Cognition 2 and 3: attracts people by vocalizing, smiling: p. 36 English - p. 77 Khmer
Language 4 and 5: vocalizes to get attention & repeats simple sound e.g. aah gaas:
p. 64 English - p. 154 Khmer

Game 1: Babble

- **Often hold the child in a comfortable position. Smile and speak lovingly.** This encourages the child to feel relaxed and secure. A good time for this activity is after the child is fed or bathed, or has emptied bowel or bladder and is clean.
- Whenever the child makes happy sounds or coos, show you are pleased by smiling at him, touch him sweetly and speak in a friendly and pleasant way to him.

Game 2: Babble

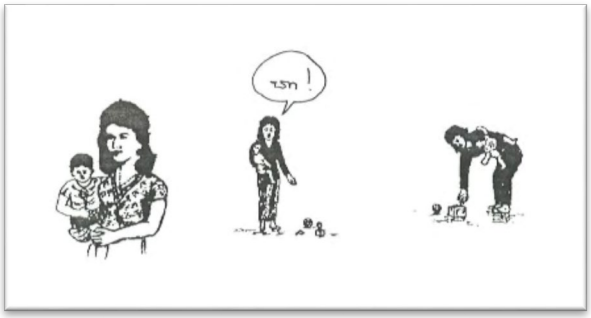
- **In many different situations, stop playing with or talking to the child, but listen to him.** As soon as the child makes any sound except crying, give your attention back.
- Give attention to the child quickly when he vocalizes (makes sounds). This helps him learn that his actions (making sounds) cause others to act (give attention). This is the first step for a child learning to speak. Smile when the child looks or smiles at you, and give him attention for a few minutes.

Game 3: Babble

Observe him, especially during feeding. As he begins to make sounds, respond by talking back to him, giving him another spoon or bit of food, and saying, "Oh, you want more". When you are playing with him and he makes sounds, say, "Oh, you want a toy". Give him the toy, or repeat what you were doing when he made the sounds. This tells him that you are listening and that you like his "talk" (sounds) and will respond to him talking.

Game 4: Babble

- **When he is actively involved in playing with some object,** watch what he does if he drops it and cannot reach it on his own. As soon as he makes any sound other than crying, return the object immediately.
- If he likes to play by giving you objects, which you give back to him, wait a moment before returning the object.



- Listen for a sound that indicates he wants the object back. Ask, "Do you want the … ?"
- At the sound of any vocalization except crying, give the object back to him. Do not wait too long and avoid making him cry. All activities should be fun and loving. Do not tease him.

Game 5: Babble 5

- Listen carefully to his sounds.
- Try to notice if they are different when he is happy, sad, interested or upset and so on. Say things that let him know you understand. For example, if the baby vocalizes displeasure, say "Oh, you don't like this? Well, let's change it".
- If he vocalizes pleasure, say, "Oh, you like that. Let's do it again". It is important that he learns through your actions that his sounds are being understood.

For a child with **seeing difficulty,**

- Always respond to smiles and sounds with physical contact (e.g. a hug, pats, stroking and kind words of encouragement).
- Be aware of other ways (body language) a child with a hearing difficulty may indicate if he wants attention, such as hand movements.
- Respond with attention each time, so he learns that he can be understood in this way.

For **a child with a moving difficulty**, this is very important, as he may not be able to speak or make sounds.

- In many different situations, stop playing with or talking to him, and listen to him. As soon as he makes any sound except crying, give your attention back. Giving attention to him quickly when he vocalizes helps him learn that his actions (e.g. making sounds) causes the adult's actions (e.g. giving attention). This is the first step for a child learning to speak.
- It is also important to smile when he looks at or smiles at you, and give him attention for a few minutes in many different situations.

DRAFT

L8: Respond to his name (start 24 months)

P25	P75	P90	P99+	P100	check at
6	10	14	**16**	**(18)**	**24** months

1. Ask the caretaker to move 1-2 meter away from the child.
2. Ensure the child is not looking at the caretaker. If necessary, briefly distract them with a toy but do not engage in play.
3. Ask the caretaker to call the child by his name clearly.
4. Observe the child's reaction.
5. If no response, ask the caretaker to report if the child responds to his name.

Pass: child turns to or looks at his caretaker when he called his name.

Fail: Not meeting the pass criteria

If Failed: Child should try the following games in the Blue Book:
Language 2: reacts to mother voice: p. 83 English - p. 187 Khmer

Game 1: Respond to his name

- To help a child to learn his own name, use it as often as possible when you speak to him.
  E.g. say, "Sokrem, give me the book, please". Don't just say, "Give me the book, please".
  E.g. say, "Sokrem, come and eat," not just "Come and eat".
  E.g. say, "Phalla, let's go and get some water", not just, "Let's go and get water".
  E.g. say, "Hello, Mala" not just, "Hello".

Game 2: Respond to his name

- Looking in the mirror with the child in front of you, point to yourself and say, "My name is ....." Then, point to him and say, "Your name is .....". Guide his hand to point to you and repeat, "Your name is .....". Then, guide his hand to point to himself and say, "My name is .....".
- Make this a game. Say, "Where is .....?" or "Show me .....", using your name or his name. If he does not point or touch the right person, guide his hand and say, "This is (Nan)" or "There is (Ang)". Praise his efforts, and make it fun.
- When he points to the person you name, ask him, "Who is this?", and point to him. Ask, "What is your name?". If he does not answer, say his name and encourage him to repeat it. Praise him. Repeat several times and practice daily until he can say his name.

- For the child with a hearing difficulties, you can make up signs for his and other people's names by using the first letter of the name or by showing something that represents that person.
- For example, if he has curly hair, you might sign his name by twirling your finger to show a curl. If he is very happy, you could make a smiling mouth with your fingers. If caretaker wears glasses, you could use the sign for glasses.
- Once you decide on a name sign, use it each time that you talk to him or refer to that person. Look in the mirror, point to him and make his name sign. Then point to yourself and make your name sign. As you use the sign all the time, he will get to know it.

DRAFT

L9: Ma or pa (non-specific) (also L11: specific)

P25	P75	P90	P99+	P100	check at
Non-specific: 8	11	14	**16**	**(19)**	**24** months
Specific: 12	17	18	**23**	**(33)**	**36** months

1. Listen to the child saying 'ma' 'pa' during the assessment.
2. Observe the child.
3. If not heard, ask the caretaker to report if the child does.

Pass: child makes any kind of single sound (unspecific), e.g. 'ma' or 'pa'.
The sound does not have to refer to a parent
L8 Ma or pa (non-specific)
L11 Ma or pa (specific)
Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Language 5: vocalize to get attention: p. 65 English - p. 148 Khmer
Language 7a: repeats consonant-vowel combinations (ga ga, da da): p.66 English - p.153 Khmer
Language 8a: recognizes 2 objects, people, needs: p. 67 English – p. 154 Khmer

Game 1: Ma or Pa

- **Offer the child food or toys that he likes** while he is seated, during feeding, or at other times when he is relaxed. Listen carefully to his vocalizations.
- Notice any sounds that combine a consonant and vowel, like "ba", "da", "ga", and "pa".
- Talk back to him by repeating one of the sounds he makes, smile and show your interest in his sounds.
- Listen for him for repetition a sound. Keep copying his sounds and show your pleasure when he makes them. If he does not begin to repeat any consonant–vowel combinations, you may stimulate this by saying "ma, ma, ma, ba, ba, ba. " etc. during feeding, each time you give him some food. Wait after each bite to see if he makes a sound.
- If he does not vocalize, put gentle pressure at his lips with the spoon, and again say, "ma, ma, ma". Always make this fun for him. Make it a game of taking turns, and be excited when he takes his turn. When he makes consonant vowel combinations three times in three sessions go on to another activity. Repeat the babble (sounds) he makes. Have conversations with him in his language. When he begins to say words, repeat and pronounce them clearly and correctly.
- To get him used to language, explain everything you do with him. Use clear, simple words, the same ones each time. Name toys, objects, body parts, etc. Repeat yourself often.
- Rhythm is important to language development. Sing songs, play music, and have him imitate body movements. Clap your hands, touch your toes or beat a drum.

DRAFT

Game 2: Ma or Pa

- **If he is able to do these vocal exercises you can ask him to make special sounds.** Tell him to make the consonant-vowel combinations "da", "ma", "ba", "pa".
- Encourage him to repeat the sounds in different ways, e.g. "ma, ma, ma, ma", "pa, pa, pa, pa", "ma, ba, ba, ma".

- Also encourage the child to make the vowel sounds "aa" "ee" and "oo".
- Let him see your face and mouth when you make the sounds. Then ask him to make the same movements with his mouth in order to make the sounds.

- The children who have **difficulties in moving their arms, legs, head or mouth** may also have difficulty drinking, eating and speaking. In this case, begin training the child to do exercises for the head and the mouth.

- If the child is small, he can do these exercises laying on his stomach and holding himself up on his elbows. You may have to put a small cushion under his chest to help him stay in this position. An older child who has **difficulties in moving his arms and legs** may sit with his body bent or turned. Help him to sit as straight as possible and to keep his head up straight. He will be able to make sounds or speak better if his head is up.
- Has the child do the following head exercises: Tell him to hold up his head and look straight in front of him. Then have him turn his head from side to side, then bend his head towards each shoulder. If he has difficulty with this, you can help him by putting your hands on both sides of his head, and gently moving his head. Do not force head movement.
- Ask him and show him how to do the following exercises with his mouth. Tell him to hold his head as straight as possible, to open his mouth, and to keep his tongue in his mouth. Then tell him to close his mouth tightly.
- Tell him to hold his head as straight as possible, then to open his mouth and stick his tongue out straight. Then, tell him to put his tongue back in his mouth and close his mouth.

<u>More mouth exercises:</u>

- Tell the child to hold his head up as straight as possible, close his lips, and blow.
- Hold a piece of paper in front of him so that it moves when he blows. Or ask him to blow out a candle.
- At first, hold the paper or the candle close to his mouth. When he is able to blow it, hold it further so he has to blow harder.
- Tell the child to hold his head up as straight as possible, close his lips, and suck. Put a reed or a straw into a glass with water or tea.

- Let him try to drink by sucking on the reed or the straw. He can also blow through the reed or straw to make bubbles in the water or tea.

DRAFT

For children with a difficulty moving that causes them to be stiff (e.g. spastic cerebral palsy), these blowing exercises may increase the uncontrolled tightening of muscles or twisting of the mouth. If so, do not use them.

- For a child with a **difficulty moving,** this is very important, as he may not be able to speak or make sounds.

- In many different situations, stop playing with or talking to him, and listen to him. As soon as he makes any sound except crying, give your attention back. Giving attention to him quickly when he vocalizes helps him learn that his actions (e.g. making sounds) causes the adult's actions (e.g. giving attention). This is the first step to a child learning to speak.
- It is also important to smile when he looks at or smiles at you, and give him attention for a few minutes in many different situations.

DRAFT

L10: Say play sound (start 30 months)

P25	P75	P90	P99+	P100	check at
4	10	17	**19**	**(28)**	**30**months

1. Ask the caretaker to play with the child or let the child play with a rattle. 2. Listen to the child making sounds. 3. If not observed, ask the caretaker to report whether the child does already	**Pass**: child plays with his caretaker (or with rattle) and makes sound with his lips. **Fail:** Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Language 5c: makes simple sounds: p. 64 English - p. 144 Khmer

Game 1: Say Play Sound

- Offer the child food or toys that he likes while he is seated, during feeding, or at other times when he is relaxed. Listen carefully to his vocalizations. Notice any sounds that combine a consonant and vowel, like "ba", "da", "ga", and “pa". Talk back to him by repeating one of the sounds he makes. Smile and show your interest in his sounds. Listen for him to repeat a sound. Keep copying his sounds and show your pleasure when he makes them.
- If he does not begin to repeat any consonant–vowel combinations, you may stimulate this by saying "ma, ma, ma, ba, ba, ba," etc. during feeding, each time you give him some food. Wait after each bite to see if he makes a sound.
- If he does not vocalize, put gentle pressure at his lips with the spoon, and again say, "ma, ma, ma". Always make this fun for him. Make it a game of taking turns, and be excited when he takes his turn. When he makes consonant vowel combinations three times in three sessions go on to another activity.

Game 2: Say Play Sound

- Repeat the sounds he makes. Have conversations with him in his language.
- When he begins to say words, repeat and pronounce them clearly and correctly.

Game 3: Say play sound

- To get him used to language, explain everything you do with him.
- Use clear, simple words, the same ones each time.
- Name toys, objects, body parts, etc.
- Repeat yourself often.

Game 4: Say Play Sound

- Rhythm is important to language development.
- Sing songs, play music, and have him imitate body movements.
- Clap your hands, touch your toes or beat a drum.

DRAFT

The children who have difficulties moving their arms, legs, head or mouth may also have difficulties in drinking, eating and speaking. In this case, begin training the child to do exercises addressing the head and the mouth.

- If the child is small, he can do these exercises by lying on his stomach and holding himself up on his elbows. You may have to put a small cushion under his chest to help him stay in this position. An older child who has difficulty moving his arms and legs may sit with his body bent or turned. Help him to sit as straight as possible and to keep his head up straight. He will be able to make sounds or speak better if his head is up.
- Tell the child to hold up his head and look straight in front of him. Then have him turn his head from side to side, then bend his head towards each shoulder. If he has difficulties with this, you can help him by putting your hands on both sides of his head, and gently moving his head. **Do not force head movement!**
- Ask him and show him how to do the following exercises with his mouth: Tell him to hold his head as straight as possible, to open his mouth, and to keep his tongue in his mouth. Then tell him to close his mouth tightly.
- Tell him to hold his head as straight as possible, then to open his mouth and stick his tongue out straight. Then, tell him to put his tongue back in his mouth and close his mouth.

More mouth exercises:

- Tell the child to hold his head up as straight as possible, close his lips, and blow. Hold a piece of paper in front of him so that it moves when he blows. Or ask him to blow out a candle. At first, hold the paper or the candle close to his mouth. When he is able to blow it, hold it further so he has to blow harder.
- Tell the child to hold his head up as straight as possible, close his lips, and suck. Put a reed or a straw into a glass with water or tea. Let him try to drink by sucking on the reed or the straw. He can also blow through the reed or straw to make bubbles in the water or tea.
- For children with a moving difficulty that causes them to be stiff (e.g. spastic cerebral palsy), these blowing exercises may increase the uncontrolled tightening of muscles or twisting of the mouth. If so, do not use them.

- For a child with a moving difficulty, this is very important, as he may not be able to speak or make sounds. In many different situations, stop playing with or talking to him, and listen to him.
- As soon as he makes any sound except crying, give your attention back. Giving attention to him quickly when he vocalizes helps him learn that his actions (e.g. making sounds) causes the adult's actions (e.g. giving attention). This is the first step to a child learning to speak.
- It is also important to smile when he looks at or smiles at you, and give him attention for a few minutes in many different situations.

DRAFT

L11: Mak-paa-bong (specific) (start 36 months)

P25	P75	P90	P99+	P100	check at
Non-specific: 8	11	14	**16**	**(19)**	**24** months
Specific: 12	17	18	**23**	**(33)**	**36** months

1. Listen to the child during the assessment.
2. Ask the caretaker whether the child calls the mother 'Mak' or the father 'pa', or 'bong' when the older sibling is present.

Pass: child can say 'Mak', 'pa', or 'bong' correctly in an appropriate way,
Or the caretaker reports he does
Passing L11 automatically pass L9 (unspecific).

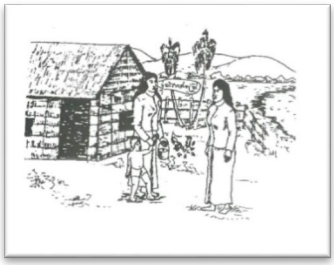
Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Language 8a: recognizes 2 objects, people, needs: p. 67 English - p. 154 Khmer

Game: Mak, Paa, Bong

- **Before a child can say the words for different people or objects,** he will understand the word when others say it.
- **Observe if he makes attempts to say words such as "Ma, Ma, Pa, Pa, etc."** Encourage him when he makes any sound like a word, by naming the word.
- If he wants an object, name it and wait for him to make some sound.
- As he gets the idea of this procedure, encourage him to make sounds to be more like the name of the object.

- When you recognize that he is trying to say a word, encourage him by repeating the word and pointing to the object or person you are naming. Show that you are pleased and praise him, e.g. "Great, (name)! Yes, that is water!" Then smile and pat him.



- Imitate the sounds that he makes and have him copy the same sounds when you make them. Then say words similar to those sounds.

- Before **a child can say the words for different objects,** he will understand the word when others say it. If he has a difficulty hearing, he will understand the meaning of the signs for different persons and/or objects when others use them, before he learns to use those signs himself. It is important to teach children who do not talk the meaning of the words first.
- Ask or sign for him to point to or look at common objects or people, saying "Where is (mother, father, cup, etc.)?" When he points correctly, praise him for pointing. If he does not point (correctly), guide him while signing and saying, "There is (mother, father, cup)", and praise him.

- Keep practicing until he can point to (or look at, if he cannot move his hands) the objects you name without your help.
- Gradually add more objects and people from his natural environment. Teach him each new object in the same way.

- **Children who have difficulties in moving their arms, legs, head or mouth may also have difficulties in drinking, eating and speaking. In this case, begin to train the child to do exercises for the head and the mouth.**
- **If the child is small**, he can do these exercises lying on his stomach handholding himself upon his elbows. You may have to put a small cushion under his chest helping him to stay in this position.
- **An older child** who has difficulties moving his arms and legs may sit with his body bent or turned. Help him to sit as straight as possible and to keep his head up straight. He will be able to make sounds or speak better if his head is up.
- Has **the child do the following head exercises:** Tell him to hold up his head and look straight in front of him. Then have him turn his head from side to side, then bend his head towards each shoulder. If he has difficulty with this, you can help him by putting your hands on both sides of **his head, and gently moving his head. Do not force head movement!**
- Ask **him and show him how to do the following exercises with his mouth.** Tell him to hold his head as straight as possible, to open his mouth, and to keep his tongue in his mouth. Then tell him to close his mouth tightly.
- Tell him to hold his head as straight as possible, then to open his mouth and stick his tongue out straight. Then, tell him to put his tongue back in his mouth and close his mouth.

<u>More mouth exercises:</u>

- Tell the child to hold his head up as straight as possible, close his lips, and blow. Hold a piece of paper in front of him so that it moves when he blows. Or ask him to blow out a candle. At first, hold the paper or the candle close to his mouth. When he is able to blow it, hold it further so he has to blow harder.
- Tell the child to hold his head up as straight as possible, close his lips, and suck. Put a reed or a straw into a glass with water or tea. Let him try to drink by sucking on the reed or the straw.
- He can also blow through the reed or straw to make bubbles in the water or tea. For children with a moving difficulty that causes them to be stiff (e.g. spastic cerebral palsy), these blowing exercises may increase the uncontrolled tightening of muscles or twisting of the mouth. If so, **do not use them.** For a child **with a moving difficulty**, this is very important, as he may not be able to speak or make sounds.

- **In many different situations, stop playing with or talking to him, and listen to him.**
- As soon as he makes any sound except crying, give your attention back. Giving attention to him quickly when he

DRAFT

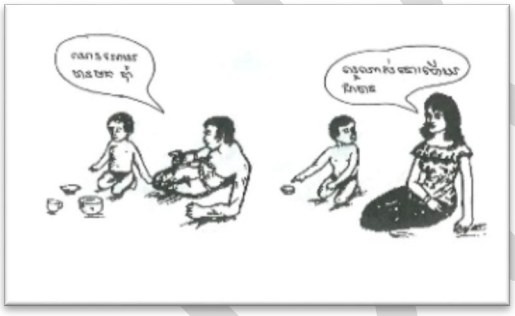
	vocalizes helps him to learn that his actions (e.g. making sounds) cause the adult's actions (e.g. giving attention). This is the first step to a child learning to speak. • It is also important to smile when he looks at or smiles at you, and give him attention for a few minutes in many different situations.

L12: One-step command

P25	P75	P90	P99+	P100	check at
1 step: 9	13	17	**21**	**(26)**	**36** months
2 steps: 16	23	25	**30**	**(34)**	**48** months
3 steps: 22	36	41	**42**	**(67)**	**60** months

1. Ask the child a one-step command: 'sit'. 2. Observe the child. 3. Ask the child 'go over there' (you point to the direction) 4. Observe the child. 5. Ask the child 'get me the …' (Do not indicate by pointing, only say it.). 6. Observe the child.	**Pass:** child obeys and is able to follow at least 1 out of 3 of your single commands. L12: one-step command, L15: two-step command, L24: three-step command. **Fail:** Not meeting the pass criteria

If Failed: Child should try the following games in the Blue Book:
Social skill 11: obeys and follows simple orders: p. 27 English - p. 62 Khmer
Cognition 13: Follows one and two step directions: p. 45 English - p. 100 Khmer



Game 1: One step command

- **Play a game by placing common objects near the child.**
- While pointing to an object, say (or sign) "Get the (object) for me".
- If the child moves toward the object but hesitates, repeat a partial direction: "That's right, the (object)".
- If the child does not move to get the object, take his hand and gently move him to it, putting his hand on the object.
- Then, take the object from the child and say "Thank you".
- Another person may help him get the object and bring it to you.
- Gradually decrease the amount of help you give him. Another variation of this activity is to ask the child to get an object and put it somewhere (on the table, on the chair) or give it to someone else.

Game 2: One step command

- **Let the child tell you which object to give him, or what to do.**
- You can make this more fun by asking silly things.
- For example, tell him to put a ball on his head, or to do funny actions like touching his nose to his knee (for older children).

DRAFT

Game 3: One step command

- **Give the child instructions that have only one step.**

E.g. "Take this to ……." or "Put this ……".

- Praise the child when he can follow simple instructions correctly and talk about the things that he can do by himself.
- You can create a game for him to play. Stick things on his back as a tail to make him laugh.

- Praise the child as much as possible to show that you are very excited when he follows your instructions.
- When the child can follow single step instructions to perform 3 types of work for each day for 3 days, move on to another activity.

L13: Say 1 word beside "Mak-paa-bong" (also L14 & L17)

P25	P75	P90	P99+	P100	check at
1 word: 13	18	23	**24**	**(32)**	**36** months
3 words: 15	22	25	**31**	**(35)**	**36** months
6 words: 17	34	35	**35**	**(39)**	**48** months

1. Ask the caretaker to report how many words the child says
2. Ask the caretaker to speak to the child any word he knows already, except for 'Mak' 'Paa' or names of family members e.g. 'bay' (rice), 'tək' (water).
3. Listen to the child repeating the word.
4. Ask the caretaker when the child said it spontaneously whether it made sense or had meaning for the child.

Pass: child is able to say at least 1 word of which he understands their meanings. 'Mama, papa and names of family members are not acceptable for passing.

L13: 1-2 words,
L14: 3-5 words,
L17: 6 or more words.

Fail: Not meeting the pass criteria

If Failed: Child should try the following games in the Blue Book:
Language 10: say 3 words or more: p. 70 English - p. 162 Khmer
Language 14: uses 6-20 words: p. 74 English - p. 173 Khmer

Game 1: say 1 word beside Mak / Paa, say 3 word, say 6 word

- **Always name the objects he plays with** as well as the things around him, like water, rice, balls, etc.
- Place a toy that he likes where he can see it, but out of reach. When he looks at it, say, "What do you want?" When he tries to say the name, give the object or food to him. If he does not say it, name the object and ask him again.
- Do the same when he wants to get up or down. Ask him what he wants and wait for him to try and say the word before doing what he wants. For example, when he wants to get down, say "what do you want". When he tries to say the word "down", put him down. When he says "ball", give him the ball. Be careful not to frustrate him by demanding words all of the time. Keep all talking activities as enjoyable and as natural as

DRAFT

possible. Understanding language depends not only on hearing, but also on watching lips and expressions. Speak to him on his level.

Game 2: say 1 word beside Mak / Paa, say 3 word, say 6 word

- **Listen carefully to find out if he is trying to say some words.** If he can make some sounds clearly, ask him to say some words. Tell him to say the names of people or objects in your home or yard. Begin with names that he finds most easy to say. When he says a word, show him that you are pleased. Then use the word in a sentence. For example, if he says "water", you can say: "Do you want water?" Begin with two words that you want him to say. When he can say these two words, choose two more words. Make sure that he has learned the previous words before you teach him new words.

Game 3: say 1 word beside Mak / Paa, say 3 word, say 6 word

- Teach **body parts in the same way,** pointing and/or saying "Show me your (hair, hand, eyes, nose, mouth, ear, foot, etc.)". If he points to the correct part, praise him and repeat (and point) " Yes, this is your ..... "
- If he needs help, guide him to point to the part named. Praise him and say " Yes, this is your ..... ". If he has difficulties hearing, make sure he is looking at you when you speak and point. Practice every day until he can point to the body parts you name and point to.
- Gradually, ask him to say the object or body parts you name without pointing to them by yourself. Always praise him!

For children who have seeing difficulties:

- Help the child to learn different objects by touching and feeling them. Ask him to give you different objects you name or to name objects you give him.
- **NOTE:** If he cannot see or hear, let him feel an object. Guide his hands to make the sign for it. Also, make the sign yourself and help him feel your hands. Before you give him each object, help him make the sign and feel your hands as you make the sign. Repeat this many times, teaching one sign at a time. Start with simple signs like "eat" and "drink". Gradually teach new signs. If you guide him to make signs and feel the sign you make, as well as feel the object (or action) again and again and again, he will begin to learn the meaning of the signs and how to use them to tell you what he wants.

For children with a hearing problem or children who cannot talk but can use their hands:

- **Teach the signs for the objects and people around them.** Point to the object, show the sign, and say the word. Using the word and sign, ask him to show you the object or person. Guide his hands when he needs help to point to an object and guide him to make the signs for the objects.
- When he understands signs for the objects around him, use pictures. Point to, name, and sign each of the pictures. Then ask him (and sign) " Where is the .....? "

Guide his hands when he needs help and praise him for his correct answer.

DRAFT

For children with moving difficulties who cannot speak:

- If these children cannot use their hands well enough to make signs but can point, they may learn to use a Communication Board showing pictures of common things and activities. Start with one simple picture, sign the word and point to the picture. Practice until he can point to the picture you name and sign. Guide his hands for as long as he needs help – this is particularly important for children with stiff arms and hands.
- Teach him another object in the same way, then put them together and ask him to show you the one you name (and sign). Praise him and guide him if he needs help.
- When it is time to eat or drink, ask him to show you what he wants. If he points to the picture of food say, "OK, you want food!" and give him food. If he points to the picture of cup or drink, give him a drink and say, "OK, you want a drink!".
- As you teach new words or pictures this way, make sure that you name a common object that he uses, like food or drink. Show him the picture and say and sign the word. If you have the actual object, show it to him as you say and
- Give him what he points to if you can, or explain why you cannot.
- As he learns more pictures, put them together on one board, which is not too big or too small for him to point to each picture.

L14: Say 3 words (see game L13)

DRAFT

L15: Two step-command (start 48 months)

P25	P75	P90	P99+	P100	check at
2-step: 15	23	25	**30**	**(34)**	**48** months
3-step: 17	36	41	**42**	**(67)**	**60** months

1. Ask the child a two-step command: 'go sit down and then raise one hand'.
2. Observe the child.
3. Ask him 'go over there and sit down' (you point where)
4. Observe the child.
5. Ask him 'give me your hands and then close your eyes'
6. Observe the child.

Pass: child is able to follow at least 1 out of 3 of your 2-step commands. He has to be able to do the commands that he understands and then do a succession of 2 actions.

L24: 3 step command

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Cognition 13a: Follows one and two step directions: p. 45 English - p. 100 Khmer

Game: Two-step command

- Start to give instructions to the child which have two steps, such as "Get the plate and get the spoon" or "Sit down and take off your pants".
- If the child does not respond or he responds only to the first step, guide him through the step(s) that he did not follow. Then praise him and describe what he did. E.g. "Good (name), you got the plate and then you got the spoon".
- Practice this 3 or 4 times every day. Give assistance as needed, but gradually wait a few seconds longer before helping him and decrease your help a little at a time until he can do the activity by himself.
- Praise the child as much as possible to show that you are very excited when he follows your instructions.
- When the child correctly completes 3 two-step tasks each day for 3 days, go on to the new activity.

DRAFT

L16: Point to 2 of 5 pictures (also L21: 4/5 pictures)

P25	P75	P90	P99+	P100	check at
2: 15	29	35	**36**	**(39)**	**48** months
4: 20	33	39	**39**	**(42)**	**48** months

1. Show the child pictures of 5 everyday household appliances or objects.
2. Ask the child to point to the pictures of those objects that you want him to point to. For example, “Where is the scarf (‘kroma’)?” Name only one object at a time.
3. Wait for the child to point before naming the next picture.
4. Observe where the child is pointing to.

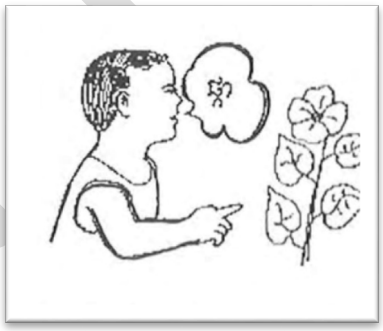
Pass: the child is able to point to 2 pictures correctly.

L16: 2 or 3 pictures,
L21: 4 or 5 pictures.

Fail: Not meeting the pass criteria

If Failed: Child should try the following games in the Blue Book:
Language 12: combines two words correctly e.g. "big cat": p. 73 English - p. 172 Khmer
Language 13: name pictures, objects or people: p. 73 English - p. 172 Khmer

Game 1: Point to 2 to 5 pictures



- Name the things around the child and talk about what he is doing as often as possible.
- If you have pictures available, point to them and name them.

- Make a game by having him point to the objects that you name. You can use pictures or actual objects like a ball, block or cup.
- Before a child learns to say the name of different objects, he learns to recognize the name. It is important to play "Show me the ....." or "Find the ....." using toys and objects that are available. When he can point out the objects or pictures you name begin asking him, "What is this?" and pointing to various things. Then name each thing when he answers correctly, "Yes (name), this is the ball".
- It is very important to repeat what he has said correctly and to show that you are pleased by smiling and patting him or handing him the object over.

Game 2: Points to 2 to 5 pictures

- **Make a picture book, or put pictures of common objects that you drew or got from magazines, etc., on paper or cardboard.**
- Point to and name the pictures for him every day.

DRAFT

- Ask him to point to the picture you name.
- Praise him when he is correct.
- Show him the right picture when he is wrong and repeat the name.
- When he can do this, point to the picture and ask him, "What is this?"
- If he does not name it correctly, tell him what it is and practice it again.
- This is a good activity for repetition. Add new pictures that he can point to and name the ones you are using.
- Remember to praise him when he is correct.

L17: Say 6 words (see game L13)

DRAFT

L18: Speak half understandably (also L26: speak understandably)

P25	P75	P90	P99+	P100	check at
L18: 50%: 17	29	33	**39**	**(49)**	**48** months
L26: 95%: 22	32	46	**52**	**(61)**	**60** months

1. Engage the child in playing or talking about something that they enjoy
2. Listen to the child and judge how much of their speech you understand
3. When no observation can be made, ask the caretaker.

Pass: The child's words can be understood by the assessor. The child may make the following mistakes and still pass:
- speaking words with some missing letter(s) but still understandable
- incomplete sentences or
- grammatical errors
- factually incorrect.

Fail: The sounds in their speech are too distorted for the assessor to clearly understand the intended words, e.g. 'ai' for 'bai'.

L18: at least 50% of the words he speaks

L26: almost 100% (though still has immature speech)

If Failed: Child should try the following games in the Blue Book:
Language 18: repeats simple stories/songs: p. 75 English - p. 176 Khmer
Language 19: uses adjectives, verbs, adverbs: p. 75 English - p. 177 Khmer
Language 20: asks questions: p. 76 English - p. 178 Khmer
Language 21: describes pictures: p. 77 English - p. 179 Khmer

Game 1: Speak (half) understandably

- **Sing simple songs with him every day, especially those that have actions to go with the words e.g. gestures or dance.**

Game 2: Speak (half) understandably

- **Every day, tell him simple stories** that have pictures showing what you talk about.
- If pictures and children's books are not available, draw simple pictures on paper or even in the dirt and make up simple stories.
- Or, show him a scene in the community and make up a story about it, using objects or things that he can see.
- Make your own books and stories by drawing pictures and making up stories.

២១-អាចពិពណ៌នាតាមរូបភាព

១៦-អាចនិយាយប្រយោគ ដែលមាន ៤-៥ពាក្យ

Game 3: Speak (half) understandably

DRAFT

- **Talk to him about all the things around you.**
- **Ask him what he sees, and explain what is going on.**
- Listen to what he says and encourage him to talk by paying attention, answering him and explaining things.

Encourage children to ask questions

- Explain things to him and take time to talk with him about things.
- A child asking "Why?" is sometimes inconvenient for the parent because he might be busy. But it is very important to explain things to children as this develops their thinking and talking abilities.

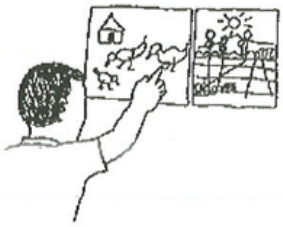
Encourage children to express themselves

- Talk with him about the things around him and what he sees.
- Be interested and ask what he sees.
- Listen, respond to and be positive about the things that he says.
- For example, say "Oh yes, I see that bird too. Where do you think he's flying? Does he have a family?"
- Get involved and share his excitement of discovering the world around him.
- Ask the child to describe pictures, too.

១៩-អាចប្រើប្រយោជន៍ដែលមាន
ការិយាសព្ទ និងគុណនាម

Game 4: Speak half understandably

- Visit the community and talk about what is going on (who, what where, how and why?). Collect things like leaves and sticks.
- Come back and discuss what he saw. What he liked and where he picked up the "souvenirs".



២១-អាចពិពណ្ណនាតាមរូបភាព

For children who have seeing difficulties:

- Help them learn different objects by touching and feeling them. Ask him to give you different objects that you name or to name objects you give him.
- **NOTE:** If he cannot see or hear, let him feel an object. Guide his hands to make the sign for it. Also, make the sign yourself and help him feel your hands.
- Before you give him an object, help him make the sign and feel your hands as you make the sign. Repeat this for many times, teaching one sign at a time. Start with simple signs like "eating" and "drinking".
- Gradually teach new signs. If you guide him to make signs and feel the sign you make, as well as feel the object (or action) again and again and again, he will

DRAFT

begin to learn the meaning of the signs and how to use them to tell you what he wants.

For children with a hearing difficulty or children who cannot talk but can use their hands:

- **Teach the signs for the objects and people around him.**
- Point to the object, show the sign, and say the word.
- Using the word and sign, ask him to show you the object or person.
- Guide his hands when he needs help to point to an object and guide him to make the signs for the objects.

When he understands signs for the objects around him, use pictures.

- Point to, name, and sign each of the pictures.
- Then ask him (and sign) "Where is the .....?"
- Guide his hands when he needs help and praise him for his correct answer.

For children with moving difficulties who cannot speak:

- If these children cannot use their hands well enough to make signs but can point, they may learn to use a Communication Board showing pictures of common things and activities. Start with one simple picture of a common object he uses, like food or drink. Show him the picture and say and sign the word.
- If you have the actual object, show it to him as you say and sign the word and point to the picture.
- Practice until he can point to the picture you name and sign.
- Guide his hands for as long as he needs help – this is particularly important for children with stiff arms and hands.
- Teach him another object the same way, then put them together and ask him to show you the one you name (and sign). Praise him and guide him if he needs help.
- When it is time to eat or drink, ask him to show you what he wants.
- If he points to the picture of food say, "OK, you want food!" and give him food. If he points to the picture of cup or drink, give him a drink and say, "OK, you want a drink!"
- As you teach new words or pictures this way, make sure that you name what he points to. Give him what he points to if you can, or explain why you cannot.
- As he learns more pictures, put them together on one board, which is not too big or too small for him to point to each picture.

DRAFT

L19: Name animal (at least 1 out of 5) (also L22: 4/5)

P25	P75	P90	P99+	P100	check at
1/5: 14	31	37	**39**	**(44)**	**48** months
4/5: 21	32	42	**44**	**(64)**	**48** months

1. Show the child the picture card with animals (kitten, cow, dog, duck, and rooster).
2. Point to the picture and ask the child 'What is this?'
3. Listen to the child's response.
4. Repeat for each of the 5 pictures.

Pass: Child can name at least 1 animal picture correctly.
Correct if the child uses the correct name of his pet.
L19: at least 1 animal picture out of 5
L22: at least 4 animal pictures out of 5
Fail: The child does not name any animal picture correctly

If Failed: The child should try the following exercise below

Game 1: Name at least 1 out of 5 animals

- **Name the animals around the child and talk about what they are doing as often as possible.**
- **If you have pictures available, point to them and name them.**

- Make a game by having him point to the animal you name. You can use pictures.
- Before a child learns to say the name of different animals, he learns to recognize the name.
- It is important to play "Show me the ....." or "Find the ....." using pictures or animals that are available.
- When he can point out the animals or pictures you name begin asking him, "What is this?" and pointing to them.

- Then name each animal when he answers correctly, "Yes (name), this is the cat".
- It is very important to repeat what he has said correctly and to show you are pleased by smiling and patting him.

Game 2: Name at least 1 out of 5 animals

- Make **a picture book or put pictures of common animals that you draw or get from magazines, etc., on a paper or cardboard.**
- Point **to and name the pictures for the child every day.**
- Ask him to point to the picture that you name. Praise him when he is correct. Show him the right picture when he is wrong and repeat the name.
- When he can do this, point to the picture and ask him, "What is this?"
- If he does not name it correctly, tell him what it is and practice it again.
- This is a good activity to repeat. Add new pictures that he can point to and name the ones you are using.
- Remember to praise him when he is correct.

DRAFT

L20: Say a 3-word phrase

P25	P75	P90	P99+	P100	check at
19	34	36	**39**	**(42)**	**36** months

1. Ask the child to say some phrases that are meaningful. If the child is shy, ask the caretaker to interact with the child, encouraging him to speak.
2. Listen to the child.
3. If no observation can be made, ask the caretaker whether he says 3-word phrases already

Pass: child is able to say at least one 3-word phrases with at least a verb. e.g. “want drink water” or “eat more rice” (3)

Fail: Not meeting the pass criteria

If Failed: Child should try the following game in the Blue Book:
Language 16: speaks 4 words in a sentence: p.75 English - p. 174 Khmer

Game: Say a 3-word phrase

- **When the child wants something, asks: "What do you want?"**
- **When he answers with one word, repeat it along with his name and wants.**
- E.g. "Chhean, what do you want?". If Chhean responds, "Water". Say, "Chhean wants water".
- Speak in short sentences and describe his actions.
- Repeat what he says using his name and the verb that goes along with his action. In this way, he will get the idea of expressing more than just one word.

L21: Point to 4 of 5 pictures (see game L16)

DRAFT

L22: Name animals (4 out of 5) (see game L19)

P25	P75	P90	P99+	P100	check at
1 name: 14	31	37	**39**	**(44)**	**48** months
4 names: 21	32	42	**44**	**(64)**	**48** months

1. Show the child the picture card with animals (kitten, cow, dog, duck, and rooster).
2. Point to the picture and ask the child: 'What is this?'
3. Listen to the child's response.
4. Repeat for each of the 5 pictures.

Pass: Child can name at least 4 animal pictures correctly, what means that the child uses the correct name.
L19: at least 1 animal picture out of 5
L22: at least 4 animal pictures out of 5
Fail: Child can name only 3 animals or less correctly

If Failed: Child should try the following games in the Blue Book:
Language 11: imitates environment sound in play: p.73 English - p. 169 Khmer

Game 1: Know 4 animal sounds

- When you go outside, imitate some of the sounds that you hear like cars, birds, dogs, etc. . Then tell the child about the sound.
- If you imitate a dog that you hear barking say, "That is a dog. Dogs say woof-woof".
- Or, ask the child: "What does the dog say? Woof-woof! Say, woof-woof".

Game 2: Know 4 animal sounds

- **Play a game with him, saying "What sound does a dog make?"**

- Wait for a response. If there is none, imitate a dog's bark.
- Repeat several times as he learns to imitate you and can make the dog's bark when asked.
- Teach the sounds of other animals, such as pigs, cats, chicken or ducks.
- Make this fun and include actions like crawling, flapping wings, holding up paws, etc.

DRAFT

L23: Know the use of 1 out of 3 objects (also L27 & L30)

P25	P75	P90	P99+	P100	check at
1/3: 21	33	39	**47**	**(53)**	**60** months
2/3: 22	39	47	**51**	**(65)**	**60** months
3/3: 31	45	54	**56**	**(69)**	**60** months

1. Show the child the chart with cup, ball and spoon.
2. Ask the child one by one:
   a. 'Which one is for drinking'?
   - Observe where the child is pointing to before asking the next question.

   b. 'Which one for playing'?
   - Observe where the child is pointing to before asking the next question.

   c. 'Which one is for eating'?'
3. Count the number of correct answers

Pass: child is able to point to at least 1, 2 or 3 out of 3 objects corresponding to the content of each object correctly.

L23: at least 1 out of 3 objects,
L27: at least 2 out of 3 objects,
L30: all 3 out of 3 objects.

If Failed: Child should try the following games in the Blue Book:
Cognition 16a: sorts and matches object and shapes: p. 47 English - p. 108 Khmer
Cognition 21a: matches / points to and names 5 colors: p. 54 English - p. 121 Khmer
Language 10c and 10d: says 3 or more words: p. 71 English - p. 165 Khmer

Game 1: Know the use of 1 out of 3 objects

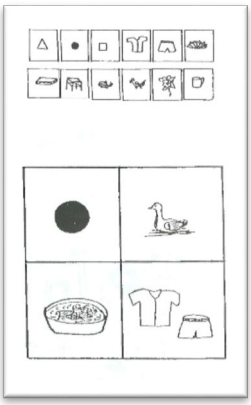
- **At this stage of development, the child begins to understand that objects belong to groups or categories such as animals, shapes, types of food, cooking utensils, clothing, etc.** Play games that help him learn to categorize objects and develop thinking skills. E.g. take a large piece of cardboard and draw lines to divide it into four sections.
- Draw a picture that shows a category in each section. Make smaller picture cards out of cardboard that have objects from each category. Talk about the pictures and show how to match the picture cards to the categories on the cardboard. Praise his efforts and help him do the activity as needed. Practice until he can put the pictures in the correct categories without help.
- Then make a new card with different categories and new picture cards, and get him to do the same activity without (or with minimal) assistance.

Game 2: Know the use of 1 out of 3 objects

- Teach the child to match objects to pictures.
- Use clear, realistic looking pictures as well as the objects that they represent (spoon, ball, brush, comb, stick, etc.).
- First, show him a toy or object. Name it.

DRAFT

- Then show the child two pictures, one of the objects (e.g. a ball) and another of a very different-looking object (e.g. a stuffed animal).



If children's books are not available, draw simple pictures on paper or even in the dirt.

- Ask the child to put the ball on the picture of the ball, or to point to the picture.
- If he does it correctly, put out more pictures (perhaps three or four) and give him one object at a time and ask him to point to or put it on the matching picture.
- If he cannot match the object to the correct picture, start with only one picture and physically guide him to touch the picture or put the object on the picture.
- As the child learns, gradually increase the number of objects and pictures that he has to match together at a time.

Once the child can do this, use pairs of pictures that are exactly the same. Start by putting two different pictures in front of the child (e.g. a spoon and a comb) show him one that is exactly the same as one of the two pictures already there and ask him to put the picture with the one that is "just the same". Guide him physically if he cannot do this and say, "This picture is the same as this. They are both (a spoon), the other picture is a comb."

For children with seeing difficulties:

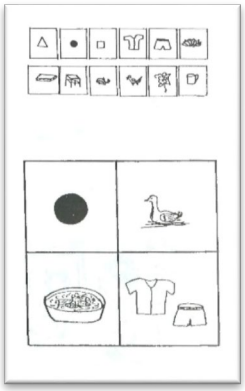
- Help the child to learn about different objects by feeling them. Ask him to give you different objects that you name or to name objects you give him.
- **NOTE:** If he cannot see or hear, let him feel an object first. Guide his hands to make the sign for it. Also make the sign yourself and help him to feel your hands.
- Before you give him each object, help him making the sign and feeling your hands as you make the sign.
- Repeat this many times, teaching one sign at a time. Start with simple signs like "eating" and "drinking". Gradually introduce and teach new signs.

- If you guide him to make signs and feel the sign you make, as well as feel the object (or action) again and again, he will begin to learn the meaning of the signs and how to use them to tell you what he wants.

DRAFT

For children with a hearing difficulty or children who cannot talk but can use their hands,

- **Teach the signs for the objects and people around the child.**
- Point to the object, show the sign, and say the word.
- Using the word and sign, ask him to show you the object or person.



- Guide his hands when he needs help to point to an object and guide him to make the signs for the objects. **When he understands signs for the objects around him, use pictures.** Point to, name, and sign each of the pictures. Then ask him (and sign) " Where is the .....? ".
- Guide his hands when he needs help and praise him for his correct answer.

For children with moving difficulties who cannot speak:

- If these children cannot use their hands well enough to make signs, but can use them for pointing, they may learn to use a Communication Board showing pictures of common things and activities. Start with one simple picture of a common object that he uses, like food or drink. Show him the picture and say and sign the word. If you have the actual object, show it to him as you say and sign the word and point to the picture. Practice until he can point to the picture you name and sign. Guide his hands for as long as he needs help– this is particularly important for children with stiff arms and hands.
- Teach him about another object the same way, then put them together and ask him to show you the one you name (and sign). Praise him and guide him if he needs help.

When it is time to eat or drink, ask him to show you what he wants.

- If he points to the picture of food say, "OK, you want food!" and give him food. If he points to the picture of cup or drink, give him a drink and say, "OK, you want a drink!"
- As you teach new words or pictures in this way, make sure you say what he points to. Give him what he points to if you can, or explain why you cannot.
- As he learns more pictures, put them together on one board, which is not too big or too small for him when pointing to each picture.

DRAFT

L24: Three-step command (see game L15)

P25	P75	P90	P99+	P100	check at
2: 16	23	25	**30**	**(34)**	**36** months
3: 22	36	41	**42**	**(67)**	**60** months

1. Ask the child a three-step command in one go: 'sit down, raise both hands and clap', 'go over there, sit down and come back to me' (you point where), 'give me your hands, then close your eyes and then open your mouth'. 2. Observe the child.	**Pass:** child is able to follow at least one of the three-step command. L15: 2 step command

If Failed: Child should try the following game in the Blue Book:
Cognition 20: Follow 3 step simple directions: p. 52 English - p. 119 Khmer

Game: Three-step command

- Give an instruction to the child that has three subsequent steps, such as "Get the plate, and get the spoon and give it to (person's name)," or "sit down, take off your pants (dress) and give them (it) to me".
- If the child does not respond or if he responds only to the first (and-or second) direction, guide him through the rest of the steps.
- Then praise him and describe what he did.
  E.g. "Good (name), you got the spoon and gave it to (name)".
- Practice this 3 or 4 times every day.
- Give assistance as needed, but gradually wait a few seconds longer before helping.
- Make this a game as you invent things to do.
  E.g. tell the child: "Touch the comb, then comb your hair, then give (name) a hug".
  Follow the same teaching directions as above.

DRAFT

L25: Pick the longest line (3/3)

P25	P75	P90	P99+	P100	check at
23	37	38	**50**	**(70)**	**60** months

1. Show 2 objects of different length, e.g. short and long chopstick.
2. Ask the child to pick up the longest.
3. Observe the child.

Pass: child can pick up the longest object.
Fail: Not meeting the pass criteria

If Failed: Child should try the following games in the Blue Book:
Cognition milestone 15: matches big and small: p. 46 English - p. 103 Khmer

Game 1: Pick the longest line

- Play at arranging five sticks of different lengths in order from the longest to the shortest. Place one set of sticks in front of the child and one set in front of you.
- Using your set show the child how to place the sticks in order of size. Ask the child to place his sticks in the same way.
- Guide him with words, telling him when he is correct, reminding him what to do and physically guiding him when necessary. Repeat the exercise using different objects: five bottles, shoes, pots, etc. Gradually reduce the guidance you give until the child can copy your arrangement on his own.
- You can also play these games with the child.

Game 2: Pick the longest line

- **Give the child two objects, one of which is much bigger than the other.**

- Ask the child to point to the bigger one. Praise him if he points correctly and show him the biggest one if he does not.
- Then ask him to show you which one is the biggest again.
- Guide his hand if necessary and praise him even if you had to help.
- If the child can pick out the big one, add three or more objects of different sizes and ask for the "big" one or the "biggest" one.
- Then ask him to point to the "small" or "smallest" one.
- When the child correctly chooses the biggest and smallest ones of three or more objects three times on three days, he has learned the idea of "big" and "small".

Game 3: Pick the longest line

- Give the child sticks, stones, pictures, blocks, or other items that are both big and small.
- Ask him to show you the big ones first, and put them in one place.
- Then ask him to show you the small ones first, and put them in one place.
- If he has trouble, show him how by taking the big one and comparing it with the small one and say, "This is big".
- Use the same technique when picking the small ones.
- As the child learns, ask him to put all the big ones together and all the small ones together. Give him help if necessary.
- When he can separate the big and small ones 3 times on 3 days, go to another activity.

Game 4: Pick the longest 3

- Give the child a number of tins of different sizes and show him how to fit them one inside the other. He will probably want to play with these tins for a very long time. You can also use pots, pans, and boxes.

Game 3 For the child with seeing difficulties:

- Guide his hands to feel each of your sticks as you describe their size, then guide him to locate his own stick that is the same size.

Game 4 For the child with moving difficulties:

- Arrange his sticks for him as he points to each stick one that matches yours.
- If he cannot point, show him one stick at a time, compare it to one of yours, and ask whether or not it is the same. He can use a simple response, such as a smile or increased activity to mean "yes".
- For some children, you may need to teach the idea of putting objects in order of size by talking about it and doing it first as they watch

L26: Speak understandably (see games L18)

L27: Know use of 2 out of 3 objects (see game L23)

DRAFT

L28: Conversation

P25	P75	P90	P99+	P100	check at
29	36	42	**62**	**(68)**	**60** months

1. Start a conversation with the child by showing a picture or telling an interactive story. 2. Ask him questions related to the picture-story. 3. Listen how the child verbally interacts with you.	**Pass:** child can carry out a functional conversation E.g. able to stay on topic and correctly answers your questions. The answers may contain small grammar or pronunciation errors. **Fail:** The child's answers do not make sense or contain so many errors that the meaning of the sentence is not clear at all

If Failed: Child should try the game in Blue Book:
Language 18: repeats simple stories/songs: p. 75 English - p. 176 Khmer
Language 19: uses adjectives, verbs, adverbs: p. 75 English - p. 177 Khmer
Language 20: asks questions: p. 76 English - p. 178 Khmer
Language 21: describes pictures: p. 77 English - p. 179 Khmer

Game 1: Conversation

- **Every day, tell the child simple stories** with pictures to show what you are talking about.
- If pictures and children's books are not available, draw simple pictures on paper or even in the dirt and make up simple stories.
- Or, show him a scene in the community and make up a story about it, which uses the objects, or things that he can see.
- Create your own books and stories by drawing pictures and making up stories.

Game 2: Talk to him about all the things around you.

- **Ask him what he sees, and explain what is going on.**
- Listen to what he says and encourage him to talk by paying attention, answering him and explaining things.

Game 3: Encourage children to ask questions

- **Explain things to him and take time to talk with him about things.**
- A child asking "Why?" is sometimes inconvenient for the parent because he or she might be too busy. But it is very important to explain things to children as this develops thinking and talking abilities.

Game 4: Encourage children to express themselves

- Talk with him about the things around him and what he sees.
- Be interested and ask them what he sees.
- Listen, respond to and be positive about what says.
- For example, say: "Oh yes, I see that bird too. Where do you think he's flying? Does he have a family?"
- Get involved and share his excitement of discovering the world around him.
- Ask the child to describe pictures, too.

Game 5: Talk about what, who, where, how, why

- Visit the community and talk about what is going on (and who, where, how and why?). Collect things like leaves and sticks.
- Come back and discuss what he saw. What he liked and where he picked up the "souvenirs".

For children who have seeing difficulties:

- Help the child to learn different objects by touching and feeling them. Ask him to give you different objects that you name or to name objects that you give to him.
- **NOTE:** If he cannot see or hear, let him feel an object first. Guide his hands to make the sign for it. Also, make the sign yourself and help him feel your hands.
- Before you give him each object, help him make the sign and feel your hands as you make the sign. Repeat this many times, teaching one sign at a time. Start with simple signs like "eat" and "drink".
- Gradually, teach new signs. If you guide him to make signs and feel the sign you make, as well as feel the object (or action) again and again and again, he will begin to learn the meaning of the signs and how to use them to tell you what he wants.

For children with a hearing difficulty or children who cannot talk, but can use their hands:

- **Teach the signs for the objects and people around them.**
- Point to the object, show the sign, and say the respective name.
- When using the word and sign, ask him to show you the object or person.
- Guide his hands when he needs help to point to an object and guide him to make the signs for the objects.

When he understands signs for the objects around him, use pictures.

- Point to, name, and sign each of the pictures.
- Then ask him (and sign) "Where is the .....?"
- Guide his hands when he needs help and praise him for his correct answer.

DRAFT

L29: Use pronouns correctly

P25	P75	P90	P99+	P100	check at
27	43	50	**55**	**(65)**	**60** months

1. Communicate with the child by playing with or telling him an interactive story with questions.
2. Listen to the child's sentences as responses.
3. When no observation can be made, ask the caretaker.

Pass: child uses the pronoun correctly, e.g. he uses correctly in his sentences 'khnjom' (I) when referring to himself and 'bong' to his brother-sister.

Fail: Not meeting one of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Languages 18: repeats simple story/song: p. 58 English - p. xx Khmer
Languages 19: uses adjectives, verbs and adverbs: p. 59 English - p. 177 Khmer
Languages 20: asks questions: p. 59 English - p. 178 Khmer
Languages 21: describes pictures: p. 59 English - p. 179 Khmer
Cognition 22: shows interest in things around him and asks questions: p. 40 E - p.124 Khmer

These games require the child to already master quite a lot of development skill in Language, Social / cognitive domain and ensure that he can express himself.

Game 1: Use pronouns correctly

- **Every day, tell the child simple stories** having pictures to show what you are talking about. If pictures and children's books are not available, draw simple pictures on paper or even in the dirt and make simple stories
- Or, show him a scene in the community and make up a story about it, which uses the objects, or things that he can see.
- Make your own books and stories by drawing pictures and making up stories.

Game 2: Use pronouns correctly

- **Talk to him about all the things around you. Ask him what he sees, and explain what is going on.**
- Listen to what he says and encourage him to talk by paying attention, answering him and explaining things.
- **Encourage children to ask questions**
- Explain things to him and taking time to talk with him about things.

DRAFT

- A child asking "Why?" is sometimes inconvenient for the parent because he or she might be busy. But it is very important to explain things to children as they develop their thinking and talking abilities.

Game 3: Use pronouns correctly
At this stage, the child will ask many questions about what things are made of and why things happen.

- You should spend some time with him and let him ask you what he wants to know.
- Be patient and answer his questions as well as you can.
- You can even make a game of "question and answer".
- Each of you takes a turn asking and answering a question.

Encourage children to express themselves

- Talk with them about the things around them and what they see. Be interested and ask them what they see.
- Listen, respond to and be positive about what they say.
- E.g. say "Oh yes, I see that bird too. Where do you think he's flying? Does he have a family?"
- Get involved and share his excitement of discovering the world around him.
- Ask the child to describe pictures too.

L30: Know the use of 3 out of 3 objects (see games L23)

DRAFT

L31: Know 4 animal sounds

P25	P75	P90	P99+	P100	check at
30	48	53	**61**	**(68)**	**60** months

1. Put the animal pictures in front of the child (cow, dog, cat, hen, and duck).
2. Produce an animal sound for each animal one by one.
3. Tell the child to point at the animal which makes this sound.

Pass: child is able to point to 4 out of 5 animals correctly.

Fail: Child can only point out 3 or less out of 5 animals correctly

If Failed: Child should try the following games in the Blue Book:
Language 11: imitates environment sound in play: p.73 English - p. 169 Khmer

Game 1: Know 4 animal sounds

- When you go outside, imitate some of the sounds that you hear like cars, birds, dogs, etc. then tell him about the sound.
- If you imitate a dog that you hear barking, say: "That is a dog. Dogs say woof-woof".
- Or, ask him: "What does the dog say? woof-woof! Say, woof-woof".

Game 2: Know 4 animal sounds

- **Play a game with him, saying "What sound does a dog make?"**

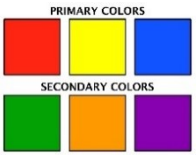
- Wait for a response. If there is none, imitate a dog's bark.
- Repeat several times as he learns to imitate you and can make the dog's bark when asked.
- Teach the sounds of other animals, such as pigs, cats, chicken or ducks.
- Make this fun and include actions like crawling, flapping wings, holding up paws, etc.

L32: Name 1 of the 6 colors

P25	P75	P90	P99+	P100	check at
33	45	54	**69**	**(73)**	**60** months

1. Show the child the chart with primary and secondary colors.
2. Ask the child to point and name the different colors he knows.
3. If the child does not understand it, point at the color and ask the child 'what color is this?'
4. Count the correct naming of the colors.

Pass: the child can name at least one color correctly.



Fail: The child can name none of the colors correctly

If Failed: Child should try the following games in the Blue Book:
Cognition 21: matches, points to and names 5 colors: p. 54 English - p. 121 Khmer

Game: Name 1 of the 6 colors

- **The first colors that a child recognizes are red, green, yellow and blue.** Collect green leaves and red, yellow and blue flowers or other objects with the child. Use these to teach him the different colors. You can also teach him the names of the flowers or objects you collect.
- Teach him to recognize these colors on his own clothes and the clothes other people are wearing.
- Present the child with a red block or another object. Talk about the color. Then present a red and a yellow block. Ask him to show you the one that is the same, or ask for the one that is "red, just like this one" while pointing to the first red block.
- If the child picks the correct color say, "Yes, good. This is the same. It is red".
- If he picks one that doesn't match say, "No, this is not the same. This one is the same (showing the matching color). It is red".
- Repeat the activity.
- As soon as the child identifies red correctly from red and yellow, use the same activity for him to identify yellow, from red and yellow. Gradually add more colors to choose from.
- As soon as the child can match red from several choices, use the same activity to teach yellow, green and blue, and then the other colors (purple, orange, brown etc.)
- When the child can correctly match all basic colors three times each day for three consecutive days, go on to another activity.

DRAFT

L33: Count 1 to 5

P25	P75	P90	P99+	P100	check at
30	59	61	**63**	**(68)**	**60** months

1. Give 10 blocks and let the child count. 2. Or count on fingers from 1 to 5.	**Pass:** child can count from 1 to 5 consecutively and correctly. **Fail:** Wrong order of numbers

If Failed: Child should try the following games in the Blue Book:
Cognition 17: understands quantity difference 1 versus 2: p. 48 English – p. 112 Khmer

Game: Count 1 to 5
To help a child begin to learn about numbers, do the following activity.
Seeds, stones, blocks or other small common objects can be used.

- Ask him to give you one item from several you place around him. Praise his efforts even if you have to guide him to pick up only one object.
- Take two objects, perhaps two balls or two flowers. Ask the child to put one of them where there is one already and to put two where there are two already. Help if necessary. Compare them and say, "This is one (ball) and that is one (ball). They are the same. This is two (flowers) and that is two (flowers). They are the same".

- After the child can do this on his own, show him a card with one drawing, and another one with two drawings. Ask him to put one object with the drawing of one thing, and two objects with the drawing of two things.
- Do this activity until the child can match one object with a picture of one object, and two objects with a picture of the same two objects three times a day for three days.

For a child with a moving difficulty:
- You may have to do the activity while he watches. Explain what you are doing.
- After you do this for several days or when he seems to understand what you are doing, begin to ask him to indicate whether or not you have matched the number of objects correctly.
- Or, put objects in groups of one and two objects. Show him one object and ask him to point to or look where there is one object, and then do the same for two objects.

Gross Motor domain (Milestone G1-G31)

This section describes the step-by-step procedure on how to assess Gross Motor (G) milestones.

G1: Equal movement (start 0 month)

P25	P75	P90	P99+	P100	Check at
0	0	0	**3**	**(3)**	**0 month**

1. Put the child on his back.
2. Observe the child's trunk, arms and legs for equal movements.
3. If the child does not move, lift him up with his belly downwards.
4. Observe the child's trunk, arms and legs for equal movements.
5. Observe whether his trunk, arms and legs move on their own or whether they just hang down without muscle tone.

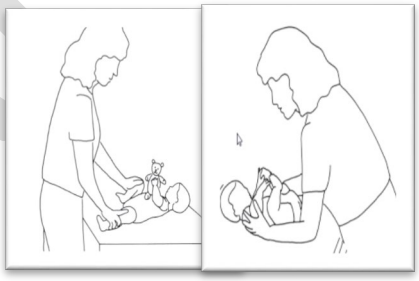
Pass: child moves both sides of his trunk easily and his right arm and leg as easily as his left arm and leg.
The range of the movement and the timing are not important.

Fail: difference in quality and quantity of the movements between both sides e.g. one limb (either leg or hand) moves noticeably less than the other.

If Failed: Child should try the following games in the Blue Box:
Learning to position and move Activity M1: Moving arms and legs while laying on back

What? Moving arms and legs while laying on back

· Most children naturally move their arms and legs around in an uncoordinated, random fashion, when they are lying on the back.
· For children who are not so active, we try to encourage this movement with this activity.
It also works as massage, and you and the child can spend a moment together as you do these movements.



When? Moving arms and legs while lying on back

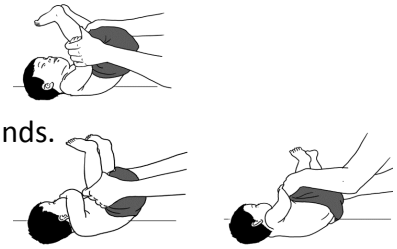
- When are changing or dressing the child.
- Do it for a few minutes and then rest or pass to another activity.

Game 1: Moving arms and legs

When the child is lying on his back:

- Gently open and close his arms.
- Gently take both legs and swing them from side to side.
- Gently move his legs back and forth in a pedaling motion (bicycle, one leg bent, one leg extended)
- Gently lift his bottom up.

Game 2: Moving arms and legs



- Bring both legs up towards head and encourage him to look at feet and eventually to reach for them with his hands.
- Keep looking at the child's eyes and smiling.
- Make it a game: you can sing, kiss or rub his feet, play peek-a-boo hiding behind his feet.
- Observe if the child continues moving by himself. Check that the child actually lifts arms and legs off the surface (anti-gravity).

DRAFT

- If the child is absent and doesn't look at his feet, you can try to put some bright colored socks or bracelets on the child's ankle.
- Reinforce when he tries to continue the movement: "Oh, look how well you are moving your legs."

G2: Lift head (also G3: sideway, G4: ≥45° up) (start 6 months)

P25	P75	P90	P99+	P100	check at
G2: 0	3	4	**5**	**(5)**	**0** month
G3: 1	3	4	**5**	**(5)**	**6** months
G4: 2	3	4	**5**	**(5)**	**6** months

1. Put the child on his stomach (face down) on a flat surface or mat
2. Observe the child's chin

Pass: child lifts his head up just a little bit so that the chin is off the surface for a short period without the head being turned to either side.
G2: <45° up G3: turn aside G4: ≥45° up
Fail: Turning the head to one side would be failed

If Failed: Child should try the following games in the Blue Box/Book:
Blue Box activity M4: learning to position and move
Blue Book Gross Motor 5: pushes up on stomach: p. 138 English - p. 321 Khmer

What?

- Lying on stomach is essential for the development of the baby. There are many benefits, such as building up the strength of head, neck and upper body muscles.
- At the beginning, the child lifts his head up only for a few seconds. Later, he will lift his head up and turn it in to both sides.
- Eventually he will be able to lifts his head up, then his shoulders and chest while pushing on his forearms.
- Newborns will have knees bent under hips.
- Gradually they will be able to strengthen the legs.

When?

- We can start soon after the baby is born. We can put the baby on his tummy every time we change him, or during play times, during quiet moments.
- At the beginning, only for 1 or 2 minutes. As the baby tolerates the position better, we can increase the time (up to one hour).
- This activity should be supervised. Do not put the baby on his tummy while sleeping!

How? Game 1: Lift head

- Put the child on his tummy at different moments every day. Get your face at his eye's level, your face, smile and voice are the most interesting things in the world for this child at the moment.

DRAFT

- Encourage the child to lift his head up. You can use toys-objects that make noises or place your face in front of him while looking at him and talking to him. Move your head or an object from side to side and encourage the child to track it.

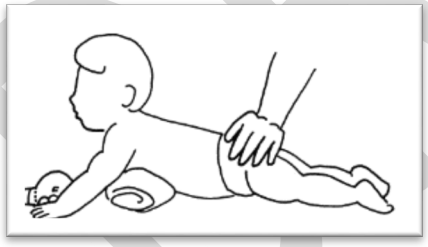
Game 2: Lift head

- Place the baby on his stomach.
- Call his name and hold a colorful, noisy object in front of him to encourage him to lift his head up**.**
- You can also put a rolled towel under the baby's chest and shoulders to help him.

If the child has difficulties seeing,

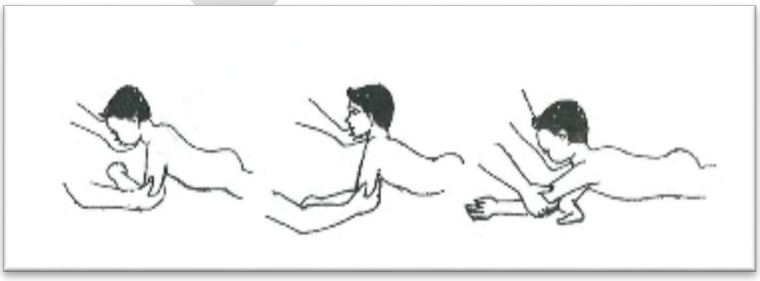
- use your voice or a noisy object such as rattles or bells

If an older child with a movement difficulty is not able to lift head and shoulders in this position:



- You can still put a rolled towel or blanket under his chest and practice tracking objects from side to side.

To help the child develop head control when lying face down



- Take his upper arms and pull him up gently until his head comes forward; then lay him down again. Repeat multiple times.

G3: Turn head aside when lying face down (see game G2)

G4: Head up 45 degrees (see game G2)

G5: Sit up steadily (≥2 seconds)

P25	P75	P90	P99+	P100	check at
2	4	5	**6**	**(6)**	**6** months

1. Have the child sit in between the caretaker's legs on a flat surface.
2. Make sure his legs are stretched and spread out.
3. Hold the child gently to prevent him from falling.
4. Caretaker initially can hold the baby with both hands on his waist but cannot touch his back or shoulders.
5. Then the caretaker stops holding his waist and does not touch him with the legs.
6. Observe the child sitting.
7. If failing, repeat 2 more times

Pass: child trunk is steady and sits without back, shoulder and waist support independently for at least two seconds.
His head does not have to be upright

Fail: sits less than 2 seconds on all 3 trials

If Failed: Child should try the following games in the Blue Box/Book:
Blue Box Learning to position and move M14
Blue Book Gross Motor 3: sit with full support: p. 136 English - p. 313 Khmer

What?

- Being able to sit instead of just lying down is very important for the child. While sitting, he is able to see and hear what is happening around him, it is easier to communicate with others, and he is freer to use his hands.

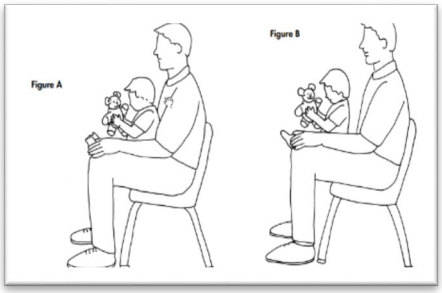
When?

- During quiet times and play times, while you read a story to the child, or while you are sitting talking with someone.
- Sitting needs a lot of practice!

How? Game 1: Sit up steadily

There are many ways to assist the child to sit.

- Remember to combine periods where he is very well supported (such as on your lap with his head on your chest) with other moments where he has to be more active:



DRAFT

- On your lap, but with his back and head unsupported.
- On the floor with you only supporting him from under his armpits or even at his hips.
- On your leg or lap as you gently bounce your legs up and down to a rhythm ("play horse").

- Make sure the child's legs are not always flexed. "Long-sitting" (sitting with legs extended) is very important for the legs, the pelvis and the new movement that will come.
- Gradually, decrease the amount of support you give (e.g. at the beginning you hold him from under the arms, later from the hips). It is normal if the child wobbles, it means he is putting his muscles and balance into action.
- It is good to have something such a low table (we can make it with a cardboard box), so the child that is not very stable can support his arms on it.

Game 2: Sit up steadily

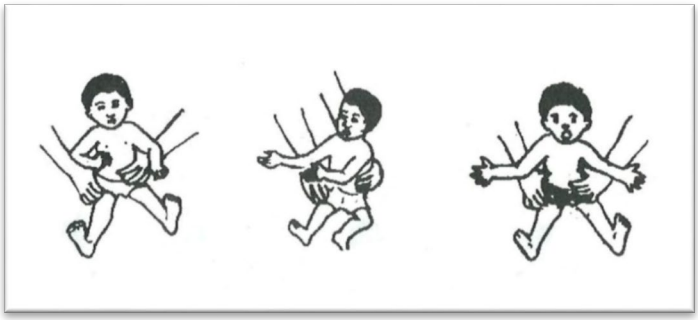
- **To help your child gain balance in sitting,** sit him on your knee facing you.
- Hold him loosely so his body can adapt to a new position.
- **Later, place the child with the back to you so that he is facing out and can see what is going on around him.** Hold him at his waist.
- Slowly lift one of your knees and gently lean the child to one side and then to the other side. This will help the child learn to balance.
- Practice the activity until the child brings his head up when you lean him to the side.

For a child with a mobility difficulty who cannot do this activity (1):

- To help the child with stiff legs learn to sit, bend his hips, straighten his knees, and spread his legs apart, while turning them out, but do not apply any force. Control his legs with your legs and use your hands to play with the child, as shown in the picture.

For a child with a mobility difficulty who cannot do this activity (2):

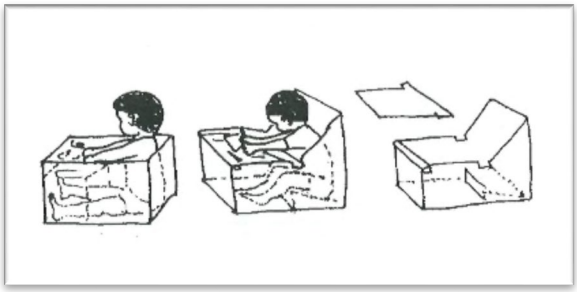
- Sit behind the child. Make sure that his back is straight and his hips are bent so that he is sitting on his bottom, not on his lower back.
- Use your body to support his back and your hands to hold his legs apart, as much as needed, so he can use his arms to play.



DRAFT

For a child with a mobility difficulty who cannot do this activity (3):

- Some children will need seating aids to sit well.
- To help improve balance, the aid should be as low as possible and still let the child sit straight.
- Firmly supporting the hips may be enough, but sometimes the child needs higher back support.



Be careful: Give enough stability eventually with a belt, so that the child doesn't hurt his head.

G6: Bear weight on legs (≥2 seconds) (start 9 months)

P25	P75	P90	P99+	P100	check at
2	5	6	**7**	**(7)**	**9** months

1. Hold the child in a standing position while supporting him under his arms.
2. Slowly diminish the support by losing the grip but still providing some support to allow the child's weight to be supported on his legs and feet.
3. Observe the child legs and feet.

Pass: child tries to stand on its feet supporting some of his weight by pushing his feet on the floor.

Fail: child lifts up his legs without pushing first pressure on his legs

If Failed: Child should try the following game below:

Game: Bear weight on leg

- **Place the child across your leg with his legs apart.**
- Put your hands gently on the child's body and hips to make sure the child is safe.
- Tilt the child to the left and right.
- Try to keep the child's feet touching the ground.

For a child who cannot do this activity.

- Put the child on your lap with his hips and knees bent.
- Use your hands to gently press the bottom of his foot to the floor. This will help the child tolerate pressure on the bottom of the foot. This pressure is important to make squatting and standing easier as the child develops his moving abilities.

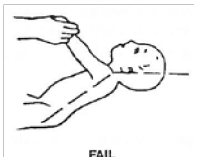
DRAFT

G7: No head lag when pulled to sit

P25	P75	P90	P99+	P100	check at
2	4	7	**8**	**(8)**	**9** months

1. Put the child on his back on the flat surface.
2. Hold the child's hands and wrists with his arms aligned to his shoulders.
3. Gently pull him up to a sitting position.
4. Observe the child' head. Caution: if the child's head lags behind early on, do not insist with another trial.

Pass: child's head follows the body, aligned to it. The head does not lag or fall behind at any time while the body is being pulled up, sometimes pulling with you with his shoulder and neck muscles.
Fail: head lags behind by not staying aligned to the body



If Failed: Child should try the following games in the Blue Book:
Gross Motor 6: controls head straight: p. 139 English - p. 325 Khmer

Game 1: No head lag when pulled to sit

- To help the child develop head control when lying face up, take his upper arms and pull him up gently until his head comes forward; then lay him down again.
- Repeat often.

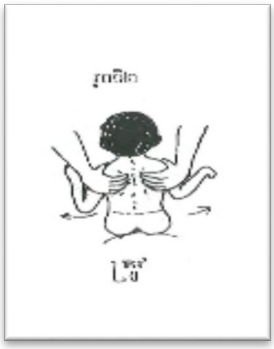
Game 2: No head lag when pulled to sit

- Place the child in a half sitting position with a towel used as support
- Next, firmly grasp the child's hand and slowly pull child into a sitting position.
- Stroke the front of the child's neck gently as he tries to lift his head up.
- If the child's head is very big or is hanging back a lot, **do not continue** until the child is stronger.

For a child with a moving difficulty who cannot do this activity:

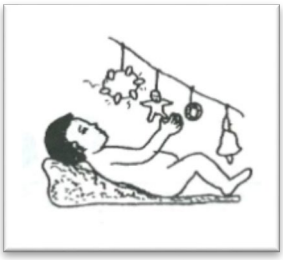
With a child who is very stiff (Spastic).

- Do not pull the child up with his arms because this will cause his legs to straighten stiffly.
- Try to pull his shoulder blades forward as you lift him up.



For a child with a moving difficulty who cannot do this activity:

- Put the child on his back with a towel roll behind his head and back.
- Place toys at the level of his chest. Be certain the child can see them without too much movement.
- Put bells on it so it makes sounds when moved. Stroke the front and side of the child's neck softly but firmly to encourage the child to lift his head to see the toys



DRAFT

G8: Roll over (front to back)

P25	P75	P90	P99+	P100	check at
2	5	6	**8**	**(8)**	**9** months

1. Put the child on his stomach.
2. Show the child a toy and pull it upwards beyond child's sight (so that the child does not see the toy).
3. Observe if the child rolls over.
4. If the child does not do it, ask the caretaker if before the child has been rolled over completely, from back to stomach or from stomach to back, at least twice.

Pass: child rolls over from the stomach to back as shown in the picture, or the caretaker has seen him rolling over at least twice.

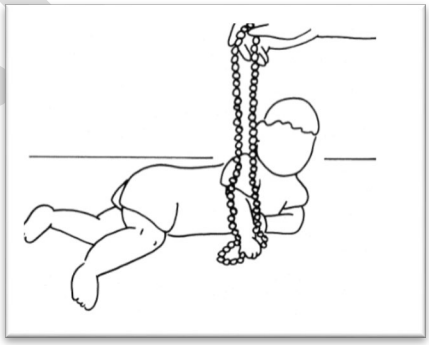
If Failed: Child should try the following game in the Blue Box/Book:
Blue Box: M11: Learning to position and move
Blue Book: Gross Motor 4: Roll from front to side: p. 137 English - p. 318 Khmer

What and when?

- Rolling from being on the belly to being on the back occurs naturally when the child is comfortable on his belly and able to release one arm to reach for an object (even if he needs help for this).

How? Game: Roll Over

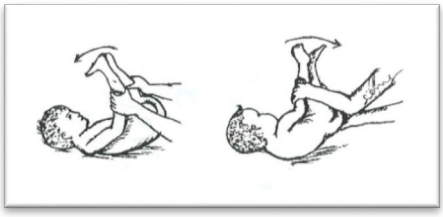
- While the baby is lying on his tummy, shows him something interesting to one side and help him to release the arm of that side to reach for the object.
- This will make him change the weight of his body onto the other side.
- Gently make him unbalanced by pushing on the shoulder that is reaching for the object. This will make him "roll" to his back.
- Keep moving the object so it stays all the time in front of his eyes.



- If the child has a seeing difficulty, use an object that makes an interesting sound. Encourage the child to reach for the object and to follow the sound.

For a child with a moving difficulty who cannot do this activity:
If the child is very stiff, do the following relaxation exercise before doing other exercises or activities.

- Put the child on his back.
- Curl up his body into a ball.
- Slowly roll his hips and legs from side to side.



DRAFT

G9: Chest up with arm support

P25	P75	P90	P99+	P100	check at
3	5	6	**8**	**(8)**	**9** months

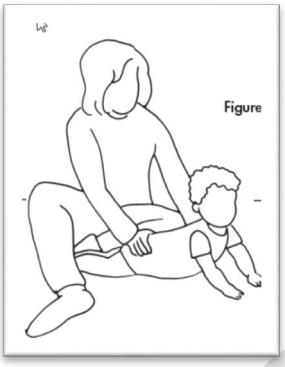
1. Put the child on his stomach on a flat surface or mat.
2. Observe whether the child lifting his chest.

Pass: child lifts up his chest using his arms to hold himself up like as shown in the picture. Note that the child can support himself on his outstretched arms.

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Box:
Learning to position and move M6

What ?



- Lying on stomach is essential for the development of the baby. There are many benefits such as building up the strength of head, neck and upper body muscles.
- The child typically progresses in the following way :

1. At the beginning he is only able to put weight on his forearms and elbows.
2. Later he will be able to put weight on hands with arms extended.

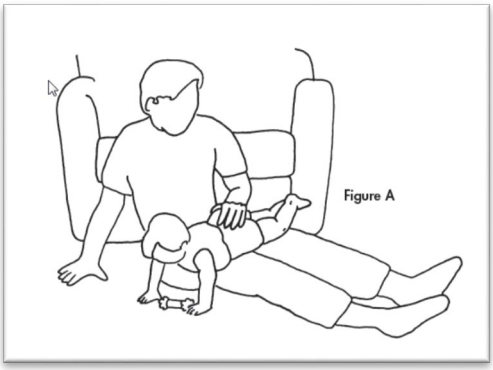
- If an older child is not able to lift head and shoulders, help him placing a rolled blanket under his chest. Remember this position takes a lot of effort and it needs to be built up gradually

When ?

- During play time. Should be supervised. **Not while sleeping!**

How ?

- Help the child to lay on his tummy.
- Make sure the child's arms and hands are forward, in front of the shoulders.
- Provide support for his hips with your hands.
- Help him to put weight on his arms.
- Remember his hands should be open, if not you can gently help him to open them.
- Help him, you can place one hand on his bottom and the other under his chest.
- Push softly on his bottom with one hand and lift up his trunk with the other.



- Reinforce with your voice or with someone showing toys- bright objects in front of him.

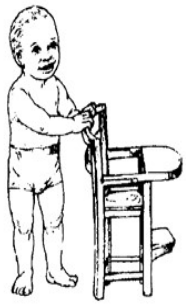
DRAFT

G10: Standing holding on (≥10 seconds) (start 12 months)

P25	P75	P90	P99+	P100	check at
3	6	7	**10**	**(10)**	**12** months

1. Place the child on an equal, firm surface, next to a chair or low table (belly level) in a standing position with his legs to support his weight and his both hands holding onto the stable object.
2. The child cannot lean on or touch the stable object with his body.
3. Encourage him to keep on standing by putting a toy on the seat of the chair or the table.
4. Observe the child and count the seconds he is standing with assistance of an object.
5. When he fails the first time, allow 2 more trials.

Pass: child is able to stand upright, supporting most of his weight on both feet, for about 10 seconds while holding onto a stable object.



Fail: child is leaning on the stable object or is touching it with his body.

If Failed: Child should try the following games in the Blue Book:
Blue Book Gross Motor 12: pulls up to stand: p. 144 English - p. 350 Khmer

When?

- If your child can hold his head well, and can sit by himself you can begin teaching him how to stand.

Game 1: Standing holding on

- Hold him standing close to you so he is not afraid.
- Gently rock him from side to side so he must balance.
- Keep your hands on his body and hips as shown in the picture.

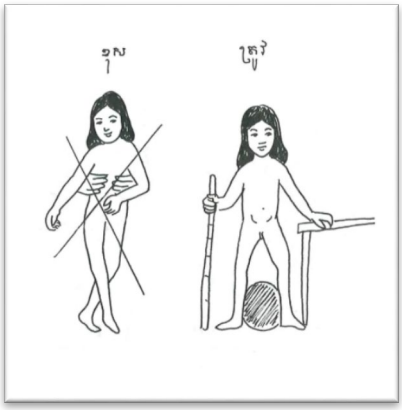
Game 2: Standing holding on

- **The child can practice getting up and down from standing.**
- Practice bending and straightening his knees.
- Use your hands to give the child help as shown in the picture.

Game 3: Standing holding on

- **Sit behind the child with his hands on a table.**
- Put things on the table a little bit far away so he must reach to get them.
- Help him to bend and straighten his knees, and to sit down and stand up.

DRAFT



For the child who has one body side weaker than the other

- When the child goes from sitting to standing, make sure he uses his weak side if he has one.
- Do not encourage the child to stand the child when his legs are very stiff. Do not let him stand with legs crossed or up on his toes.
- Do help him stand with legs apart, legs turned out, and feet flat, using objects as shown in the picture to help.

For a child who cannot do this activity:

- Put the child on your lap with his hips and knees bent.
- Use your hands to gently press the bottom of his foot to the floor. This will help the child tolerate pressure on the bottom of the foot. This pressure is important to make squatting and standing easier as the child develops his moving ability.

DRAFT

G11: Sit without support (≥10 seconds)

P25	P75	P90	P99+	P100	check at
4	7	9	**11**	**(11)**	**12** months

1. Put the child in a sitting position in between caretaker's legs or on a flat surface, making sure he does not fall.
2. Slowly remove your hands and body and give him a big toy like a stuffed animal to handle with both hands.
3. Observe the child sitting.
4. If failed, make 2 more trials

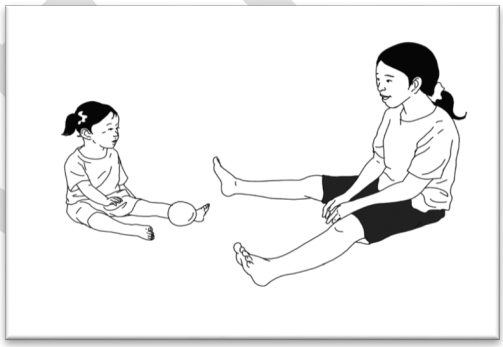
Pass: child sits with head up and straight back for at least 10 seconds without using hand-arm support to balance his body, in at least one of a maximum of three trials.

Fail: child put hands on legs or on the flat surface for support.

If Failed: Child should try the following games in the Blue Box/Book:
Blue Box Learning to position and move: M18
Blue Book Gross Motor 8: sits alone and uses hands for support: p.141 English - p.333 Khmer

What?

- When the child is able to sit independently, he will be able to use his arms to play.
- All the games below demand changes in the way he's sitting and help him to continue developing head and back muscles.



How? Game 1: Sit without support

- If the child is still not very stable, you can put some pillows around or sit on a carpet or soft floor.
- Remember that falling also makes part of learning; just make sure he doesn't hurt himself.
- Play ideas:
  - Sit on the floor in front of the child, throw to him a ball and ask him to throw it back to you.
  - Hold interesting objects and toys in front of him and encourage him to reach for them.
  - Ask him to reach to one side, the other, or the floor in front of him.
  - Sing a song where you have to clap and encourage him to do the same.
  - Encourage him to look back beyond one shoulder and then the other side ('Look who's coming behind you!').

Game 2: Sit without support

- **Place the baby in a sitting position.**
- If he needs a little help, try placing your hands at his hips or on his lower back for support, until he learns to sit alone.

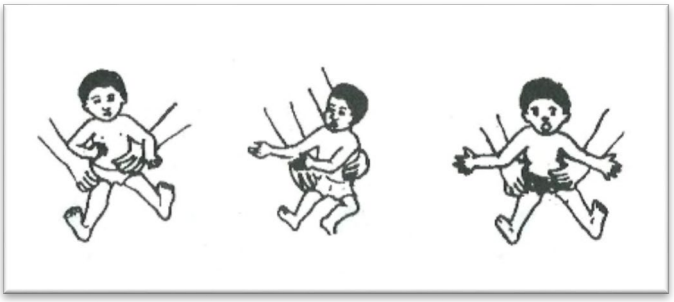
Game 3: Sit without support

- **Help him turn from side to side to play.**
- Gently move him from side to side, and forward and back, so he can practice balancing. Keep your hands on his waist and give support as needed.

DRAFT

Game 4: Sit without support

- **Help him to learn to use his hands to stop himself falling to the side.**
- Later when he can sit alone, help him to put his hands behind to stop himself falling backwards.



For a child with a moving difficulty that is not able to sit without support,

- Practice using arms while sitting with support.
  - Remember that pelvis, hips, and head need to be well supported.
  - A belt for the hips, and a tray so he can support his arms on it may help.
- Put pillows to the sides of the hips if the child tends to fall to the sides. Legs are better flexed, with hips well supported. Try different degrees of tilting of the chair, which may help the child to keep head up.

These are only a few quick tips. Ask for help to find a proper seating for the child.

For a child who cannot do this activity.

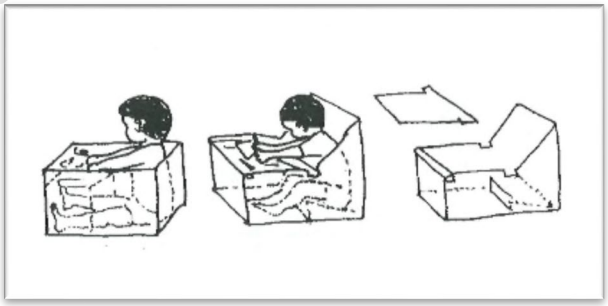
- If the child sits on your lap throwing his head, shoulders, and arms back, do not try to push him forward as shown in the picture.

BUT

- Put your forearm across his neck and the base of his skull. With your hand and forearm, control his shoulders pushing them forward and in wards.

For a child who cannot do this activity.

- You can use a box to help support the child when sitting. Let the child sit in the box and play. Cut out one side so the child can see all around.
- From time to time, remove the child from the box and let the child sit with less support. As the child's body gets stronger, he will be able to sit alone for longer periods. Then you can get the child to sit without the box for as long as he can.



- When the child can sit alone, you can stop using the box.

DRAFT

G12: Crawl (≥ 3 moves)

P25	P75	P90	P99+	P100	check at
6	8	9	**10**	**(14)**	**12** months

1. Put the child in a prone position with his belly on the supporting surface.
2. Place yourself in front of him (in a distance approx. 120-150 cm away).
3. Observe the child moving in any direction.
4. When not moving spontaneously, show him a toy or object that attracts his visual attention.
5. Try to coax him to crawl towards the toy.
6. Encourage him to grab it.

Pass:

1) Child moves forwards or backwards on his arms and knees
2) With alternating and consecutive movements with both arms and legs, at least 3 consecutive in a row.
3) Without his belly touching the floor.

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Gross Motor 9: puts weight on hands and knees: p. 142 English - p. 339 Khmer
Gross Motor 11: crawls: p. 143 English - p. 346 Khmer

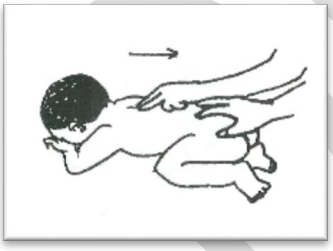
If your child can hold his head well and sit well, you can teach him to crawl.

- Put him over your leg, on his hands and knees.
- Slowly rock him forward and back.

Game 1: Crawl

- Place the baby on his hands and knees.

If he needs a little help, support him with one hand under his chest and one hand behind him (on his bottom), until he can stay in this position by himself.

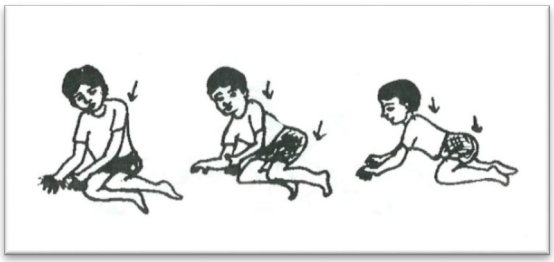


If the child does not lift his head in this position,

- Help him to lift his head by pressing firmly on the muscles on each side of his backbone and slowly bringing your hand from his neck toward his hips.

Game 2: Crawl

- To help the child go back and forth between sitting and being on his hands and knees, hold his shoulders and hips and give as much physical support and guidance as needed to do the activity.



DRAFT

Game 3: Crawl

- Create things for the child to crawl over and under safely using logs, tires, chairs, etc.
- Encourage the child to move through different surfaces up, over, around, and to stay still for balance

Game 1 for a child who cannot do this activity.

- Place the child over a big rolled object (pillow) in "all-fours" position.
- Give downward pressure on his shoulders and then on his hips. Rock his body forward so that his weight is supported by his arms.

Game 2: for a child who cannot do this activity.

- Place the child on your lap or on the floor in front of you.
- Put your hands on the child's waist and hips.
- Move the child's body slowly from side to side, and from front to back.

Note: Help the child lean on the weak arm, and sit to the weak side. Open his hand first before getting him to lean on the weak arm.

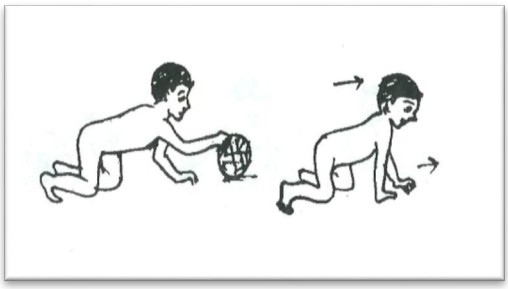
Game 3 For a child who cannot do this activity.

- Place the child in side-sitting position between your legs with both arms toward one side on the floor or over your legs for extra support.
- Push some of the child's body weight forward on to his hands, like in the picture.

After he can stay on his hands and knees by himself:

- Give him toys so he has to lift one hand up to reach them.

Later, when he can balance well, help him to crawl forward:



DRAFT

	• Hold the child's hips securely in your hands with the child's hands on the ground, and his elbows straight (facing forward). • Have the child "walk" on his hands on a path drawn in dirt (see picture) or towards an interesting object. • The child needs to be able to open his hands flat and move one arm at a time to do this activity. This will help to strengthen his shoulders and arms for crawling later.	

DRAFT

G13: Pull up to stand (≥ 2 seconds)

P25	P75	P90	P99+	P100	check at
6	9	10	**11**	**(11)**	**12** months

1. Place the child sitting on the floor beside a chair or low table.
2. Encourage him to stand by putting a toy on the seat of the chair or the table.
3. Observe the child.

Pass: child pulls himself up to stand without help for a more than 2 seconds.
Fail: Not meeting pass criteria

If Failed: Child should try the following games in the Blue Book:
Gross Motor 12: pulls to stand: p. 144 English - p. 351 Khmer

Game 1: Pull to stand 1

- **The child can practice getting up and down from standing.**
- Practice bending and straightening his knees.

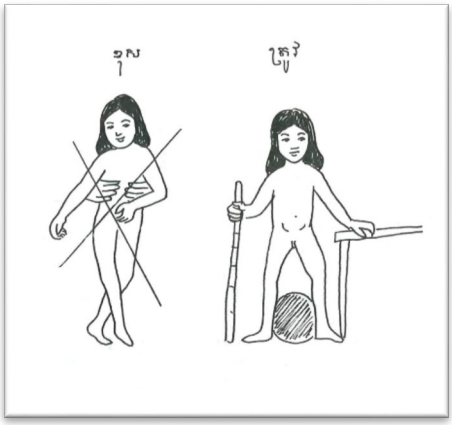
- Use your hands to give the child help as shown in the picture.

Game 2: Pull to stand 2

- **Sit behind the child with his hands on a table.**
- Put things on the table a little bit far away so he must reach to get them.
- Help him to bend and straighten his knees, and to sit down and stand up.

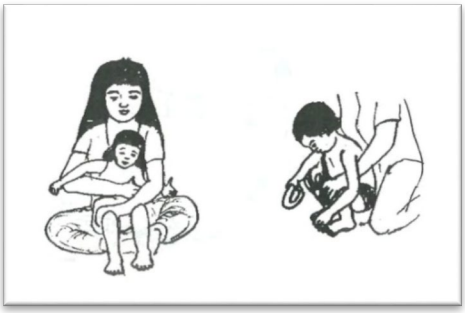
For the child who has one body side weaker than the other:

- Do not encourage the child to stand the child when his legs are very stiff. Do not let him stand with legs crossed or up on his toes. Do not let him stand with legs crossed or up on his toes. Do help him stand with legs apart, legs turned out, and feet flat, using objects as shown in the picture to help.



Pull to stand for a child who cannot do this activity:

- Put the child on your lap with his hips and knees bent.
- Use your hands to gently press the bottom of his foot to the floor. This will help the child tolerate pressure on the bottom of the foot.



DRAFT

	This pressure is important to make squatting and standing easier as the child develops his moving ability.

G14: Turn head and trunk in all direction

P25	P75	P90	P99+	P100	check at
6	8	10	**13**	**(13)**	**12** months

1. Get the child to turn his head and shoulders in all direction by making noise, showing a toy or calling his name. 2. Observe the child's head and trunk movements.	**Pass:** child is able to turn his head in all direction without changing his body positioning (not moving his pelvis). **Fail:** Not meeting any of the pass criteria

If Failed: Child should try the following game described below

To help the child develop head and trunk control when standing, use this exercise

Get the child to turn his head and shoulders in all direction by making noise, showing a toy or calling his name

when:

- Standing with your hand controlling the hip
- Then standing alone

DRAFT

G15: Getting to sit

P25	P75	P90	P99+	P100	check at
7	9	10	**13**	**(13)**	**12** months

1. Put the child on his back.
2. Observe the child.

Pass: child gets himself up to a sitting position without help.

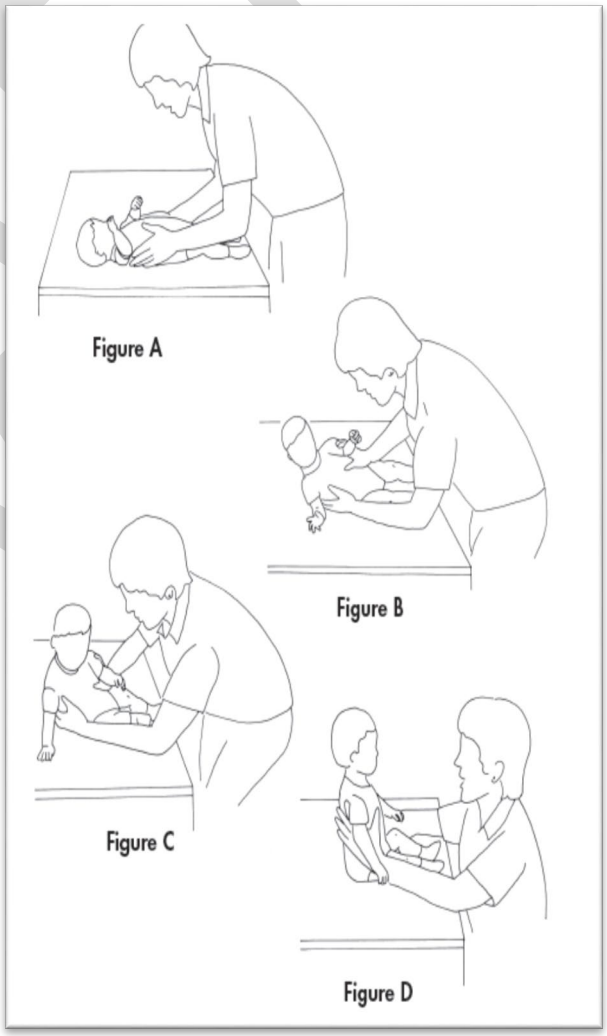
If Failed: Child should try the following game in the Blue Box:
Learning to position and move M13

What?

- Often we help a young child to come to a sitting position simply by pulling from his hands towards us.
- We can still do it, especially if the child is able to hold his head.
- But with this activity, we want to teach the child to sit on his own with the support of his own arm.
- The explanation is a bit long, but it is an important movement to practice

How?

- Place the child on his back on the floor or bed, in front of you.
- Place each one of your hands on each side of his body.
- Roll the child to the right side assisting with your two hands. If the child's left arm does not move in front of his body, guide the child's left arm across the body (Fig. A)
- Now the child will be in a side-lying position on the right side of his body, propping up on his right arm. (Fig. B)
- Help the child to extend his right arm, pushing on right hand.
- If this is too difficult for the child, use your left hand to lengthen the right side of the child's body at the same time you use your right hand to bring the child's left hip down. (Fig. C)
- Continue to rotate the child's body up to the sitting position by using your hands to position both hips on the table and making sure the shoulders are positioned over the hips with a straight back (Fig. D).
- Practice with the other side.



DRAFT

G16: Standing alone (≥ 2 seconds) (also G18: ≥ 10 seconds) (start 18 months)

P25	P75	P90	P99+	P100	check at
2 sec: 8	10	12	**14**	**(16)**	**18** months
10 sec: 9	12	14	**17**	**(17)**	**24** months

1. Place the child with both feet flat on a flat surface
2. Support the child to stand by holding his hands or supporting his trunk.
3. Gradually remove the support while the child modifies and adjusts to the new position.
4. Observe the child standing alone and count the number of seconds he can stand alone.

Pass:
- The child is able to stand upright on both feet (not on toes) with a straight back
- His legs support 100% of his weight
- No contact with a person or object.
- Able to standalone like this for at least 2 seconds

G16: 2 seconds,
G18: 10 seconds.

Fail: The child is not able to stand alone for at least 2 seconds

If Failed: Child should try the game in Blue Box: Learn to position and move M21-M22-M23

What?
- Maintaining an aligned upright position against gravity demands a lot of effort. The child needs to be ready to do this before being able to get to stand.

Game 1: Stand-alone 1

How?
- Sit on the floor or a chair/couch and have the child standing, with his back against your torsos, or in between your legs.
- Provide support if needed with your hands: in the child's belly and buttocks.
- Make sure the child is not standing with feet not flat, legs too far apart, crossed, or to close together.
- What you want is that the child is bearing his own body weight gradually.

Game 2: Stand-alone 2
- Sit in a couch or on a chair and position him in-between your legs
- From this position, rock your body from side to side and backwards and forwards, gently, to have the child experience shifting on the weight (as you rock, he will be wearing weight on one leg, then the other, etc.).
- From this position:
  - Have the child look around, up and to the floor.
  - Have the child reaching forward to grab a toy.

DO NOT USE BABY WALKER

DRAFT

- It is advised not to use "baby walkers". They won't help the child to learn to walk, and it can even be detrimental to their development. In some countries, the sale of baby walkers is banned by the authorities.
- Be patient and work with the child according to the previous steps to walk.
- For a child that will not learn to walk due to moving difficulties, other solutions such as walking frames or wheelchairs should be considered with the help of someone experimented.

Game 3: Stand-alone 3

- Have the child stand in front of a low table, a bed or inverted box or laundry basket. The child should be able to use the surface to support his arms.
- Provide support with your hands: one hand across the child's bottom and the other hand across the child's belly.
- You are trying to keep the child's body and hips straight (don't allow the child to stand leaning with hips against the table).
- Make sure that the child is not standing with legs too far apart, crossed, too close together, knees locked or standing on his toes.

Game 4: Stand-alone 4

- Try also to have the child stand against a wall or a big piece of furniture such as a refrigerator.
- Place the child's hands on the wall or refrigerator for support.
- Place one of your hands on the child's hip and the other hand on the child's chest.

- If the child is leaning his body into the wall, gently push the child's body back so that shoulders are positioned directly over hips.
- Remember you want hips to be in line with shoulders and feet as much as possible.
- Apply some pressure with your hands on the hips towards the floor. It helps the child to feel the weight of his body on his feet.
- If the child doesn't need your support, gradually take your hands off and just stay there for safety.
- Allow the child to wobble and to find his balance.

Game 5: Stand Alone 5

What?

- This position is important as it allows the child to experiment the standing position without having human support.
- It is a big step towards independent walking and standing.
- The contact of the wall behind the child stimulates the extension of hips and backs.

DRAFT

How?

- Stand the child with his back and bottom against a wall.
- Stay kneeling or sitting in front of her, with some toys to play or a book.
- Make sure the child's feet are positioned directly under the knees, knees under the hips, and hips under the shoulders.
- The child's feet need to be facing forward.
- Encourage the child to reach forward with the arms to reach the toy or the book you are holding.

- Some children will need a lot of support to stand up, but they also need to spend some time every day on their feet.
- Even for some children that will probably not walk independently permanently, standing is extremely important for many reasons:
  - It keeps body alignment and preserves bone density.
  - It helps with respiratory and digestive functions.
  - It allows the child to look at the world from another perspective.
- For a child that will not be able to stand/walk independently, consider creating a standing frame, with easy to find materials or using home furniture.

For a child who has moving difficulty

For the child with poor balance, make a "balance board" by placing a board over a log or other strong round object.

- Encourage the child to stand on the board, while giving the child as much help as needed by putting your hands on the child's waist, as shown in the picture.

DRAFT

G17: Take steps with holding (≥5 steps) (start 24 months)

P25	P75	P90	P99+	P100	check at
8	10	11	**17**	**(17)**	**24** months

1. Place the child in a standing position so that his legs support most of his weight, at a distance from which he can reach a stable object and can hold on with 1 or 2 hands up by holding him by his hands.
2. Observe if the child walks and count the steps.
3. If the child does not move spontaneously, show the child a toy and coax the child to walk towards the toy and grab it.

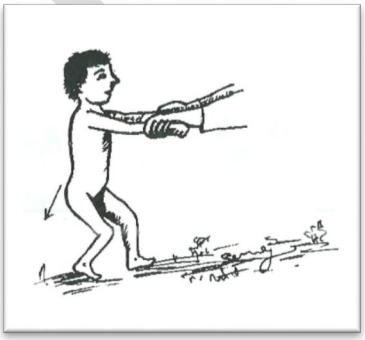
Pass: child can walk in an upright position with straight back, making at least 5 sideways or forward steps while holding onto a stable object, moving one leg forward while the other supports part of his weight.

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Gross Motor 13: start to walk: p. 144 English - p. 356 Khmer

Game 1 Take step with holding

- **Have the child standing in front of you and give him your hands to hold on to for support.**
- Call him to move towards your direction, ask him to take a few steps toward you.
- When the child takes steps with two hands held, give him only one hand to hold on and call him toward you.
- Then stand close to the child and call him to you, without holding his hands at all.



Game 2: Take steps with holding

- **Place the child near a bench or bed in a standing position. Place his hands on the bench so he can be safe.** Move away from the child and call him toward you.
- Get the child's attention with your voice by showing him his favorite toy or some food, so that he walks toward you.

Game 3: Take steps with holding

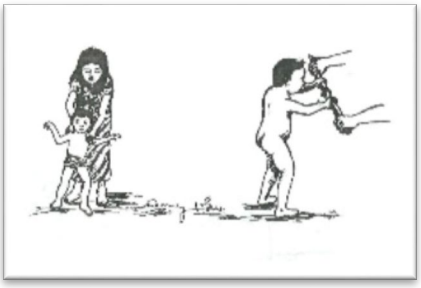
- Give the child big things to hold in his hand and call him towards you so he takes a few steps alone.

DRAFT

Note: Do not do this if the child has very weak legs from paralysis, or if he is very stiff or very floppy.

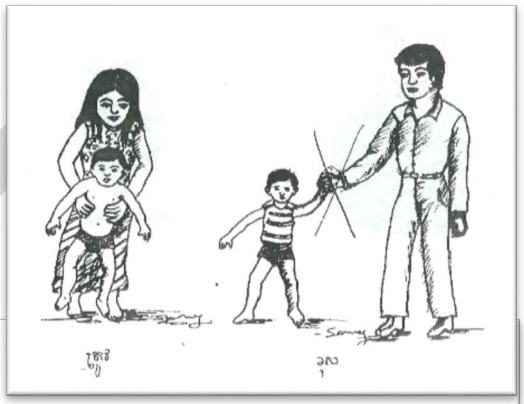
For a child who cannot do this activity (1):

- As the child gains better balance, you can provide a light support at the shoulders, or have the child hold a rope (because it is flexible, he will need to balance more).

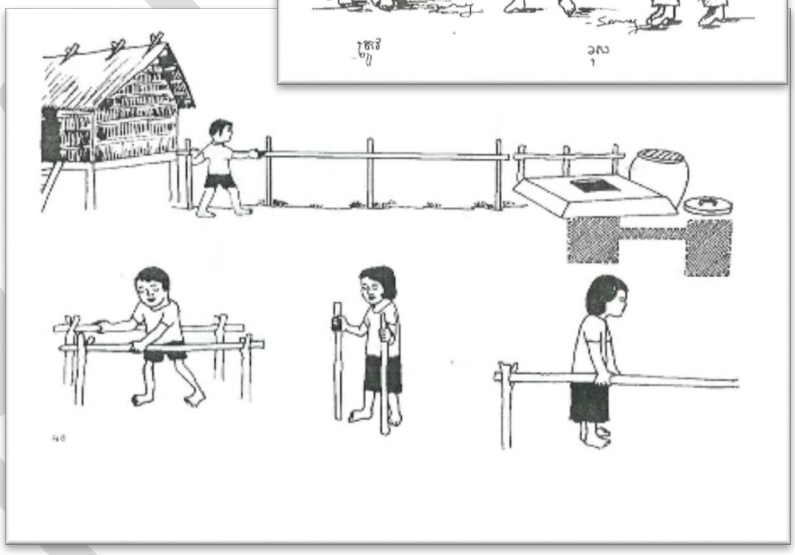


For a child who cannot do this activity (2):

- It is better to hold the child at his waist, not by his hand, so he can balance better.



- **Parallel bars can be used to help a child walk** if he cannot balance himself alone yet.
- When he becomes stronger, let him try to walk using one or two walking sticks.



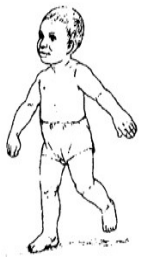
G18: Stand-alone (≥10 seconds) (see G16 games)

G19: Walk alone (≥5 steps) (start 30 months)

P25	P75	P90	P99+	P100	check at
11	13	14	**17**	**(17)**	**30** months

1. Place the child in standing position, out of reach of any object.
2. Go and stand 120 cm in front of the child and call him to come towards you (caretaker can encourage).
3. Observe if the child walk independently and count the steps.

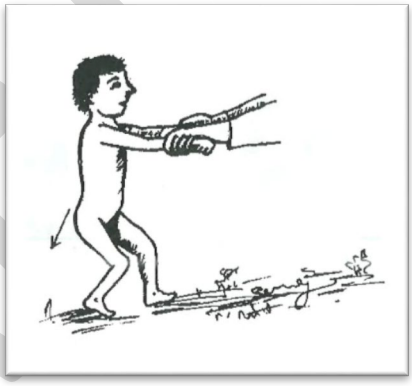
Pass: child can walk in an upright position with straight back, making at least 5 steps alone, moving one leg forward while the other supports most of his weight, without any contact with a person or an object.
Fail: Not meeting any of the pass criteria



If Failed: Child should try the following games in the Blue Book:
Gross Motor 13: starts to walk: p. 144 English - p. 356 Khmer
Gross Motor 15: walks well: p. 146 English - p. 356 Khmer

Game 1: Walk alone

- **Play a game holding the child's hands less and less as the child can do more by himself.**
- Have the child stand in front of you and give him your hands to hold on to for support.
- Call him to take a few steps walking toward you
- Tell him to take two steps away from you.
- When the child takes steps with two hands held, give him only one hand to hold and call him toward you.
- Then stand close to the child and call him to you, without holding his hands at all.



Game 2: Walk alone

- **Stand the child near a bench or bed. Place his hands on the bench so he can be safe.**
- Move away from the child and call him toward you.
- Get the child's attention with your voice by showing him his favorite toy or some food, so that he walks toward you.

Game 3: Take steps with holding

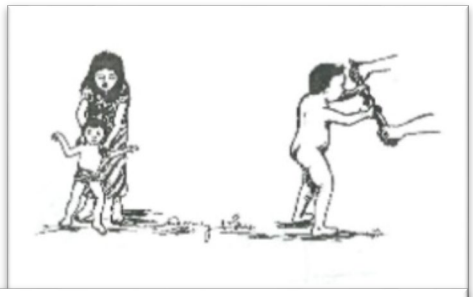
- Give the child big things to hold in his hand and call him towards you so he takes a few steps alone.

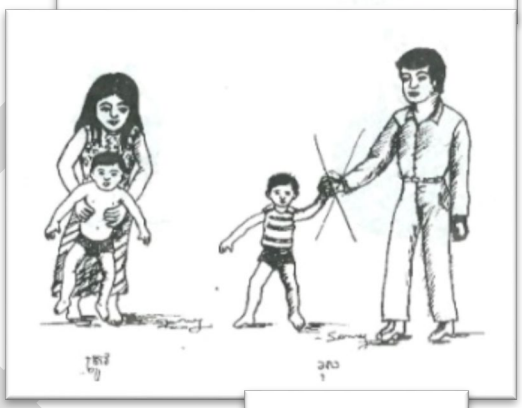
DRAFT

Note: Do not do this if the child has very weak legs from polio, or if he is very stiff or very floppy.

For a child who cannot do this activity.

- As the child gains better balance, you can provide a light support at the shoulders, or have the child hold a rope (because it is flexible, he will need to balance more).



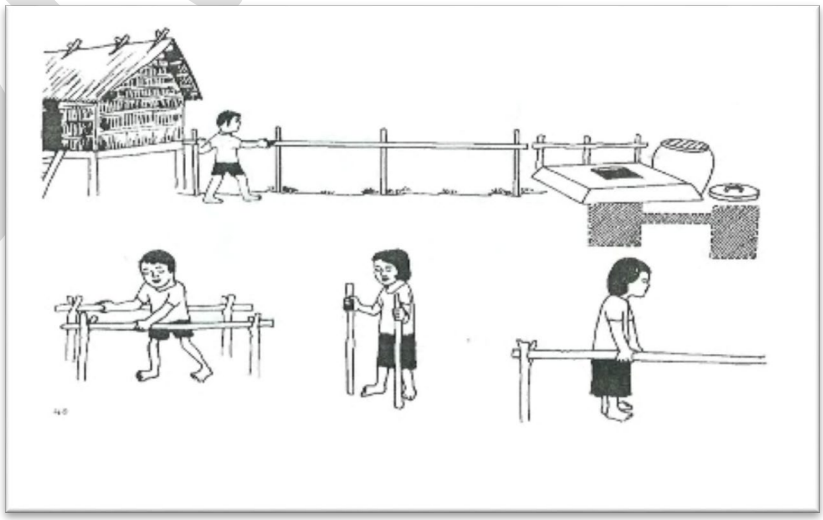


- It is better to hold the child at his waist, not by his hand, so he can balance better

For a child who has difficulty moving

- For the child with poor balance, make a "balance board" by placing a board over a log or other strong round object.
- Encourage the child to stand on the board, while giving the child as much help as needed by putting your hands on the child's waist, as shown in the picture.

- **Parallel bars can be used to help a child walk** if he cannot balance alone yet.
- When he becomes stronger let him try to walk using one or two walking sticks



DRAFT

G20: Stoop and recover (start 36 months)

P25	P75	P90	P99+	P100	check at
11	16	18	**24**	**(24)**	**36** months

1. Tell the child to stand up by himself.
2. If he does not, make the child stand on the floor away from all support.
3. Put an object (or toy) on the floor in front of him.
4. Encourage the child to bend forward and pick up the toy and get in an upright position again.
5. Observe the child stoop and recover.

Pass: child can bend forward and pick up the toy from the floor without sitting down and later get in upright position by himself without holding onto an object or a person.

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following game in the Blue Book:
Gross Motor 12: pulls up to stand: p. 144 English - p. 350 Khmer

Game 1: Bend down and get up again

- The child can practice getting up and down from standing.
- Practice bending and straightening his knees.
- Use your hands to give the child help as shown in the picture.

Game 2: Bend down and get up again

- Sit behind the child with his hands on a table.
- Put things on the table a little bit far away so he must reach to get them.
- Help him to bend and straighten his knees, and to sit down and stand up.

Game 3: Bend down and get up again

- Put an object (or toy) on the floor in front of him.
- Encourage the child to bend forward without bending the knees, pick up the toy and get in an upright position again.

DRAFT

G21: Run with good balance (≥2 m)

P25	P75	P90	P99+	P100	check at
12	17	19	**25**	**(32)**	**36** months

1. Ask the caretaker to stand in front of the child, about 2 meters away.
2. Ask caretaker to tell the child to run towards him.
3. Observe the child.
4. Alternative: Encourage the child to run by throwing a ball for him to chase.

Pass: child is able to run to the caretaker without falling or tripping.

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Gross Motor 18: begins to run: p. 147 English - p. 372 Khmer

Game 1: Run with good balance

- Once the child can walk well, he will try to run.
- You can help him learn by asking other children to run with him holding his hand and running with him, like a game.
- Be careful, ask the older child not to run too fast.

Game 2: Run with good balance

- Encourage the child to run by throwing a ball for him to chase.

DRAFT

G22: Walk up (≥2 steps)

P25	P75	P90	P99+	P100	check at
11	15	19	**24**	**(38)**	**36** months

1. Find a house stairway in reasonable condition, each 10 cm high steps (child's house or neighbor)
2. Tell the child to step on the stairway. He may use a wall or a rail for support, but not hold a person.
3. Observe the child climbing up.
4. The child can try this for 2-3 times.
5. If no stairway is available, ask the caretaker whether the child can climb up stairs alone in an upright position.

Pass:
- Child is able to step up on house stairway in an upright position at least 2 steps.
- The child may use a rail or wall for support, but may not hold a person.

Fail:
- To crawl up the stairs (with hand and feet support on the steps).
- Climbing up a ladder is different and cannot be part of this assessment.

G23: Walk backward (≥2 steps) (start 48 months)

P25	P75	P90	P99+	P100	check at
13	24	29	**33**	**(33)**	**48** months

1. Tell the child to stand up.
2. Tell the child to walk 2 steps backward (you demonstrate the child how to walk backward and ask him to copy you).
3. Observe the child.
4. If the child does not walk backward, ask the caretaker whether the child can walk backward, e.g. while opening a door or a drawer.

Pass: child walks at least 2 steps backward or the parents report he can.

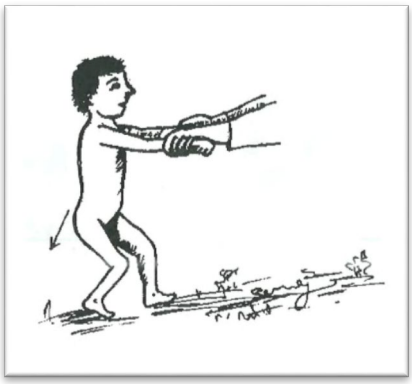
Fail: Not meeting any of the pass criteria

If Failed: The child could try this exercise below

(you demonstrate the child how to walk backward and ask him to copy you)

Game 1 Take step backward 1

- Have the child stand in front of you and give him your hands to hold on to for support.
- Ask him to take a few steps backward.
- When the child takes steps with two hands held, give him only one hand to hold.
- Then stand close to the child without holding his hands at all.



DRAFT

Game 2: Take step backward 2

- Have the child stand with his back in front of you and put your hand on his hips for control and to hold on to for support.
- Ask him to take a few steps backward.
- When the child takes steps, support him only with one hand on his back.
- Then stand close behind the child without holding him but catching him when he loses his balance.

For a child who has difficulty moving

For the child with poor balance, make a "balance board" by placing a board over a log or other strong round object like a metal pipe.

- Encourage the child to stand on the board, while giving the child as much help as needed by putting your hands on the child's waist, as shown in the picture.

If Failed: Child should try the following game in Blue Box:
Learn to position and move M30

What?

- Children often learn how to go upstairs before downstairs.
- At the beginning, they depend on their arms that are much stronger than their legs. So, they need to hold your hand or a stair railing.
- Stairs can be frightening for children. Don't leave the child unattended and provide support as needed.

How? Game: Walk up 2 or more steps

- Stepping up and down one step: Place an inverted wooden box or similar on the floor. Allow the child to hold your hand and help him to step up onto the box.
- Allow the child to spend some time on top of the box, then tell the child to step down. Practice this activity several times.
- Encourage the child to take turns using the right and left legs for going up and down.
- Put a stick on the ground for the child to step over.
- Tie a string between two chairs and have the child try to step over it; tie the string higher as the child's balance improves.
- When walking in the street, encourage the child to try to step up and down from the curbs.

For going up and down the stairs, the progression is typically as follows:

DRAFT

- First, children are able to climb up using hands and knees.
- Then, the child begins walking up using a railing or your hand for support, placing both feet on each step.
- Later, the child begins going down in the same fashion and with support of your hand or the railing.
- Typically, when they are around 2 years old, they can walk up the stairs without support, but still putting both feet on each step before proceeding to the next step.
- Reciprocal pattern, i.e. placing only one foot on each step, is developed typically around the age of 3 years.

DRAFT

G24: Kick ball forward (start 60 months)

P25	P75	P90	P99+	P100	check at
16	24	29	**40**	**(49)**	**60** months

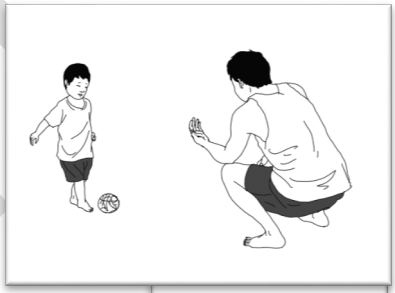
1. Put a ball 15 cm in front of the standing child.
2. Tell him to kick the ball forward (you may demonstrate the child how to kick the ball and ask him to copy you).
3. Observe the child kicking.

Pass: child can kick the ball forward with his leg without holding on to any support.
Fail: Sliding or pushing the ball with the foot, hitting the ball on the back swing or stepping on the ball are failures.

If Failed: Child should try the following game in the Blue Book:
Gross Motor 16: stands on one foot: p. 147 English - p. 368 Khmer

Game: Kick ball forward

- **If the child can stand and walk alone, make a ball out of cloth or paper, or use an old can.**
- Show the child how to kick the ball, then let him try by himself.

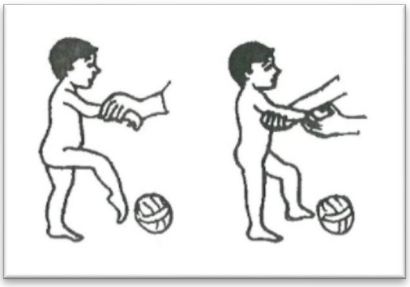


How?

- Children love to play with balls. Initially they want to pick up and throw the ball with the arms.
- You may want to demonstrate kicking the ball for the child.
- By holding the child's hand, you will encourage the child to kick the ball instead of trying to pick it up.
- Kick the ball towards the wall or someone who is playing with you.
- If football is popular where you live, you can tell the child you are playing football.
- If the child is having difficulties with this activity, practice games where he needs to stand on one foot for a few seconds, then on the other foot.
- First hold his hand and then let him do it without assistance.
- As the child feels more confident, reduce your help (don't hold the child's hand) combine walking with kicking the ball.

If the child can stand up, but he only uses one side of his body

- You can help him learn to use the weak side. Help him stand on the weak side with his foot flat. He can kick a ball with his weak leg to practice using it.
- Hold his hands if he needs help to balance.
- He can also kick a ball with the strong leg. (This is also a very good exercise because it requires him to stand on his weak leg).
- Make sure he puts all his weight on the weak side, and that his foot is flat.



DRAFT

G25: Jump up with both feet together

P25	P75	P90	P99+	P100	check at
21	30	35	**39**	**(61)**	**60** months

1. Ask the child to jump up with both feet together at the same place (you may demonstrate the child how to jump up and down and ask him to copy you).
2. The child may not hold to any support or run before jumping.
3. Observe the child.

Pass: child is able to jump with both feet off the ground at the same time.
The child does not have to land in the same place.
Fail: Not meeting any of the pass criteria

If Failed: Child should try the following game in the Blue Book:
Gross Motor 17: jumps alone: p. 147 English - p. 370 Khmer

Game 1: Jump up with both feet together

- **Show the child what you want him to do by jumping on the spot in front of him.**
- Next hold his trunk. Do not lift him by the arms.
- Ask him to try to lift his feet off the ground as you did.
- Talk to the child and make sure he is paying attention to you by being in front of him saying "1, 2, 3 up we go".

Game 2: Jump up with both feet together

- **Encourage the child to jump from a low step,** while holding the child's hands.

Game 3: Jump up with both feet together

- Draw a circle on the ground.
- Ask the child to jump with both feet inside the circle.

- Do not do this activity if the child's legs become stiff and straight when he stands.
- **A child should be able to stand alone before he tries this activity.**

DRAFT

G26: Throw object overhand

P25	P75	P90	P99+	P100	check at
20	32	41	**48**	**(67)**	**60** months

1. Give the child a ball (or object)
2. Stand at least 1 meter away from him.
3. Ask the child to throw the ball to you using an overhand throw (you may demonstrate the child how to throw the ball and ask him to copy you).
4. Observe the child.
5. The child is allowed to do 2 more trials if necessary.

Pass: child can throw the ball within arm's reach of you between your knees or head, using an overhand throw (not sideways or underhand). The ball might bounce before if it was between your knees and head before beginning the downward arc.

Fail: Throwing the ball directly downwards or away from you are failures.

If Failed: The child should try the following games in the Blue Box and Book:
Blue Box Learning to use hand and tools H12
Blue Book Gross Motor 14: throws overhand: p. 148 English - p. 363 Khmer

What?

- Even though in the drawing the child is throwing the ball with two hands, normally children start by throwing one small ball with only one hand.
- This activity allows children to coordinate their arm and hand movements at the same time.
- Balls are great toys and they allow learning turn-taking: you throw the ball and then you have to wait for the other person to send it back to you. It is a wonderful communication and social activity!
- Engage in a turn-taking game with the child: the child throws the ball, you catch it, you throw the ball back to him, … . The child will love this interaction and will be motivated to throw it better and better.

When?

- Play time
- Ask other children in the family to engage in this game with the child.

How?

Game 1: Throw object overhand

- The child can be sitting or standing.
- Play: giving the child a basket or bucket to throw toys, a ball or stones into. At first keep the bucket close to the child.
- If needed, guide the child's hand to throw the ball until he can do it without help.
- **If the child has stiff arms, do not force his arms to throw the object.**

DRAFT

Game 2: Throw object overhand

- Encourage him to use both his hands (in a separate or simultaneous way)
- You can also play throwing the ball to a target on the wall.

- Build a ball rattle (a ball that sounds when it moves), by filling a plastic ball with rice or sand.

For a child who cannot do this activity.

- If the child is unable to sit alone and throw a ball at the same time, try holding the child's body as shown in the pictures, to help him do this activity.
- Even children that have moving difficulties can enjoy playing with a ball.
- Look for the posture where he is more stable, and check if it is easier for him to push the ball than to throw it.
- Try different kinds of balls: maybe a soft homemade ball with pieces of cloth is easy to grasp

DRAFT

G27: Balance on each foot 1 second or more (also G29: ≥3 seconds)

P25	P75	P90	P99+	P100	check at
≥1 sec: 20	35	39	**51**	**(61)**	**60** months
≥3 sec: 20	40	53	**65**	**(73)**	**60** months

1. Ask the child to stand away from all support.
2. Show the child how to balance on one foot.
3. Ask him to raise his left foot in the air by bending his left knee, maintaining a good balance on his right foot for as long as he can without inkling.
4. Observe the child and count how many seconds he can stand on one foot without falling down or inkling.
5. Give the child 3 trials if necessary. The longest time of these 3 trials is valid.
6. Repeat 1-5 but balancing on left foot by raising the right knee.
7. The shortest time between the left and the right foot is valid.

Pass: child can keep balance for at least 1 or 3 seconds on each foot as shown in the picture.
G27: at least 1 sec.
G29: at least 3 se.
Fail: child fails to keep balance for at least 1 or 3 seconds on each foot, even if repeated for 3 trials

If Failed: Child should try the following games in the Blue Box and Book:
Blue Box Learning to position and move M31
Blue Book Gross Motor 16: stands on one foot: p. 147 English - p. 368 Khmer

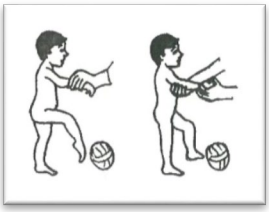
What?

- Kicking a ball requires the child to stand for a short moment on one leg. Probably the child was already doing this (such as when you are dressing the child and he lifts up one leg for you to put the pant on) but while kicking the ball, there's also movement and disequilibrium.

How?

- Children love to play with balls.
- Initially they want to pick up and throw the ball with the arms.
- You may want to demonstrate kicking the ball for the child.
- By holding the child's hand, you will encourage the child to kick the ball instead of trying to pick it up.
- Kick the ball towards the wall or someone who is playing with you.
- If football is popular where you live, you can ask the child to play football.
- If the child is having difficulties with this activity, practice games where he needs to stand on one foot for a few seconds, then on the other foot. First hold his hand and then let him do it without assistance.
- As the child feels more confident, reduce your help (don't hold the child's hand) and combine walking with kicking the ball.

If the child can stand up, but he only uses one side of his body



- Help him learn to use the weak side.
- Help him stand on the weak side with his foot flat.
- He can kick a ball with his weak leg to practice using it.
- Hold his hands if he needs help to balance.
- He can also kick a ball with the strong leg. (This is also a very good exercise because it requires him to stand on his weak leg).
- Make sure he puts all his weight on the weak side, and that his foot is flat.

DRAFT

G28: Jump far (> 20 cm)

P25	P75	P90	P99+	P100	check at
26	39	50	**61**	**(73)**	**60** months

1. Put a piece of A4-size paper (21*29 cm) in front of the child.
2. Ask the child to stand close to the side of the paper with both feet together and to jump with 2 feet together over the shorter part of the paper (21 cm), (you may demonstrate the child how to jump over the paper and ask him to copy you).
3. Observe the child.
4. The child is allowed to do 2 more trials if necessary.

Pass: child can jump 21 cm over the A4 sized paper starting with both feet on the ground, and both feet landing together.

Fail: child fails to jump over the 21 cm long side of the A4 sized paper with both feet at the same time.

If Failed: Child should try the following games in the Blue Book:
Gross Motor 17: jumps alone: p. 147 English - p. 370 Khmer

Game 1: Jump up with both feet together

- **Show the child what you want him to do by jumping on the spot in front of him.**
- Next hold his trunk. Do not lift him by the arms.
- Ask him to try to lift his feet off the ground as you did.
- Talk to the child and make sure he is paying attention to you by being in front of him saying "1, 2, 3 up we go".

Game 2: Jump up with both feet together

- Encourage the child to jump from a low step.
- Hold the child's hands.

Game 3: Jump up with both feet together

- Draw a circle on the ground
- Ask the child to jump with both feet from the outside to the inside of the circle

Game 4: Jump up with both feet together

- Put a piece of A4-size paper (21*29 cm) in front of the child
- Ask the child to stand close to the side of the paper with both feet together and to jump with 2 feet together over the shorter part of the paper (21 cm)
- You may demonstrate the child how to jump over the paper and ask him to copy you.

- Do not do this activity if the child's legs become stiff and straight when he stands.
- **A child should be able to stand alone before he tries this activity.**

DRAFT

G29: Balance on each foot for 3 or more seconds (see game G27)

G30: Hop on one foot (≥2 times)

P25	P75	P90	P99+	P100	check at
28	39	53	**62**	**(73)**	**60** months

1. Ask the child to hop on one leg up and down in the same place, away from all support.
2. You may demonstrate him how to hop up and down and ask him to copy you.
3. Observe the child.
4. Count how many times he can jump on one leg.

Pass: child can hop at least 2 times on one foot in a row, either in place or over a distance, without falling.
It is acceptable if the child moves forward or sideway while hopping.

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following games in the Blue Book:
Gross Motor 19: hops on one foot: p. 149 English - p. 373 Khmer

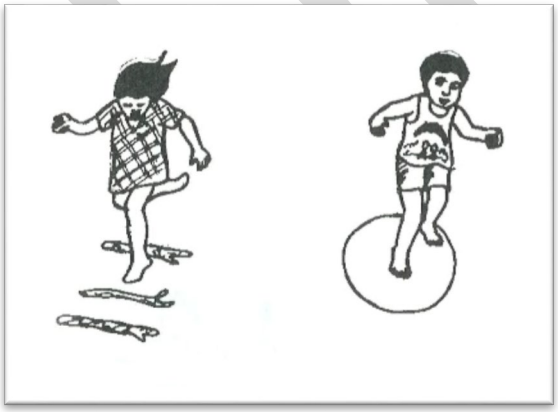
When?

- After the child, has learned to run and kick a ball, encourage him to hop on one foot.

How?

Game 1: Hop 2 times or more on one foot

- The child stands outside or inside the house on the floor.
- Hold the child's hand lightly so he feels safe.
- You hop on one foot to show the child what to do, and ask the child to hop on one foot and count 1, 2, 3.
  - First: hop on the left foot.
  - Second: hop on the right foot.



Game 2: Hop 2 times or more on one foot

- **To help the child to become stronger in hopping on one foot,** encourage him to play games (e.g. hopping over sticks, or lines drawn in the dirt, or hopping into circles drawn in the dirt).

DRAFT

G31: Heel-to-toe walk on straight line (≥4 steps)

P25	P75	P90	P99+	P100	check at
29	47	54	**65**	**(70)**	**60** months

1. Draw a line or put a 1-meter long string on the ground and stretch the string straight.
2. Ask the child to walk on the string by placing his heel in front of or touching the toe of the other. Walk about 8 steps like this (you may demonstrate him how to walk and ask him to copy you).
3. Observe the child walking.
4. The child is allowed to do 2 more trials if necessary.

Pass: child can walk by placing his heel in front of or touching the toe of the other on a straight line for 4 or more steps, placing the heel no more than 2.5 cm in front of the toe, without holding on to any support.

Fail: Not meeting any of the pass criteria

If Failed: Child should try the following game in the Blue Book:
Gross Motor 15b: walks well: p. 146 English- p. 365 Khmer

Game 1: Walk strait line for 4 steps

- Draw a line or put a 1-meter long string on the ground and stretch the string straight
- Ask the child to walk on the string by placing his heel in front of or touching the toe of the other.
- Walk about 8 steps like this (you may demonstrate him how to walk and ask him to copy you)

For a child who has difficulty moving

For the child with poor balance, make a "balance board" by placing a board over a log or other strong round object.

- Encourage the child to stand on the board, while giving the child as much help as needed by putting your hands on the child's waist, as shown in the picture.

DRAFT

Annex 1. cDMAT performance table overview

Social personal domain cDMAT 2019	P25	P75	P90	P99+	P100	START DMAT
S1 Look at face (0)	0	0	1	2	2	0
S2 Cry when appropriate	0	0	1	5	5	
S3 Smile spontaneously (6)	0	0	1	6	7	6
S4 Smile responsively	0	1	2	6	7	
S5 Brief interest in toy	1	3	4	5	6	
S6 Observe object in each hand (9)	2	4	5	6	7	9
S7 Recognize its own hands	1	3	6	7	8	
S8 Explore environment (12)	1	4	5	7	8	12
S9 React to play (18)	1	4	6	8	8	18
S10 Seek object fallen on floor	3	4	6	9	12	
S11 Recognize stranger	1	8	11	12	12	
S12 Anxiety to separate	1	8	12	13	13	
S13 Play 'chab chaab' (24)	5	10	13	14	22	24
S14 Hold and drink from cup	9	12	14	17	20	
S15 Greet with hand clasp	7	12	16	18	27	
S16 Play 'woh …. vak-eu' (30)	8	11	17	19	22	30
S17 Indicate wants	9	13	16	17	27	
S18 Imitate activities	9	14	19	22	30	
S19 Use spoon (36)	12	18	20	26	30	36
S20 Ask to use toilet	9	18	25	27	30	
S21 Point to 2 body parts (48)	14	21	28	30	39	48
S22 Comb hair with help	13	24	27	32	42	
S23 Put on simple clothes with help	14	24	33	34	40	
S24 Parallel play without sharing	8	30	40	41	52	
S25 Wash and dry hand	18	35	40	40	46	
S26 Play well with others (sharing) (60)	13	24	41	43	59	60
S27 Tell own name and gender	18	34	39	45	53	
S28 Name a friend	22	35	39	45	53	
S29 Play kid games (team/wait turns)	19	27	40	64	71	
S30 Serve own food	24	40	45	51	76	
S31 Put on T-shirt without help	29	40	45	51	69	
S32 Dress without help ((un)button)	27	44	51	52	69	
S33 Comb hair without help	25	43	46	62	72	

DRAFT

Fine motor domain cDMAT 2019	P25	P75	P90	P99+	P100	START DMAT
F1 Follow object to midline (≤90o) (0)	0	2	3	6	6	0
F2 Follow object passed midline (>90o)	0	3	4	6	6	
F3 Grasp big object	2	4	5	6	6	
F4 Play with own body (9)	0	3	4	7	7	9
F5 Follow object 180 degrees (12)	2	4	5	8	8	12
F6 Hands together	0	4	6	7	8	
F7 Looks at small objects (18)	2	4	5	8	8	18
F8 Reach for red string	3	5	6	10	10	
F9 Rake lotus seed (1/3)	4	6	7	10	10	
F10 Put object in mouth (24)	3	5	7	13	13	24
F11 Take objects in each hand	4	7	10	14	16	
F12 Transfer object between hands	6	9	12	17	17	
F13 Thumb-finger grasp (30)	7	12	14	21	31	30
F14 Put block in cup	9	12	15	21	29	
F15 Bang 2 objects together (36)	8	15	18	23	31	36
F16 Pincer grasp	11	18	24	29	29	
F17 Tower 2 blocks	13	22	27	29	35	
F18 Scribble with pencil	15	26	28	31	40	
F19 Lift lid of container (48)	14	21	27	36	42	48
F20 Tower 4 blocks	17	23	27	33	39	
F21 Tower 6 blocks	20	27	33	36	42	
F22 Unscrew a jar	18	28	30	41	41	
F23 Take off easy clothes	19	29	37	42	42	
F24 Make string with ≥3 beads (60)	20	29	35	41	67	60
F25 Wiggle one thumb	29	39	40	42	49	
F26 Imitate vertical line (<30o)	29	41	43	48	53	
F27 Fold a paper	33	41	45	51	53	
F28 Catch soft ball	27	46	53	67	70	
F29 Zip and unzip	37	45	55	61	70	
F30 Tie single knot	37	52	57	70	74	
F31 Copy circle	40	54	55	70	75	
F32 Copy square	51	66	71	73	77	

DRAFT

Language cognition domain cDMAT 2019	P25	P75	P90	P99+	P100	START DMAT
L1 Respond to noise (0)	0	1	3	5	5	0
L2 Make sounds	0	2	4	6	7	
L3 Turn head to sounds (9)	1	3	4	5	6	9
L4 Laugh aloud (12)	1	3	4	6	7	12
L5 Squeal	2	3	4	7	8	
L6 Turn head to voice (18)	0	3	5	8	10	18
L7 Babble	2	6	9	12	13	
L8 Respond to his name (24)	6	10	14	16	18	24
L9 Ma or pa (non-specific)	8	11	14	16	19	
L10 Say play sound (30)	4	10	17	19	28	30
L11 Mak/paa/bong (specific) (36)	12	17	18	23	33	36
L12 One-step command	9	13	17	21	26	
L13 Say ≥1 word beside mak/paa	13	18	23	24	32	
L14 Say words (≥3)	15	22	25	31	35	
L15 Two step-command (48)	16	23	25	30	34	48
L16 Point to pictures of objects (≥2/5)	15	29	35	36	39	
L17 Say words (≥6)	17	34	35	35	39	
L18 Speak half understandably	17	29	33	39	49	
L19 Name animals (≥1/5)	14	31	37	39	44	
L20 Say a 3-word phrase	19	34	36	39	42	
L21 Point to pictures of objects (≥4/5)	20	33	39	39	42	
L22 Name animals (≥4/5) (60)	21	32	42	44	64	60
L23 Know use/action of objects (1/3)	21	33	39	47	53	
L24 Three-step command	22	36	41	42	67	
L25 Pick the longest line (3/3)	23	37	38	50	70	
L26 Speak understandably	22	32	46	52	61	
L27 Know use/action of objects (2/3)	22	39	47	51	65	
L28 Conversation	29	36	42	62	68	
L29 Use pronouns correctly	27	43	50	55	65	
L30 Know use/action of objects (3/3)	31	45	54	56	69	
L31 Know 4 animal sounds	30	48	53	61	68	
L32 Name 1 / 6 colors	33	45	54	69	73	
L33 Count 1 to 5	30	59	61	63	68	

DRAFT

Gross Motor domain cDMAT 2019	P25	P75	P90	P99+	P100	START DMAT
G1 Equal movement (0)	0	0	0	3	3	0
G2 Lift head (6)	0	3	4	5	5	6
G3 Turn head aside lying face down	1	3	4	5	5	
G4 Head up 45 degrees	2	3	4	5	5	
G5 Sit up steadily (≥2 sec)	2	4	5	6	6	
G6 Bear weight on legs (≥2 sec) (9)	2	5	6	7	7	9
G7 No head lag when pulled to sit	2	4	7	8	8	
G8 Roll over (front to back)	2	5	6	8	8	
G9 Chest up with arm support	3	5	6	8	8	
G10 Standing holding on (≥10 sec) (12)	3	6	7	10	10	12
G11 Sit without support (≥10 sec)	4	7	9	11	11	
G12 Crawl (≥3 moves)	6	8	9	10	14	
G13 Pull up to stand (≥2 sec)	6	9	10	11	11	
G14 Turn head and trunk in all direction	6	8	10	13	13	
G15 Getting to sit	7	9	10	13	13	
G16 Stand alone (≥2 sec) (18)	8	10	12	14	16	18
G17 Take steps with holding (≥5 steps)(24)	8	10	11	17	17	24
G18 Stand alone (≥10 sec)	9	12	14	17	17	
G19 Walk alone (≥5 steps) (30)	11	13	14	17	17	30
G20 Stoop and recover (36)	11	16	18	24	24	36
G21 Run with good balance (≥2 m)	12	17	19	25	32	
G22 Walk up (≥2 steps)	11	15	19	24	38	
G23 Walk backward (≥2 steps) (48)	13	24	29	33	33	48
G24 Kick ball forward (60)	16	24	29	40	49	60
G25 Jump up with both feet together	21	30	35	39	61	
G26 Throw object overhand	20	32	41	48	67	
G27 Balance on each foot (≥1 sec)	20	35	39	51	61	
G28 Jump far (>20 cm)	26	39	50	61	73	
G29 Balance on each foot (≥3 sec)	20	40	53	64	73	
G30 Hop on one foot (≥2 times)	28	39	53	62	73	
G31 Straight heel-to-toe walk (≥4 steps)	29	47	54	65	70	

DRAFT

Annex 2. cDMAT 2019 form

giz **Cambodian Developmental Milestone Assessment Tool (cDMAT 2019)**

Name: _____ Child enrolled in (pre-)school? __No __Yes __ Unknown

Birthdate: __ __ /__ __ / 2 0 __ __ Highest educational level of the principal caretaker:

Gender: ___Female ___Male ___None ___Primary ___Secondary ___Academic

Assessment date: __ __ /__ __ / 2 0 __ __ **Age at time of assessment: __ __ month(s)**

Page 1 of 2

P99+ (mo)	Social/personal	Pass	Fail	NA
2	S1 Look at face (@ 0 m)			
5	S2 Cry when appropriate			
6	S3 Smile spontaneously (@ 6 m)			
6	S4 Smile responsively			
5	S5 Brief interest in toy			
6	S6 Observe object in each hand (@ 9 m)			
7	S7 Recognize its own hands			
7	S8 Explore environment (@ 12 m)			
8	S9 React to play (@ 18 m)			
9	S10 Seek object fallen on floor			
12	S11 Recognize stranger			
13	S12 Anxiety to separate			
14	S13 Play 'chab chaab' (@ 24 m)			
17	S14 Hold and drink from cup			
18	S15 Greet with hand clasp			
19	S16 Play 'woh .... vak-eu' (@ 30 m)			
17	S17 Indicate wants			
22	S18 Imitate activities			
26	S19 Use spoon (@ 36 m)			
27	S20 Ask to use toilet			
30	S21 Point to 2 body parts (@ 48 m)			
32	S22 Comb hair with help			
34	S23 Put on simple clothes with help			
41	S24 Parallel play without sharing			
40	S25 Wash and dry hand			
43	S26 Play well with others (sharing)(@ 60 m)			
45	S27 Tell own name and gender			
45	S28 Name a friend			
64	S29 Play kid games (team / wait turns)			
51	S30 Serve own food			
51	S31 Put on T-shirt without help			
52	S32 Dress without help ((un)button)			
62	S33 Comb hair without help			

P99+ (mo)	Fine motor	Pass	Fail	NA
6	F1 Follow object to midline (≤90°) (@ 0 m)			
6	F2 Follow object passed midline (>90°)			
6	F3 Grasp big object			
7	F4 Play with own body (@ 9 m)			
8	F5 Follow object 180 degrees (@ 12 m)			
7	F6 Hands together			
8	F7 Looks at small objects (@ 18 m)			
10	F8 Reach for red string			
10	F9 Rake lotus seed (1 /3)			
13	F10 Put object in mouth (@ 24 m)			
14	F11 Take objects in each hand			
17	F12 Transfer object between hands			
21	F13 Thumb-finger grasp (@ 30 m)			
21	F14 Put block in cup			
23	F15 Bang 2 objects together (@ 36 m)			
29	F16 Pincer grasp			
29	F17 Tower 2 blocks			
31	F18 Scribble with pencil			
36	F19 Lift lid of container (@ 48 m)			
33	F20 Tower 4 blocks			
36	F21 Tower 6 blocks			
41	F22 Unscrew a jar			
42	F23 Take off easy clothes			
41	F24 Make string with ≥3 beads (@ 60 m)			
42	F25 Wiggle one thumb			
48	F26 Imitate vertical line (<30°)			
51	F27 Fold a paper			
67	F28 Catch soft ball			
61	F29 Zip and unzip			
70	F30 Tie single knot			
70	F31 Copy circle			
73	F32 Copy square			

DRAFT

P99+ (mo)	Language/cognition	Pass	Fail	NA	P99+ (mo)	Gross motor	Pass	Fail	NA
5	L1 Respond to noise (@ 0 m)				3	G1 Equal movement (@ 0 m)			
6	L2 Make sounds				5	G2 Lift head (@ 6 m)			
5	L3 Turn head to sounds (@ 9 m)				5	G3 Turn head aside laying face down			
6	L4 Laugh aloud (@ 12 m)				5	G4 Head up 45 degrees			
7	L5 Squeal				6	G5 Sit up steadily (≥2 sec)			
8	L6 Turn head to voice (@ 18 m)				7	G6 Bear weight on legs (≥2 sec) (@ 9 m)			
12	L7 Babble				8	G7 No head lag when pulled to sit			
16	L8 Respond to his name (@ 24 m)				8	G8 Roll over (start front to back)			
16	L9 Ma or pa (start non-specific)				8	G9 Chest up with arm support			
19	L10 Say play sound (@ 30 m)				10	G10 Standing holding on (≥10 sec) (@ 12 m)			
23	L11 Mak/paa/bong (specific) (@ 36 m)				11	G11 Sit without support (≥10 sec)			
21	L12 One-step command				10	G12 Crawl (≥3 moves)			
24	L13 Say ≥1 word beside mak/paa				11	G13 Pull up to stand (≥2 sec)			
31	L14 Say words (≥3)				13	G14 Turn head and trunk in all direction			
30	L15 Two step-command (@ 48 m)				13	G15 Getting to sit			
36	L16 Point to pictures of objects (≥2/5)				14	G16 Stand alone (≥2 sec) (@ 18 m)			
35	L17 Say words (≥6)				17	G17 Take steps with holding (≥5 steps)(@ 24 m)			
39	L18 Speak half understandably				17	G18 Stand alone (≥10 sec)			
39	L19 Name animals (≥1/5)				17	G19 Walk alone (≥5 steps) (@ 30 m)			
39	L20 Say a 3-word phrase				24	G20 Stoop and recover (@ 36 m)			
39	L21 Point to pictures of objects (≥4/5)				25	G21 Run with good balance (≥2 m)			
44	L22 Name animals (≥4/5) (@ 60 m)				24	G22 Walk up (≥2 steps)			
47	L23 Know use/action of objects (1/3)				33	G23 Walk backward (≥2 steps) (@ 48 m)			
42	L24 Three-step command				40	G24 Kick ball forward (@ 60 m)			
50	L25 Pick the longest line (3/3)				39	G25 Jump up with both feet together			
52	L26 Speak understandably				48	G26 Throw object overhand			
51	L27 Know use/action of objects (2/3)				51	G27 Balance on each foot (≥1 sec)			
62	L28 Conversation				61	G28 Jump far (>20 cm)			
55	L29 Use pronouns correctly				64	G29 Balance on each foot (≥3 sec)			
56	L30 Know use/action of objects (3/3)				62	G30 Hop on one foot (≥2 times)			
61	L31 Know 4 animal sounds				65	G31 Straight heel-to-toe walk (≥4 steps)			
69	L32 Name 1 / 6 colors								
63	L33 Count 1 to 5								

Comments / specific observations during the assessment

Instructions

Step 1	Collect demographic information on the child and determine the child's **age in months**
Step 2	Start assessing the child in **this order** of the 4 domains: social/personal, fine motor, language/cognitive, and gross motor.
Step 3	The milestone from **where to start in each domain** at a specific age in months is indicated in (@ xx m) behind specific milestones.
Step 4	Check '**PASS**' if the child passes the skill by demonstration or caregiver report. Check '**FAIL**' if the child fails the skill. Check '**NA**' when the skill is not assessed (e.g. child is unable to perform and the caregiver does not know whether (s)he can do it).
Step 5	REMEMBER to apply the **4 consecutive Pass rule at the start**. In case not, also assess previous milestones till the rule is met.
Step 6	The **4 consecutive Failed rule allows to stop** the assessment for more advanced skills as they are expected to Fail all.
Step 7	**Compare the performance of the child with the P99+ column** which indicates the age in months when virtually all Khmer children are able to do.

DRAFT

Annex 3. Community Based DMAT (development delay monitoring)

Child name:	Sex: F M	Birthday: .. / .. / 20.... (D/M/Y)					HC Village
milestone 2018	Perfor-mance (months)	P25	P75	P90	P99+	P100	CB-DMAT for referral to physiotherapist for full DMAT assessment
S1 Look at face		0	0	1	2	2	Every child from the age of 6 months should be able to perform these 4 milestones
F2 Follow object passed midline (> 90°)		0	3	4	6	6	
L3 Turn head to sounds		1	3	4	5	6	
G4 Head up 45 degrees		2	3	4	5	5	
S8 Explore environment		1	4	5	7	8	9 months = 0.75 years
F5 Follow object 180 degrees		2	4	5	8	8	
L5 Squeal		2	3	4	7	8	
G9 Chest up with arm support		3	5	6	8	8	
S11 Recognize stranger		1	8	11	12	12	12 months = 1 year
F9 Rake lotus seed (1 /3)		4	6	7	10	10	
G11 Sit without support (≥10 sec)		4	7	9	11	11	
G13 Pull up to stand (≥2 sec)		6	9	10	11	11	
S14 Hold and drink from cup		9	12	14	17	20	18 months = 1.5 year
F11 Take objects in each hand		4	7	10	14	16	
L7 Babble		2	6	9	12	13	
G19 Walk alone (≥5 steps)		11	13	14	17	17	
S16 Play 'woh .... vak-eu'		8	11	17	19	22	24 months = 2 years
F12 Transfer object between hands		6	9	12	17	17	
L9 Ma or pa (non-specific)		8	11	14	16	19	
G20 Stoop and recover		11	16	18	24	24	
S19 Use spoon		12	18	20	26	30	30 months = 2.5 year
F14 Put block in cup		9	12	15	21	29	
L11 Mak/paa/bong (specific)		12	17	18	23	33	
G21 Run with good balance (≥2 m)		12	17	19	25	32	
S23 Put on simple clothes with help		14	24	33	34	40	36 months = 3 years
F15 Bang 2 objects together		8	15	18	23	31	
L14 Say words (≥3) besides mak/paa/bong		15	22	25	31	35	
G23 Walk backward (≥2 steps)		13	24	29	33	33	
S26 Play well with others (sharing)		13	24	41	43	59	48 months = 4 years
F22 Unscrew a jar		18	28	30	41	41	
L17 Say words (≥6) besides mak/paa/bong		17	34	35	35	41	
G24 Kick ball forward		16	24	29	40	49	
F25 Wiggle one thumb		29	39	40	42	49	60 months = 5 years
L26 Speak understandably		22	32	46	52	61	
L29 Use pronouns correctly		27	43	50	55	65	
G26 Throw object overhand		20	32	41	48	67	
S29 Play team games (waiting turns)		19	27	40	64	71	72 months = 6 years
F28 Catch soft ball		27	46	53	67	70	
L33 Count 1 to 5		30	59	61	63	68	
G31 Straight heel-to-toe walk (≥4 steps)		29	47	54	65	70	

DRAFT

Community based-DMAT (CB-DMAT)
Age 6 months–2 years

AHC giz
Improving Healthcare for Cambodia's Children

6 months

By age 6 months, your child can:	yes	no
▪ Look at face?	☐	☐
▪ Follow object passed midline?	☐	☐
▪ Turn head to sounds?	☐	☐
▪ Head up 45 degrees?	☐	☐

If one or more 'no', refer to specialist

9 months

By age 9 months, your child can:	yes	no
▪ Explore environment?	☐	☐
▪ Flow object 180 degrees?	☐	☐
▪ Squeal?	☐	☐
▪ Chest up with arm support?	☐	☐

If one or more 'no', refer to specialist

1 year

By age 12 months, your child can:	yes	no
▪ Recognize stranger?	☐	☐
▪ Rake lotus seed (≥1 /3 attempts)	☐	☐
▪ Sit without support (≥10 sec)?	☐	☐
▪ Pull up to stand (≥2 sec)	☐	☐

If one or more 'no', refer to specialist

1.5 years

By age 18 months, your child can:	yes	no
▪ Hold and drink from cup?	☐	☐
▪ Take objects in each hand?	☐	☐
▪ Babble?	☐	☐
▪ Walk alone (≥5 steps)?	☐	☐

If one or more 'no', refer to specialist

2 years

By age 24 months, your child can:	yes	no
▪ Play 'woh.... vak-eu'?	☐	☐
▪ Transfer object between hands?	☐	☐
▪ Ma or pa (non-specific)?	☐	☐
▪ Stoop and recover	☐	☐

If one or more 'no', refer to specialist

Community based-DMAT (CB-DMAT)
Age 2.5 years–6 years

AHC giz
Improving Healthcare for Cambodia's Children

			yes	no	
2.5 years		By age 30 months, your child can:			If one or more 'no', refer to specialist
		▪ Use spoon	☐	☐	
		▪ Put block in cup	☐	☐	
		▪ Mak/paa/bong (specific)	☐	☐	
		▪ Run with good balance (≥2 m)	☐	☐	
3 years		By age 36 months, your child can:	yes	no	If one or more 'no', refer to specialist
		▪ Put on simple clothes with help?	☐	☐	
		▪ Bang 2 objects together?	☐	☐	
		▪ Say words (≥3)	☐	☐	
		▪ Walk backward (≥2 steps)	☐	☐	
4 years		By age 48 months, your child can:	yes	no	If one or more 'no', refer to specialist
		▪ Play well with others (sharing)?	☐	☐	
		▪ Unscrew a jar?	☐	☐	
		▪ Say words (≥6)?	☐	☐	
		▪ Kick ball forward?	☐	☐	
5 years		By age 60 months, your child can:	yes	no	If one or more 'no', refer to specialist
		▪ Wiggle one thumb?	☐	☐	
		▪ Speak understandably?	☐	☐	
		▪ Use pronouns correctly?	☐	☐	
		▪ Throw object overhand?	☐	☐	
6 years		By age 72 months, your child can:	yes	no	If one or more 'no', refer to specialist
		▪ Play kid games waiting turns?	☐	☐	
		▪ Catch soft ball?	☐	☐	
		▪ Count 1 to 5?	☐	☐	
		▪ Straight heel-to-toe walk (≥4 steps)?	☐	☐	