

# Module on Early Listening and communication Skills for Children with Cochlear Implant under ADIP Scheme

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## PREFACE

This module is prepared for empanelled therapist under ADIP scheme. The module gives a holistic approach to develop early listening and communication skills of children with cochlear implant. This module contains four domains which are very important to develop at proper implantation ages in a cochlear implanted child i.e., Audition, Speech, Language, and Cognition. Through this module therapist can easily track the development of cochlear implant children. There is pre and post-test formats which help the therapist from where they can start the therapy and know the progress of the child.



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## INTRODUCTION

The module outlines quarterly targets for development in audition, speech, language and cognition for infants and children who are cochlear implanted with no additional difficulties. This targets can be worked upon with the exemplars activities or with personal innovative methods of teaching. The module acknowledges the fact that uniformity in teaching children with hearing loss to listen and speak age appropriately to be attained for higher achievements in them. The infants and toddlers with hearing loss must be given opportunity to listen and learn via listening alone (audition only) via Auditory-Verbal Therapy or through Auditory or visual mode via speech language therapy by trained therapists and audiologists.

Children with hearing loss with cochlear implants who are below the age of 2;6 years would benefit from Auditory-Verbal/ Speech language Therapy. However, children with hearing loss implanted between 2.6 and 5.0 years of age will need visual support along with audition (Sharma, Nash & Dorman, 2009). The module outlines the exemplar activities for the therapist for better understanding and achievement of the targets. The exemplar of activities are framed in more natural day to day activities to achieve easy carryover into the everyday life to improve the child's level of functioning.

The caregivers and the family has a central role to Auditory-Verbal Therapy and its effectiveness in children with cochlear implantation. Hence the module outlines the activities for caregivers in quarterly targets of all domains corresponding to the targets for the child. The targets outlined are based on the developmental milestones in children with typical hearing. The

authors had referred to various resources available i.e. Integrated Scales of Development, (2010), Cochlear Ltd, St. Gabriel's Curriculum (2001) etc for preparation of the targets in the domains.

**How to use the module:** In order to use the module following steps to be carried out.

- i. Initially do a baseline assessment to identify the level of functioning of the child. The evaluation can be carried out using the pre-test evaluation formats (Appendix). Trace the child's performance as per the post implant age and chronological age in terms of audition, speech, language and cognition domains.
- ii. Once the baseline status is identified use the module on early listening and communication skills and select the goal to be achieved in each domain post implant.
- iii. The goals are to be worked upon using the exemplar activities mentioned or by any self-made activities as per the chronological age of the child.
- iv. Once the goals are achieved move to the next section goals and continue until all the goals are achieved in all domains.
- v. Every three months once post-test to be performed to keep tracking the progress of the child.

Reference:

Sharma, A., Nash, A. A., & Dorman, M. (2009). Cortical development, plasticity and re-organization in children with cochlear implants. *Journal of communication disorders*, 42(4), 272-279.





## AUDITION

Post-Implant Age	Goals	Exemplar activities for chronological age 0 - 2.6 years	Exemplar activities for chronological age 2.7 – 5.0 years
0-3 Months	1. To wear cochlear implant during all waking moments (Eyes open technology on).	<p>A distraction toy can be used so that it's easy to put on the hearing device.</p> <p><b>For caregivers:</b></p> <ul style="list-style-type: none"> <li>- Use of cap, huggie holder to increase wearing time of device.</li> <li>- Maintain logbook for implant usage.</li> <li>- Make the child wear cochlear implant (CI)/hearing aids before waking up and remove them after the child sleeps.</li> <li>- If the child removes the CI put it on again every time until the child is habituated to wearing it.</li> <li>- After bathing wipe off the area in and around the ears and make the child wear hearing aids or cochlear implant before dressing up.</li> </ul>	Use child's favourite toys as models and play activity to encourage the child to wear his/her device.
	2. To respond to environmental sounds or voice.	Depending on the baby's age, make him/her lie down or sit in a comfortable position. Use a distraction toy, present the sound/talk E.g., /bababa/mamama/wawawa/. Check for the child's responses such as stops activity.	Check whether the child would turn towards the sounds while you are talking/presenting raspberries without visual cues.

		<p><b>Listening walk:</b> The purpose of the walk is to make the child listen to sounds, particularly those they may not have been aware of previously. Before the walk, you can suggest sounds to listen for or you can call the child's attention to sounds as you walk along. After the walk, see how many sounds your child can remember and encourage him/her to describe them. Practice listening to environmental sounds and guessing where the sounds are coming from and what is making them. E.g., water dripping or running from the tap, knocking on the door or doorbell.</p>
		<p><b>For caregivers:</b></p> <ul style="list-style-type: none"> <li>- Keep the background noise minimal or absent.</li> <li>- Speak at a close distance.</li> <li>- Use the listening cues by pointing a finger to your ear and saying “listen” or “I heard that” or “You heard that”.</li> <li>- If a child does not respond on his own, draw his/her attention to the sound.</li> <li>- Use the environmental sound list.</li> </ul>
3. To	respond to parent/caregiver's voice.	<p><b>PEEK A BOO:</b> Where is Amma? (Cover the face with fingers/palm/dupatta/saree) -can you see Amma/mama?</p> <p>As you play with the child use a lot of intonations and exclamations. Encourage the child to pull your hands/dupatta/ saree etc off.</p> <p><b>Hide &amp; seek game:</b> The parent hides and calls the child. Have another member of the family help the child listen and see who is calling them and try to find the person. The child pays attention and tries to look towards the parent.</p>

	4. To respond to noisemakers and understand the presence and absence of sound.	Shaking rattles, banging a drum, playing xylophone, or making sounds with a spoon and bowl can be performed. <b>Tip:</b> Let the child explore himself/herself the presence or absence of sound by playing with the above objects and parents should use the appropriate language.	Banging drum, ringing the bell, blowing the whistle, etc. in a play way approach, can be performed to achieve the goal.
		<b>For Caregivers:</b> Teach the child to listen to the sound with a listening cue and make them understand that there is no sound when the sound stops.	
	5. To respond to music (adult-directed singing).	Sing a song and sway your child in rhythm with the music using a lot of intonation. E.g., Singing a lullaby.	Singing songs, rhymes, lullaby's (regional language songs) to the child to achieve the goal.
	6. Indicates the presence and absence of music.	<b>Freeze dance:</b> Mum holds a child in arms and waits, holding very still. The music is turned on, Mum begins moving and dancing, pointing to her own ear and stating "I can hear the music". Turn off the music stop dancing, point to ear, and say "It's all gone, I can't hear the music".	<b>Musical chair:</b> Running in a circle when music is on. Sit on the chair when the music is off.
		<b>For caregivers:</b> Ensure the child is close enough to hear the signal.	



	7. To detect Ling's six sounds/a, u, i, m, ŋ, s/).	<ul style="list-style-type: none"> <li>- Present Ling's six sounds in random order.</li> <li>- When a baby detects the sound, let him/her throw a ball in a bucket with the help of an adult. Encourage by clapping and saying you heard that. Good listening!</li> </ul>	Conditioning activity using spoon and glass. Take 6 to 8 spoons, present the sound. When a child hears the sound encourage him to put the spoon in the glass.
4-6 Months	1. To associate meaning to sound with objects/pictures.	Present toys/pictures along with its performative learning to listen (LTL) sounds.	<ul style="list-style-type: none"> <li>- LTL sound objects. E.g., cow, sheep, horse, etc. can be utilized.</li> <li>- Present the sound and pretend to feed animals or make them drink water.</li> </ul>
		<b>For caregivers:</b> Use acoustically different sounds so that it's easier for a child to associate meaning and develop auditory memory.	
	2. To associate songs/ rhymes with objects/ pictures/ actions.	<ul style="list-style-type: none"> <li>- Use different actions and objects for different rhymes. E.g., "Twinkle-Twinkle" in the air make a star with hand by opening and closing fingers or use a star. "मछली जल की रानी है", make your palm a fish, or use a fish toy.</li> </ul>	
	3. To localize the source of sound/voice.	Observe if a child turns to left/right/ down or up when you speak/shake a container filled with pulses.	<b>Find the toy:</b> Hide a noise-making toy/mobile phone ringing. A child has to locate. Observe if the child turns to left/right.

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		Use minimum and maximum distance like minimum 2 feet maximum 10 feet for localization activities.
4. Children will have a longer attention span for listening.	Listening to favourite rhymes/short stories can be shared to achieve the goal.	
5. To recognize words for common items.	Bathing a doll- reinforcing body parts- wash hands, legs, stomach.	Nouns sack- child and therapist have a sack of identical objects. E.g.: Therapist-I have a ball; a child pulls out the ball from his sack.
	<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- Initially introduce few body parts and gradually add more.</li> <li>- Tip: when first introducing nouns put several numbers of the same objects E.g.: car and shoe.</li> </ul>	
6. To understand and identify familiar verbs – “ing”.	Washing, drinking and sleeping.	
7. Identify Ling Six sounds by showing the right object/picture.	Points/ picks up/ imitates the Ling six sounds when sees associated object or picture. E.g., /a/ for aeroplane, /m/ for food.	
	<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- Use modelling, waiting, and expectant look for the child to identify the sound.</li> <li>- Young babies prefer 3-dimensional realistic objects. Pictures can be used for older children.</li> <li>- For the identification task, 3 or more objects/pictures can be kept.</li> </ul>	

	8. To monitor own voice and the voices of others.	<ul style="list-style-type: none"> <li>- Exposure to LTL sounds and nursery rhymes help the child to step by step monitor duration, no. of syllables, pitch, vowel, and consonant in the sounds.</li> <li>- Present a sound and wait for the child to process and imitate the sound.</li> <li>- Auditory feedback loop develops. Imitation to adult model becomes better and better.</li> </ul>	
		<b>For caregivers:</b> Create a listening environment at home. Use lots of voice modulations, singing during all activities. Point to the ear and say “listen” while getting the child’s attention to a particular sound or voice. You can select particular songs for particular activities like while feeding, while playing, while putting the child to bed etc.	
7-9 Months	1. To stop an activity when the name is called.	Call the child by his name and wait for his response. Reinforce his response by waving at him/her, giving him a toy/ asking for help.	
		<b>For caregivers:</b> Do not call the child’s name without reason just for testing purposes. Always make it meaningful.	
	2. To discriminate the supra-segmental aspects of duration, intensity and pitch.	<b>Duration Discrimination:</b> Long and short sound. E.g.: Cock-a-doodle-doo (rooster) Vs quack-quack (Duck). <b>Pitch Discrimination:</b> High pitch and low pitch Woof-woof (dog) Vs meow (cat). <b>Intensity Discrimination:</b> Loud sound -big animal Vs Soft sound- baby animal.	<b>Duration:</b> Threading beads- continuous sound /aaaaa/ vs short sound /a-a-a/. <b>Pitch:</b> A story of lion and mouse- lion low pitched voice and mouse high pitched voice. <b>Intensity:</b> Wake up game: sit with head down while we say pat-pat-pat (whispered sound) and head up when we call out loudly.

		The animal whose sound is heard ... drinks the water.	
		<b>For caregivers:</b> For a discrimination activity, only two objects/sounds should be used.	
	3. Auditory memory of one item at the end of a phrase or a sentence.	From a basket of fruits- Please give me 'banana'.	Guessing games can be used to make the activity interesting.
		<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- Do not test your child to determine if they have a one-item memory, rather, observe your child as you play and interact. If it appears he/she has learned a word or simple direction, give him the phrase or direction with no visual or contextual cues first, if he responds, you know he has learned that target word. If he doesn't, make sure that he is listening and then show him what you said or intended so he matches what he hears to what you say.</li> <li>- After the child understands the language of daily routines, you can expect him to comprehend familiar phrases without the context to help comprehension. For example, just before you get your handbag and keys, you would tell your child to go and get his shoes because it's time to go in the car. Your child should be able to follow this direction even though there is no context.</li> <li>- Every goal you work on with your child needs to be generalized into a variety of situations.</li> <li>- Once one item memory is achieved in the final position, we check the one item memory in the middle position and then at the beginning of a sentence.</li> </ul>	



	4. To identify words with the same initial consonants and varying vowels.	<b>Shopping activity:</b> The child selects an appropriate object from a set of 3 objects. Give me the book. E.g., bat, book, ball. Cup, cake, car.	BINGO game with a card can be used.
	5. To identify common phrases.	<b>Daily routine activities:</b> Understands wave bye-bye, clap-clap, shake hands etc.	<b>Craft activity:</b> With clay- roll it, press it, make it round – round, etc.
	6. To comprehend spatial directions like in, on and under.	<b>Playing with farm animals:</b> Put the cow in the farmhouse. Put the bird on the tree. A cow is under the tree.	<b>Schoolbag activity:</b> Put book/compass box, napkin, lunch box in the bag. Put the bag on the table. Put shoes under the chair.
		<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- Select opposite pairs at a time. E.g., On and Under.</li> <li>- Always first start in a closed set and then move to an open set.</li> </ul>	
10-12 Months	1. To identify familiar words in the middle of the sentence.	E.g., Put the <u>fish</u> in the water.	E.g.: Give the <u>banana</u> to mummy.
	2. To follow one direction without the object.	<b>Singing a rhyme:</b> This is the way we stamp our feet/ jump up high.	<b>Game-Simon says:</b> clap your hands, turn around etc.
	3. To develop comprehension for verb-object sentences where the object is constant.	<b>Directed activity:</b> Apple cutting E.g., <u>Wash</u> the <u>apple</u> , <u>Cut</u> the <u>apple</u> , <u>Peel</u> the <u>apple</u> .	<b>Directed activity:</b> Lime Juice E.g., <u>Wash</u> the <u>lemon</u> , <u>Cut</u> the <u>lemon</u> , <u>Squeeze</u> the <u>lemon</u> .

4. To develop comprehension for noun-verb sentences where a noun is constant.	Activity with toy animals. A <u>cow</u> is <u>eating</u> . A <u>cow</u> is <u>sleeping</u> .	<b>Table top story:</b> Thirsty crow. E.g.: <u>Crow</u> is <u>flying</u> . <u>Crow</u> is <u>drinking</u> .
5. To participate in Auditory Closure with familiar songs and rhymes.	<b>Auditory Closure:</b> saying the last word of each line or stanza E.g., Roly Poly, Roly Poly up, up, _____. Roly Poly, Roly Poly out, out, _____. Roly Poly, Roly Poly clap, clap, _____. Roly-Poly, Roly Poly hands in your (lap)	<b>Auditory Closure:</b> Saying the last word of each line or stanza. E.g.: Twinkle-Twinkle little _____. How I wonder what you _____.
6. To discriminate the speaker's voice from competing stimuli.	To comprehend adults' speech with background noise/in unfamiliar settings. The child comprehends some common phrases if AC/fan is on or the door is open.	
7. To identify two-item memory in a sentence.	<b>Water activity:</b> Take out <u>duck</u> and <u>fish</u> (final position); Put <u>duck</u> and <u>fish</u> in the water (middle position); <u>Duck</u> and <u>fish</u> will swim in the water (at the beginning).	<b>Directed activity:</b> While making a sandwich. Put onion and tomato on the bread.
	<b>For caregivers:</b> Once a child develops two-item memory in Noun +Noun. - Introduce different combinations- Verb + noun - <u>Clean</u> the <u>dog</u> . Noun + Verb - <u>Baby</u> is <u>sleeping</u> .	

		<p>Verb + Verb - <u>Cut</u> and <u>paste</u> the circle.</p> <p>Adjective + Noun - <u>Take</u> the <u>softball</u>.</p> <ul style="list-style-type: none"> <li>- If the child picks only one rather than two objects, be careful not to slip back into 1-item memory by asking for the one object your child did not select. Instead, repeat both words while keeping the one he did select separate from the remaining three items, so essentially, he/she has to remember only one word at that time, but still gets a 2-item auditory input.</li> <li>- Once two-item memory is achieved in the final position, we work towards two-item memory in the middle position and then at the beginning of a sentence.</li> </ul>	
13-15 Months	1. To sequence two directions with objects.	E.g., Colour the circle and cut it. Get your shoes and wear them.	E.g., Put the glue in the box and take out the pen. Wash the lemon and then wipe it. Cut the lemon and squeeze the juice. Fold the T-shirt and keep it in the cupboard.
	2. To comprehend negative 'not' when selecting items.	E.g., Put tomatoes in the fridge, not the bananas.	E.g., Switch off the lights, not the fan.
	3. To comprehend two action sentences using toys/pictures.	<b>Using toys:</b> The girl ran and jumped.	<b>Using pictures:</b> Show me the girl who is jumping and the girl who is eating.
		<b>Book sharing:</b> Stories like- brown bear brown bear, the very busy spider.	<b>Book sharing:</b> Stories like 'The Hungry caterpillar'.

4. Listens to simple stories and shows increased interest in new words.	Initially select a book with repeatable lines.	Select the stories related to the child's experiences.
5. To identify objects/pictures by listening to descriptive sentences.	<b>Treasure bag:</b> Put animals/ fruits in the bag. Describe each of them without naming it and then show it to the child.	
	E.g., It's an animal, which lives on the farm and we can ride on it. (Answer-Horse).	E.g., I have fruit which has a yellow peel, it's long and white inside. We need to peel before eating. (Answer-Banana).
6. To comprehend conjunction 'or'.	<b>Making a choice:</b> You can take an ice cream or chocolate. You want to have the ice cream in a cone or a cup.	You want to draw a circle or a square.
7. To identify three items in a sentence.	<b>Water activity:</b> Closed set: Put the duck, fish and tortoise in the water. Put the apple, banana and papaya on the plate Open set: Get your bag, water bottle and napkin.	<b>Shopping game:</b> Let the child pretend to be a shopkeeper and go shopping. E.g., Give me a packet of biscuits, chips and milk.
	<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- Always try in the closet set first and then in the open set.</li> <li>- Always start with known words.</li> </ul>	



	8. To be able to discriminate between familiar phrases.	<b>Storybook:</b> 4 to 5 pictures without sentences. To show the pictures and tell the story. After or while telling the story you may ask simple questions.	
	9. To follow one-step directions.	<ul style="list-style-type: none"> <li>- <b>Feel bag:</b> Shows the objects one by one, talks about them and put them in the bag (Non-transparent, opaque bag and just long enough that the child's hand can reach the bottom of the bag).</li> <li>- A child feels the object without seeing and takes out the asked objects.</li> <li>- Wipe the table.</li> <li>- The caregiver asks for an object.</li> </ul>	
<b>16-18 Months</b>	1. Listens and identifies familiar songs.	Use regional language songs.	
	2. Comprehends longer sentences.	E.g., Wash your hands and sit on the chair.	Comprehends story read to the child. E.g., Main bhi, Gol Roti.
	3. Distance hearing improves.	Try calling the child from the other room and check if he/she can follow the command. E.g., Go wash your hands.	
	4. To sequence three to four step story.	<b>Bathing activity:</b> Brush baby's teeth, put soap, and wash the baby.	<b>Sequence cards:</b> E.g., The girl sat in the auto, went to the beach and ate ice cream.
	5. To listen and follow simple commands on tape.	Record the simple commands on tape. Tell the child to listen to the recorded command and do the activity. E.g., - Open the box, Take out the banana, Give it to daddy.	

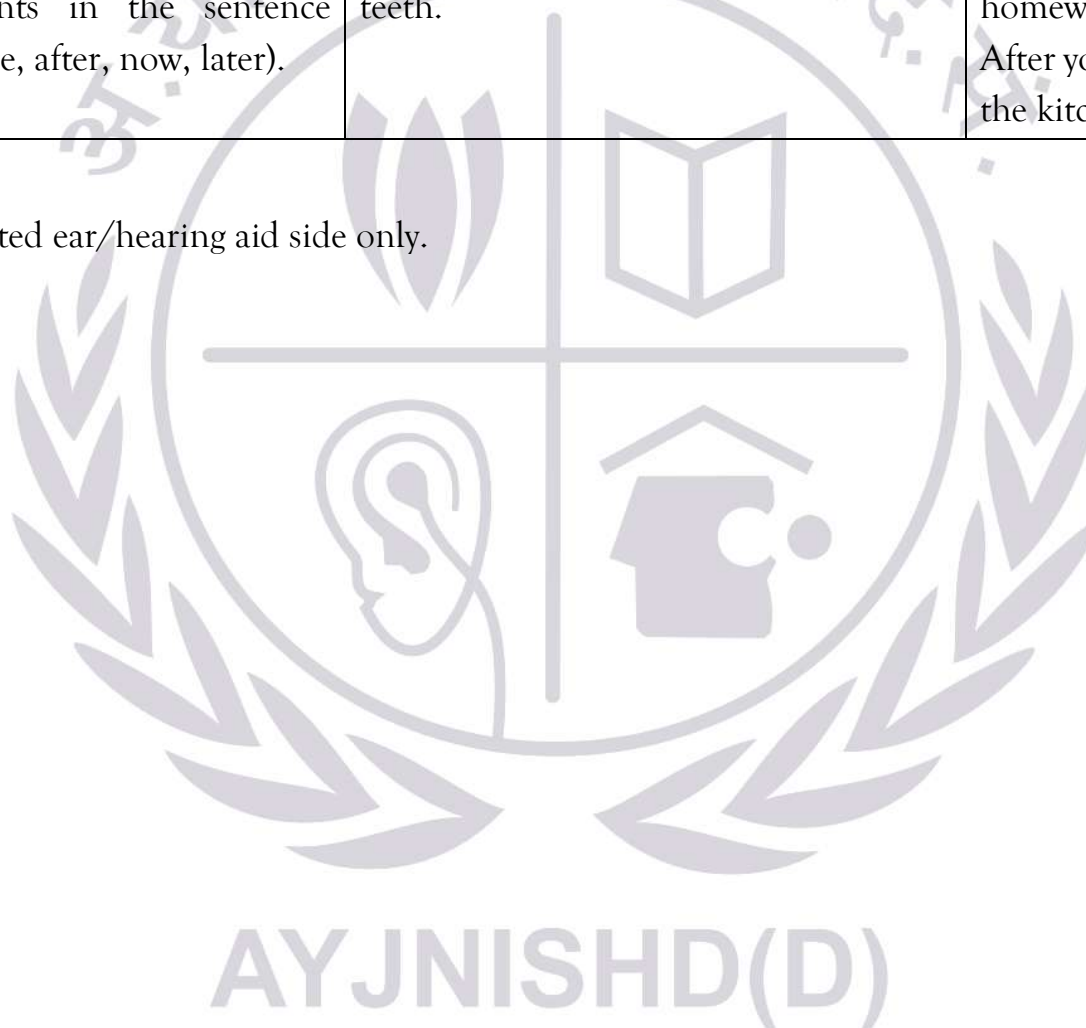
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	6. Follows three commands which include action + verb + adjective.	Take out bread from the packet, put butter on it and keep it on the blue plate.	<b>While drawing:</b> Take out the yellow pen and draw a circle around a red star.
<b>19-21 Months</b>	1. To identify objects by listening to descriptive sentences (closed set).	Guess Who? It lives in a jungle, jumps from tree to tree, and likes to eat banana.	Guess Who? It has four wheels, Papa drives it and goes to his office.
	2. To identify four items in a sentence.	Pick up apple, mango, banana and orange from the basket.	Let's put circle, square, triangle and star on the shape board.
	3. To listen and comprehend plurals.	Present singular and plural words in a meaningful context.	We will go to the farmhouse and feed the cows and the goats.
	4. Listens and comprehends rhyming words.	Present rhyming words for identification. E.g., bat / cat / mat.	To work upon rhyming pairs and comprehend if they rhyme or not for example cat - mat; fat - bat; pin - bin; sun - fun.
	5. To be able to do a complex level of auditory closure/ complete analogies.	E.g., Tea is hot but the ice-cream is... Rabbit runs fast but the tortoise moves....	E.g., Lion lives in the jungle but the cow lives on a... A stone sinks in the water but a boat...in the water.
<b>22-24 Months</b>	1. To increase auditory memory up to five to six elements.	E.g., Tomorrow we are going for a picnic. Let's pack our picnic bag. Put napkins, mat, water bottle, ball and racket in the blue bag.	E.g., Tomorrow is Monday so let's pack your school bag as per the timetable. You need to put a pencil, two blue pens, an eraser and a glue stick in the pencil box.

2. To be able to repeat six to seven words sentences.	E.g., I want to eat bread and jam.	E.g., I play with my younger brother. We are planning to go out.
3. To sequence a series of multi-element directions.	E.g., Let's get ready for Raghav's birthday party. You need to wear your blue shirt and black pants and then bring the gift from the cupboard and car keys from the shelf.	E.g., Take out your English book open page number 26 and read the story.
4. To follow directions with more difficult concepts.	Not applicable.	E.g., Colour the big circle blue and put a cross on the smaller circle. Place the thick book beside the green box and the soft book behind the box.
5. To make identification based upon several descriptions.	E.g., Name the animal who lives in the jungle, eats grass, and carries its baby in the pouch.	E.g., Name the helper who writes a prescription and saves the lives of animals.
6. To recall a short story.	Not applicable.	Present a short story and ask related questions.
7. To be able to follow a simple conversation in various acoustic environments.	E.g., Check if the child follows age appropriate commands/ directions while playing or in a shopping mall, etc. Children are able to follow simple commands from a distance and or even if there is a mild to moderate background noise. Care giver-don't raise your voice un-necessarily, speak normally as you speak to normal hearing person.	

	8. To be able to track an eight-word sentence.	Can repeat sentences like: I like playing with my brother and sister.	Can repeat sentences like: My father goes to the office at 9.00am by bus.
	9. To comprehend time elements in the sentence (Before, after, now, later).	Before you go to bed please brush your teeth.	Before you go for play please finish your homework. After you finish the meals, put the plate in the kitchen.

**Note:** Sit towards implanted ear/hearing aid side only.







## SPEECH

Post-Implant Age	Goals	Exemplar activities for chronological age 0 - 2.6 years	Exemplar activities for chronological age 2.7 – 5.0 years
0 – 3 Months	1. To vocalize for pleasure, pain, discomfort and to acknowledge the child's vocalization by giving meaning to it.	Utilizing soft toys and play wait and pause to encourage the child to vocalize. <b>For caregivers:</b> To interact with a baby or young child naturally without trying to highlight any speech sound, however, imitate the child's vocalizations in a fun play way method, extend and expand the same.	Utilize pictures/ photographs, art/ craft /play ideas to encourage the vocalizations.
	2. To blow raspberries. (Imitate blowing of raspberries which will encourage the child to repeat the same).	Use toys of vehicles and encourage raspberries.	Associate to the performative of the scooter etc.
	3. To vocalize for longer periods of time using vowel-like sounds.	Encourage the child to vocalize by waiting and pausing giving the child a chance to vocalise for their needs and wants E.g., feed; upon waking; when he/ she is happy, etc. by acknowledging their vocalisations.	Use play activities with (Learning to listen) LTL sounds toys, book share and experience books for various vowels production.
	4. For children older than 9 months of age: To spontaneously babble a wider range of speech sounds.	- Use finger puppets and say a variety of speech sounds in a chain to the child. - Can use Peek-a-Boo also. <b>For caregivers:</b> To document the range of speech sounds that child produces spontaneously.	Model chains of speech sound to the child using art & craft activities.

4 – 6 Months	1. To associate learning to listen (LTL) sounds of the objects/pictures.	Encourage the child to vocalize LTL sounds associated with objects using play-way method.	Encourage the child to vocalize sounds associated with the picture/story.
	2. To babble: duplicating syllables.	Encourage to babble through the day E.g., baba/ dada/ mama.	Encourage the babble through the day E.g., while playing.
	3. To say “m” as in yumm/ yummy.	In a daily routine when the child eats something encourage the child to say “yumm”.	
	4. To achieve vocalization with varying suprasegmental aspects of duration, pitch and intensity.	Encourage vowels with varying duration and intensity while doing various activities.	Utilize speech sounds with varying duration, intensity and pitch. E.g., ‘ʃ’ Vs ‘t’; vowels ‘u’ Vs ‘i’, etc.
	5. To say some of the Ling’s six sounds.	Playing Ling’s six sound, encourage the child to vocalize.	
	6. To repeat/ imitate some of the Ling’s 6 sounds.	Try to achieve the goal during the Ling’s six sound test. <b>For caregivers:</b> To maintain a record of new phonemes or speech sounds the child produces spontaneously.	
7 – 9 Months	1. To babble with more variety of consonant vowel (CV) combinations.	Encourage using finger puppets for achieving the goal.	Use art/craft material for achieving the goal.
	2. To imitate familiar words beginning with /b/, /p/, /m/ and /d/.	Use objects with words E.g., papa, mama, dog, baby, dadi, dada etc.	
	3. To imitate /h/, /n/, /p/ in initial position and /m/ in final position.	Use words with objects to achieve the goal.	

	4. To say /n/ as in “No!”	Throughout the day e.g., when a child approaches something they know they should not touch such as plug points/remotes or when served food and they don’t want to eat.	
10 – 12 Months	1. To imitate jargon-like sound combinations that are age-appropriate every day.	<ul style="list-style-type: none"> <li>- In pretend play.</li> <li>- Throughout the day in routine activities. E.g., brushing baby’s teeth</li> </ul>	<ul style="list-style-type: none"> <li>- To babble consistently with more and more CV combinations (Consonant-Vowel combinations).</li> <li>- In play throughout the day in routines that involve movement. E.g. watering plants.</li> </ul>
	2. To be able to use varied vowels and consonant combinations like /mammi/, / <u>d</u> ada/ etc.	Use games in front of mirror initially, later with auditory cues to work on the use of varied vowels in consonants.	
	3. To be able to use words beginning with plosives and nasals spontaneously.	Encourage modelling with real objects beginning with plosives or nasal sounds. E.g., papa, mama, baba.	
	4. To produce more consonants, /w/, /b/, /k/, /g/, /t/, and /d/ in initial positions.	<ul style="list-style-type: none"> <li>- Use age-appropriate object words beginning with /w/, /b/, /k/, /g/, /t/, and /d/.</li> <li>- Use rhymes or stories which have a bombardment of these phonemes.</li> </ul>	
		<b>For caregivers:</b> It is important to have speech babble fun games and these games should be for a short duration like two to five minutes.	
	5. To produce some diphthongs like /ai/ as in hi! and bye.	<ul style="list-style-type: none"> <li>- Use greetings and waving as in natural situations.</li> <li>- In conversations while playing.</li> </ul>	

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13 – 15 Months	1. To communicate with more true words filling the jargon.	In conversation and while playing.	
	2. To spontaneously say words beginning with /t/ or /d/.	In context encourage saying words. E.g., doggie/ two/down.	
	3. To spontaneously say words beginning with /w/ and /h/.	E.g., wee, wawa for water, Hi/Hello/Haan.	
		<b>For caregivers:</b> To respond to the child as though she/he were talking and not make the child unnecessarily repeat the words.	
	4. To use all vowels in words with /b/, /p/ and /m/.	To spontaneously produce phonemes/b/, /p/ and /m/ when vocalising with increasing vowel varieties. E.g., bell, ball, bill etc.	
	5. To produce some diphthongs such as in /oy/ as in boy, /ow/ as in wow!	In conversation and while playing, daily routine activities, stories. <b>For caregivers:</b> To respond to the child enthusiastically and not make the child repeat the word unnecessarily. Repeat the word meaningfully.	
16 – 18 Months	6. To use /ng/ and /f/ in final position.	Not applicable	With older children, we can do some short drills. In verbs and other words like 'off'.
	1. To be able to combine two words when speaking.	<ul style="list-style-type: none"> <li>- Natural interactions and for older children, we can use pictures.</li> <li>- Encourage through modelling, turn taking and expansion.</li> </ul>	
	2. To be able to use some of the nasals and fricatives in final position like yumm or off.	Use age-appropriate object words with nasals and fricatives in final position.	

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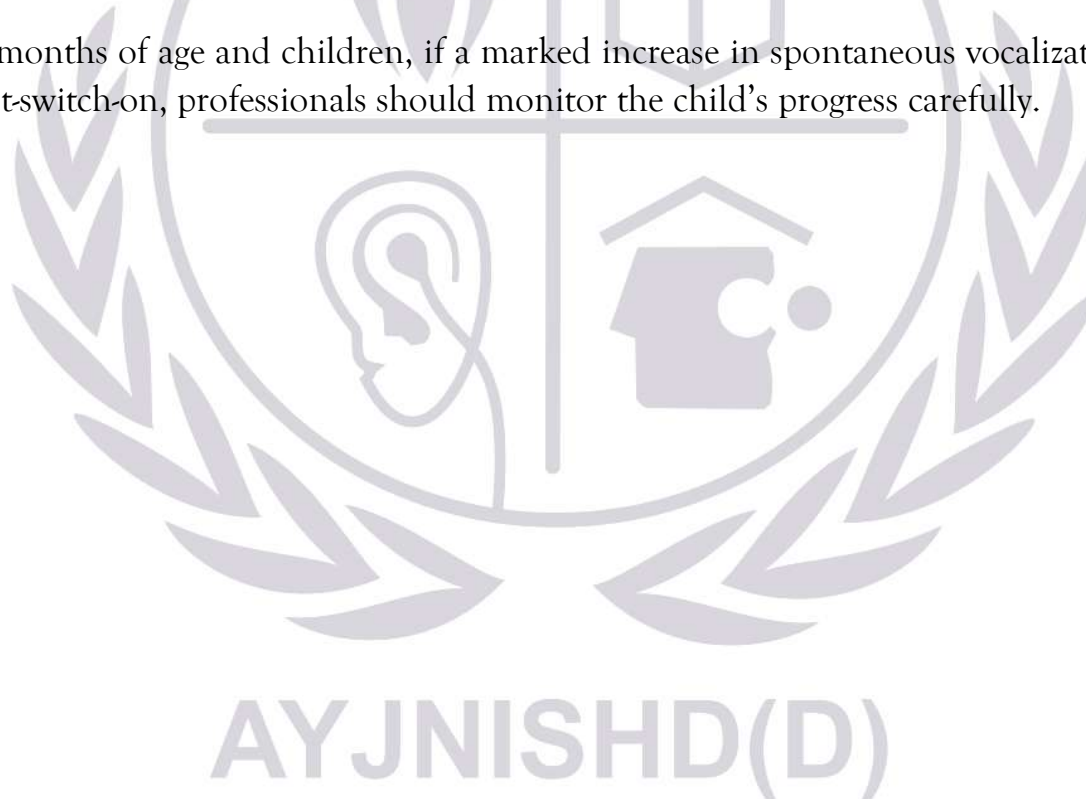


	3. To use /w/ in 'Q' form in the context 'Where', 'What'.	Provide stimulation of use of 'Q' forms through story reading etc.	Modify the environment to encourage a child to use the 'Q' form.
	4. To use suprasegmentals like intonation and stress in sentence level.	Songs, role play, or story telling can be utilized to achieve the goal.	
	5. To use diphthongs like /ai, au, io/ etc.	Use modelling and manding to work on words with diphthongs E.g., /meow, bai/ etc.	
<b>19 – 21 Months</b>	1. To produce /th/ as in that, this etc. in the initial position.	Use words with /th/ sound in pretend play and daily activities.	To use words in various activities and while using pictures.
	2. To spontaneously say words beginning with /k/.	In context use /k/ beginning words like cat/ car/ cut/ cap/ come through pictures or toys with /k/ beginning words.	
	3. To use 'ing' in verbs.	Create opportunities to play with the child where these verbs can be used in informal ways & with older children use action verb cards.	
<b>22 – 24 Months</b>	1. To say /sh/, /j/ in initial and final position.	To spontaneously say words beginning with /sh/, /j/. E.g., push/ finish.	
	2. To be able to understand and answer questions.	Use spontaneous conversations, explaining procedures of how something can be done and storytelling etc.	
	3. To be able to sing favourite songs/rhymes/ poems.	Use regional songs/ rhymes/ poems singing activities to achieve the goal.	
		Activities where there is bombardment of /l/ sound words. Use of phoneme based story books.	

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	4. To produce /l/ in all positions like ball, lamp etc.	<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- It is important to wait and pause and give processing time to the child to respond appropriately.</li> <li>- Once the child is producing a consonant at phoneme level, it is important to acquire the same sound at phonological level i.e. using the sound at word and sentence level as well.</li> <li>- By end of the second year child starts using simple blends like /sm/ as in smile, /sp/ as in spoon, /st/ as in /st/.</li> </ul>
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**Note:** For infants over 6 months of age and children, if a marked increase in spontaneous vocalizations is not observed by the end of second month post-switch-on, professionals should monitor the child's progress carefully.





# RECEPTIVE LANGUAGE

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## RECEPTIVE LANGUAGE

Post-Implant Age	Goals	Exemplar activities for chronological age 0 - 2.6 years	Exemplar activities for chronological age 2.7 – 5.0 years
0 – 3 Months	1. To smile, still, or look happy when being sung to.	<ul style="list-style-type: none"> <li>- Use songs based on culture.</li> <li>- Songs to be associated with LTL sounds.</li> </ul>	
	2. To engage and pay attention briefly, especially when spoken to by a caregiver.	To engage in age-appropriate daily routine activities in response to spoken language. E.g., while feeding etc.	To engage in age-appropriate daily routine activities in response to spoken language. E.g., -Washing hands. -packing toys away.
		<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- To sing nursery rhymes to a child.</li> <li>- To use parentese as they converse with child.</li> <li>- To involve a child in play with confidence.</li> <li>- To talk softly at the ear level of the child's processor.</li> </ul>	
	3. To listen to understand the sounds in the environment.	To briefly pay attention to the sounds in the environment as pointed out by the caregiver.	To respond to / detect the different LTL sounds. E.g., a car with sounds 'beep-beep', an aeroplane with 'aaa' etc.
	4. To understand sound word association.	Use soft toys, play with toy vehicles and animals, picture books of LTL toys for achieving the goal.	<ul style="list-style-type: none"> <li>- Picture books showing more detail.</li> <li>- Jigsaws of LTL toys can be used.</li> </ul>
	5. To identify Mama / Papa by name.	- Utilize a family photo album for the goal.	Utilize scrapbooks with parents' pictures to achieve the goal.

		- Through everyday activities.	
	6. To identify by names of everyday objects that are meaningful to the child.	<ul style="list-style-type: none"> <li>- Utilize real objects to provide stimulation to achieve identification.</li> <li>- To look at the object being talked about.</li> <li>- E.g., a ball / a cup / spoon.</li> </ul>	<ul style="list-style-type: none"> <li>- Utilize flashcards/pictures/objects for achieving the goal.</li> <li>- To hand over the object as requested and being talked about.</li> <li>- E.g., a car / a ball / a bus or scooter.</li> </ul>
	7. To understand verbs related to a daily routine.	Use verbs of daily routine activities. E.g., drinking, sleeping.	
	8. To understand familiar words in context by the end of 3 months.	Through play, singing, everyday routine, reading picture books, etc. can be utilized to achieve the goal.	
	9. To understand the Q form- Where? in context only.	Through everyday conversation. E.g., Where's Papa? Where's the ball? A child responds by looking.	Through storytelling activities understanding of 'Q' form like "where" can be achieved.
		<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- To interact with the child naturally by talking (avoid gestures or pointing).</li> <li>- To continue to involve a child in play through natural verbal interactions.</li> <li>- To share a book with the child every day.</li> </ul>	
<b>4 – 6 Months</b>	1. To follow simple commands in context via listening alone.	Expose the child to a variety of functional language and vocabulary through self-talk, parallel talk, modelling, etc. using different daily routine activities.	



	2. To understand simple commands in context.	In everyday routines: E.g., Wave or say 'bye'. Give Mama/Papa a kiss, Go get your (ball).	In everyday routines: E.g., Wave or say 'bye'. Wash your hands. Put your toys away.
	3. To identify at least 3 LTL toys by their name.	While play, acoustic highlighting of the keyword can be used.	
	4. To respond to Q form: Where? in context only by pointing.	In everyday routines use Q forms. E.g., Where's the doggie? Where's the ball? Do you see it?	
	5. To understand greeting Hi!, Bye.	Greet the child every time you meet them and say 'bye-bye' when someone leaves.	
	6. <b>For children, 2.0 years of age or older:</b> To understand early verbs like 'on/off, 'gone', 'fell down' etc.	Depending on child's motoric development use: Uh oh! the ball fell down.	
7 – 9 Months	1. To identify family members' mama/ papa in sentences.	<b>In everyday routines:</b> A child will show by looking at the person. E.g. Look! Papa's home!	Continue to connect, family member to name using photographs and by pointing.
	2. To understand early verbs, such as sleeping, eating, crying, etc.	Through daily routine activities and interactions teach early verbs.	Through conversations, storybooks, experience books and pictures for older children teach early verbs.
		This can be done in everyday routines, through play and book share.	

		3. To identify names of common objects.	<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- To talk rather than using gesture.</li> <li>- Use model as needed.</li> </ul>
10 Months	-12	1. To understand simple command: Give the ___ (familiar object) to ___ (familiar person).	<b>In everyday routines:</b> E.g., Go get your shoes, Let's play! Throw the ball.
			<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- Provide incidental language.</li> <li>- Use expansion of language while conversing.</li> </ul>
		2. To understand show me___ (familiar object) by pointing.	Use age-appropriate picture books to achieve the goal.
		3. To identify 3 body parts.	<ul style="list-style-type: none"> <li>- While playing with a doll.</li> <li>- In daily routines: at mealtimes.</li> <li>- In songs/rhymes.</li> </ul>
		4. To understand the functional language used by familiar speakers.	In everyday conversation: E.g., Hello, what is your name, Come here, Show me your (dress/T-shirt), Go get your shoes, etc.
			<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- To talk in longer sentences with the child.</li> <li>- To share a book/ read aloud to a child every day.</li> <li>- To take a child out into the neighbourhood/ homes of friends every week.</li> </ul>

	5. To understand Yes/ No questions.	<b>While conversation:</b> E.g., Has Papa come home? Do you want more? Shall we pack up now?	
	6. To understand the prepositions in pairs like: on/under and in/out.	- <b>In-play:</b> E.g., The baby is sleeping on the bed. - <b>In everyday routines:</b> E.g., Here is your banana. Put the banana on this plate. Put the plate on the table.	- <b>In everyday routines:</b> E.g., Put the book on the bed. Put the book under the pillow. - <b>In Pretend Play:</b> E.g., Mama put a baby on the chair.
13 – 15 Months	1. To understand choices in context using familiar language.	<b>In everyday routines:</b> E.g., Do you want to play with your car or the ball? (Keep both the toys in front of the child).	A child may need visual prompts but reduce prompting if you can and use listening only as the child expands the scope of one item memory. E.g., Do you want to wear a red shirt or a blue shirt? (Place shirts in front of the child).
	2. To comprehend the language for feelings – happy, sad, angry.	- In daily conversations talk about how the child is feeling related to his experience. E.g., Why are you crying? - Use of puppets or soft toys to encourage the facilitation of language of feelings.	- Roleplay games where the child becomes a character and tries to enact. - Read aloud related storybooks. - Talk about child's recent experience or activity E.g., visit some place like mall, zoo. some festival, celebration-birthday, some incidences, etc

	3. To understand more adjectives, prepositions and simple verbs.	- Daily conversation and daily routine activities can be used to achieve the goal.	
	4. To understand more and more nouns and verbs (with 'ing').	<ul style="list-style-type: none"> <li>- In everyday conversation use modelling, self and parallel talk.</li> <li>- Doing daily routine activities – the girl is running.</li> <li>- Role play activities.</li> </ul>	
		<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- To offer appropriate choices to the child.</li> <li>- To model the place position: on, in, under in context.</li> <li>- To share/ read simple stories.</li> <li>- To use experience book is great for using “ing”.</li> </ul>	
	5. To understand language related to maths like more-less, empty-full, all-none, etc.	While feeding, cooking, or playing with the child use the concepts to be taught.	
	6. To understand the pronouns: I, me and mine.	Through play and daily interaction in everyday routines create situations to understand the concept of mine.	
16 – 18 Months	1. To listen to a simple complete story.	<ul style="list-style-type: none"> <li>- As per the child's age, read the story. E.g. Where's Spot?</li> <li>- Read only a few pages at a time and continue the next day (if the child does not have auditory attention).</li> <li>- <b>For caregivers:</b> use big picture books</li> </ul>	- Begin reading these stories having developed the child's attention span. Eg., Uh oh! The peanuts have fallen down. Here put all of them back in the box.

			<ul style="list-style-type: none"> <li>- Read only a few pages at a time and continue the next day.</li> </ul>
	2. To understand at least 70-100 words by listening alone nouns, verbs, adjectives, positions, and pronouns.	<p>Vocabulary of following can be used;</p> <ul style="list-style-type: none"> <li>- Family members,</li> <li>- Names of toys,</li> <li>- Names of animals,</li> <li>- Names of favourite foods,</li> <li>- Names of household objects.</li> <li>- Names of basic shapes and colours.</li> </ul>	Vocabulary development at least 50-70 words by listening to nouns, verbs, adjectives, position, and pronouns.
		<p><b>For caregivers:</b></p> <ul style="list-style-type: none"> <li>- To refer to themselves using pronouns: e.g. me/my/mine and not by proper-noun name. E.g. Mama's.</li> <li>- To continue to share/read simple stories aloud.</li> </ul>	
	3. To develop the concept of names of the categories like fruits, vegetables, pet animals, etc.	Helping the child with sorting activities like sorting out fruits and vegetables into separate bowls when they are mixed up.	A mixed bag of vehicles can be utilized and let the child sort out road transport, air transport and water transport.
	4. To develop number concepts 1 to 3.	Counting fingers or other body parts.	Drawing and colouring of objects.



	5. To develop time concept - later.	Daily conversations and talking about what will be done when?	Let's read the story and later we will go for a play.
	6. Using conjunction such as "and" / "or".	In daily routine activities: - Do you want to play with bat and ball? - You can eat either banana or an apple. - Do you want to color with pencils or crayons?	
	7. To understand questions like: How Many? Which one?	In-play: - How many eyes do you have? - How many legs do you have? - How many chocolates do you want to eat?	
<b>19 – 21 Months</b>	1. To understand the pronoun: you and yours.	In everyday conversation and play: E.g., You throw the ball, "You want milk".	
	2. <b>For children 2.0 years or older:</b> To understand: It's your turn, It's my turn.	Simple games that involve turn-taking behaviour. E.g. Throwing balls into a tub of water etc.	Simple turn-taking games can be utilized. E.g. spinning a top etc.
		<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- To use the pronoun 'you' in everyday conversation.</li> <li>- To engage a child in turn-taking routines.</li> </ul>	
	3. To develop a vocabulary for the patterns and textures E.g.,	- Talk about the patterns and textures of the clothes worn by the child or the things used by the child.	Making a scrapbook on patterns and textures

	<p>Patterns: stripes, florals, checks, polka dots, etc.</p> <p>Textures: Rough, Smooth, shiny, sparkle, etc.</p>	<ul style="list-style-type: none"> <li>- Coloring activities using crayons</li> <li>- Showing and letting the child feel the patterns and textures found in nature and talking about his/her experience.</li> </ul>	
	<p>4. To comprehend the language for tastes E.g., sweet, sour, bitter, etc.</p>	<ul style="list-style-type: none"> <li>- While feeding the child talk about the taste</li> <li>- While adding sugar in the milk or making porridge for the child show and let the child taste before salt/sugar is added.</li> </ul>	<p>Sandwich making or lemonade making activity etc. activity can be utilized.</p>
	<p>5. To understand why question.</p>	<p>Doing age-appropriate conversations with the child and encourage him/her to think and answer-</p> <ul style="list-style-type: none"> <li>- Why are you crying?</li> <li>- Why do we need to eat?</li> <li>- Why do plants need water and sunlight?</li> <li>- Why do we wear shoes?</li> </ul>	
	<p>6. Expand vocabulary in different parts of speech E.g., adjectives, prepositions, etc.</p>	<p>Talking about colors, shapes, and other qualities can be performed.</p>	
<b>22-24 months</b>	<p>1. To understand gender vocabulary, I'm a _____. (boy/girl).</p>	<p>In everyday conversation:</p> <ul style="list-style-type: none"> <li>- Play with dolls.</li> <li>- Family photographs.</li> </ul>	

		- Picture talk.	
2. To understand body parts outside of self.		During play activities, E.g., the eyes of the dog, the tail of the monkey, the elephant's trunk, etc.	
3. To understand time concepts (today, tomorrow, yesterday) through verbal explanations.		During conversation: E.g., Today we will stay at home and tomorrow we will go for shopping.	E.g., <b>Not now.</b> We can read this book <u>afterward</u> .
		<b>For caregivers:</b> To read stories that have a longer storyline.	
4. To understand rhyming words.		<ul style="list-style-type: none"> <li>- Using rhymes and giving stress on the rhyming words.</li> <li>- Reading books based on rhyming words E.g., Kip has a zip or Dough is a little pug, etc.</li> <li>- Playing auditory closure games based on rhyming words E.g., My tight is...in color (White).</li> </ul>	
5. To play vocabulary based games		<ul style="list-style-type: none"> <li>-Names of fruits or vegetables, animals, etc. can be used while daily activities.</li> <li>-A game like fire on the mountain run run run-stop then child have to tell fruits or vegetables, animals, etc. (same game can be used for action verbs also).</li> </ul>	
6. To comprehend what will happen next / What happens in the end?		<ul style="list-style-type: none"> <li>- Showing a picture and asking a child to think and tell what will happen next.</li> <li>- In daily conversation E.g., while making a sandwich - I have taken two slices of bread now what to do next.</li> </ul>	
7. Understanding the main idea of the story.			This can be a moral value learned from the story or a lesson learned through an incident.

	8. To comprehend the question: How?	Daily conversations like: How did you come to the clinic?
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**Note:** If a child has post-implant age of 24 months, he/she is at least three years old therefore there should be an abundance of inputs for conversational language and incidental language.





# EXPRESSIVE LANGUAGE

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### EXPRESSIVE LANGUAGE

Post-Implant Age	Goals	Exemplar activities for chronological age 0 - 2.6 years	Exemplar activities for chronological age 2.7 – 5.0 years
0–3 Months	1. To vocalize spontaneously and on-demand. <ul style="list-style-type: none"> <li>- pleasurable experiences,</li> <li>- upsetting experiences,</li> <li>- being spoken to and</li> <li>- being sung to.</li> </ul>	<p>Throughout the day encourage child's vocalizations in following by using vocal turn-taking while:</p> <ul style="list-style-type: none"> <li>- feeding,</li> <li>- rocking baby to sleep,</li> <li>- dressing routine,</li> <li>- taking baby for a stroll outdoors,</li> <li>- singing,</li> <li>- playing,</li> <li>- when being read to.</li> </ul> <p><b>For infants older than 6 months of age, await the child's vocal response for turning the page while reading a story.</b></p> <p><b>For caregivers:</b> Look out for every small vocalization and acknowledge and respond to it by nodding, smiling, giving a vocal response.</p>	<p>Throughout the day encourage vocalizations through turn-taking, using wait and pause, to allow the child to vocalize encourage vocalization for demand:</p> <ul style="list-style-type: none"> <li>- washing hands,</li> <li>- getting dressed,</li> <li>- at mealtimes,</li> <li>- during play,</li> <li>- when read to.</li> </ul>
	2. To vocalize in response to LTL sounds.	<p>Through play with related LTL toys:</p> <ul style="list-style-type: none"> <li>- Cessation of activity after hearing the sound.</li> <li>- To look at the person who utters the sound.</li> </ul>	
	3. Detection of Ling's six sounds.	Toys and activities corresponding to Ling's six sounds to be utilized.	Puzzles and pictures corresponding to Ling's six sounds to be utilized.

	4. To imitate at least 3 LTL sounds by their performative.	Toys and pictures corresponding to the LTL sounds to be utilized.	
	5. <b>For children older than 12 months:</b> To imitate /a/, /u/ and /m/of Ling's six sounds, based on developmental age.	Toys and activities corresponding to Ling's six sounds to be utilized. <b>For caregivers :</b> <ul style="list-style-type: none"> <li>- To acknowledge and positively respond to the child's vocalizations.</li> <li>- To play with Ling's 6 sounds every day.</li> <li>- To play with the LTL toys every day.</li> </ul>	
<b>4 – 6 Months</b>	1. To vocalize in response to singing.	Sing regional language rhymes to the child to achieve the goal.	
	2. To vocalize in response to speech/ when spoken to.	Engage the child in conversation while performing daily routine activities.	
	3. To begin to babble.	<ul style="list-style-type: none"> <li>- Encourage in situations where a child has a strong urge to communicate, e.g., wants a toy.</li> <li>- Imitate child's babbling and add to it.</li> </ul>	Model chains of syllables using various art/craft activities for imitation.
<b>7 – 9 Months</b>	1. To answer Yes/No questions with vocalization.	Daily routine activities and conversations can be utilized to achieve the goal.	Through stories or while daily routine activities encourage the expression of yes/no.
	2. To spontaneously say words with vowels/ diphthongs. e.g. Oh! Oh no! ओहो !	In everyday conversation encourage the child to say words with vowels/ diphthongs.	Older children may spontaneously say fewer words with vowels/ diphthongs. E.g., Oh! Au (for Ouch!). However, encourage more expression of such words.

	3. To express in mono/bi syllabic words.	Encourage the use of kinship terms like /mamma/, /papa/ etc. for seeking their attention throughout the day.	Encourage use of kinship terms and common objects when needed.
	4. To express his/her needs through simple verbs like “give”, “come”, “more” etc.	Through daily activities encourage the use of simple verbs for their daily needs.	
	5. To be able to greet and use farewell.	Modelling greeting and farewell in social situations. E.g., Hi!, Bye-Bye to be utilized. <b>For caregivers:</b> - To expect a response when they ask a child a question and to wait for a response. - To expect a child to vocalize to express a need. - To purposely create situations so that child is motivated to talk. E.g., purposely drop pillows when carrying them in the child’s presence.	
<b>10 – 12 Months</b>	1. To answer where question by pointing or vocalizing.	While daily routine activities ask ‘where’ questions. E.g., Where is your ball? Where is Papa?	
	2. To imitate keywords spontaneously.	Utilized everyday conversation or play activities to achieve the goal.	Older children may need frequent prompting to say familiar words.
	3. To engage briefly in a conversation using turn-taking.	Everyday conversation encourage turn-taking while various verbal and non-verbal activities.	- To consistently involve a child in short conversations of at least 2 turns. - To purposely create situations so that child is motivated to talk.
	4. To use jargon to communicate.	Enhance jargon by responding and extending and expanding it when communicating.	
	5. To answer the Q form; Who’s that? Or Who’s	In everyday situations, conversation, using experience books, storybooks and photographs.	

	come? for people whose names child can say.	<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- To expect a child to respond to what is said to her.</li> <li>- To talk in longer sentences with the child.</li> <li>- To respond to child's jargon as though they were true words.</li> </ul>	
13 – 15 Months	1. To answer the 'Q' form What's that? In a single word for object names that are familiar and that the child can say.	Deliberately show only partially toys/ food that you know the child wants to see /play with/touch.	Older children may only use body language to ask. Model asking the question.
	2. To use 2- word phrases. E.g., Papa gone.	In everyday conversation encourage a child to speak and use expansion.	To imitate at least 2 keywords spontaneously in everyday routines especially when a child wants something.
	3. To answer Yes/ No questions consistently with /no/ and an approximation of /yes/ consistently.	<ul style="list-style-type: none"> <li>- Elicit an answer with /no/ and an approximation of /yes/ emerging. E.g., Do you want more milk? Do you want to go out?</li> </ul>	
	4. To have an expressive language vocabulary of at least 50 words.	Given the child's stage of development, these words may not be produced completely clearly but they will be clear enough to understand.	Achieve through pictures, conversation, storytelling, etc.
		<b>For caregivers:</b> <ul style="list-style-type: none"> <li>- To answer the questions the child may ask.</li> <li>- To involve the child in the conversation for at least 1 turn of conversation. E.g., parent says something → child says something in response.</li> <li>- Generalization and socialization are necessary don't do parrot training.</li> </ul>	

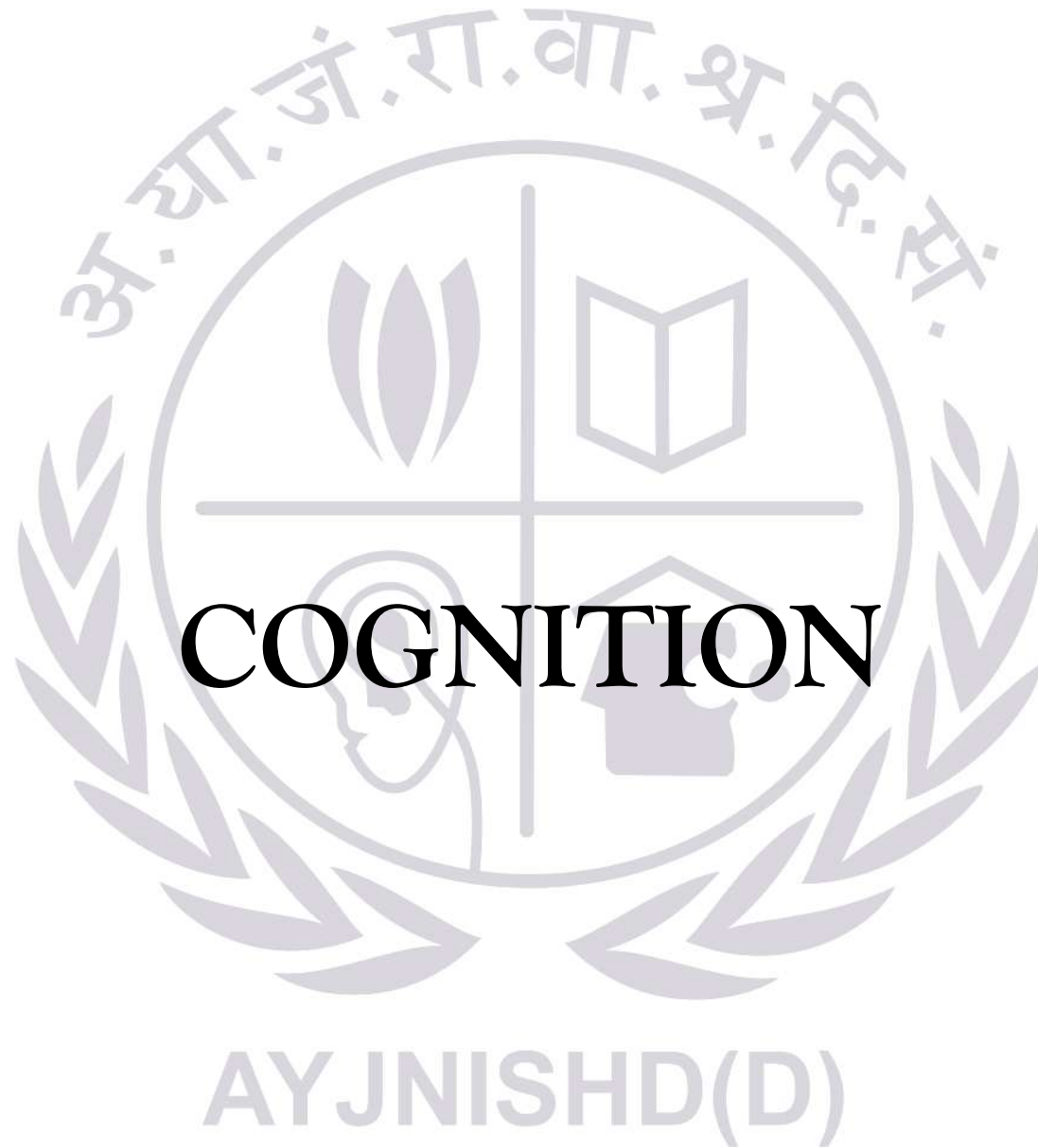
<b>16 – 18 Months</b>	1. To consistently express self in short sentences.	Achieve the goal utilizing everyday conversations.	
	2. To spontaneously ask: different questions, Where, Who, What, How, question form etc.	Modify environment as per age to encourage questioning.	
<b>19 – 21 Months</b>	1. Increase in expressive language vocabulary in different parts of speech.	<ul style="list-style-type: none"> <li>- Work on various categories of vocabulary, E.g., fruits, vegetables, furniture, animals, etc.</li> <li>- To work on various parts of speech through conversation and stories.</li> <li>- 2-3 new words per day minimum.</li> </ul>	
	2. To begin to refer to self as “I, my, mine”.	To express what s/he wants to play with/eat or say “it’s my book”, “it’s mine”.	
	3. To consistently express self in 2–3-word sentences.	<ul style="list-style-type: none"> <li>- Picture description and language expansion to be utilized.</li> <li>- Experience books are a great source for conversation.</li> </ul>	
<b>22 – 24 Months</b>	1. To begin to answer Q form: What is ___ doing? For familiar verbs, that child can say.	<p>With photographs, in everyday routines like</p> <ul style="list-style-type: none"> <li>- eating</li> <li>- sleeping</li> <li>- jumping</li> <li>- playing</li> <li>- use experience books.</li> </ul>	Use conversations and storytelling to elicit.

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	<p>2. To participate in conversation for at least 2-3 turns.</p> <p>3. To be able to spontaneously use 3 to 5 words in a sentence.</p> <p>4. To be able to change the verbs according to the tense. E.g., use of 'ing' and ed.</p> <p>5. To retell short stories.</p>	<ul style="list-style-type: none"> <li>- Involve in a conversation of topics of interest and which is age-appropriate.</li> <li>- Use storybooks and role-play games can be utilized.</li> <li>- Use imaginary play activities</li> <li>- Puzzles / riddles solving activities</li> </ul> <p><b>For caregivers:</b> To continue to include a child in conversation.</p>
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## COGNITION

Chronological Age	Goals	Exemplar activities for 0 – 2.6 years
<b>0 to 3 months</b>	1. To show awareness at caregivers.	Hold the baby in your arms. Talk and sing to the baby.
	2. To be aware of familiar people/ situations.	The baby starts recognizing the mother's voice, smiles, coos etc. on seeing caregivers.
<b>4 to 6 months</b>	1. To look at objects and reaches for them.	<ul style="list-style-type: none"> <li>- Hang a moving toy mobile on the cradle for the baby to see.</li> <li>- When the baby turns over, keep a colorful toy within the baby's reach so he can stretch out his arm to touch it.</li> </ul>
	2. Smiles/coos in response to stimulation.	
	3. Recognizes parents.	
	4. Maintains eye contact with the adult.	
<b>7 to 9 months</b>	1. To transfer toy from one hand to another.	Give a rattle/ teething ring to hold.
	2. To smile at self in the mirror.	Play peek-a-boo by covering your face with hands or dupatta.
	3. To hold one cube and take another.	When the child is holding a toy in his/ her hand, introduce another basket of toys near the other hand.
	4. To repeat the action that produces noise.	<ul style="list-style-type: none"> <li>- Introduce a sound and then show the object E.g., toy cat, dog, bird, car, train...</li> <li>- Wait for the child to produce a sound then move the toy.</li> </ul>

	5. To imitate simple acts and gestures.	Clapping after any task achieved, dancing with the child to music, blowing bits of paper, puffing cheeks and releasing, blowing raspberries.
	6. To play games like Pat-a-cake and Peak-a-boo.	<ul style="list-style-type: none"> <li>- Have another person call out the child's name hiding under the dupatta or covering the face with hands.</li> <li>- Show the face when the child comes to search for the person who called out.</li> <li>- Playing Pat-a-cake with play dough.</li> </ul>
<b>10 to 12 months</b>	1. To relate an action to an object. E.g., use of a spoon.	Can be achieved during daily routine activities of brushing teeth, bathing, applying powder, putting on clothes, eating, drinking with a doll etc.
	2. To take pegs from a pegboard.	Demonstrate picking up a peg in front of the child and then give the opportunity to do the same. Listen to a sound and pick up a peg.
	3. To match two identical objects.	Sorting vegetables after shopping, sorting blocks by color and size, Put 2 each of any toy/ fruit in a basket. Mom picks up one E.g., a ball, and says give me a ball.
	4. To build a two-block tower.	Let the child see building a tower with cups or bowls of different sizes, blocks and take a turn to do the same.
	5. To demonstrate object permanence.	Show an object. Then hide it under something (under a handkerchief). Lift the handkerchief and make the child aware that the object still exists there.
<b>13 to 15 months</b>	1. To remove a cube from a cup one at a time.	Keep gems/ toffees/ dice in a bowl/ cup to pick up.

16 to 18 months	2. To follow simple commands and instructions.	Take a basket of toys/ clothes and say. E.g., Give me..., Put on your shoes, Open the ..., show me.
	3. To place a circle in a shape board.	Have a cut out of cardboard in the required shape and let the child play with it after the demonstration.
	4. To remove the lid of a box to find a hidden toy.	Demonstrate opening the lid and letting the child follow you.
	1. To put six pegs on a pegboard.	Let the child handle the pegboard and try putting the pegs in the pegboard.
	2. To imitate circular scribble.	With the help of a slate and chalk or thick crayons demonstrate scribbling and let the child imitate you.
	3. To pick up small objects.	Let the child pick up large beans and gather them in a box, pick up small lemons/ berries and put them in the basket. Be careful as the child may swallow small objects.
	4. To invert a bottle to obtain small objects.	Demonstrate that it will be difficult to take out a small object from a bottle by putting the hand inside it. Rather inverting it will make the object more accessible.
	5. To begin ring stacking.	After the demonstration, let the child try stacking rings. If the rings are not available, the same can be done with bangles of different shapes. You can have cutouts of the cardboard of different shapes in the shape of the rings. The child can stack it in a small metal or wooden rod.



6. To obtain a toy with a stick.	This gives the child an opportunity to learn the means to achieve the goal. Demonstrate the same when you want to take some object. E.g., Pull an object with a stick that is away from you.
7. To look at a picture book and turn pages.	Spend some time at bedtime to narrate stories. Give verbal direction to turn the page. You can take turns to do the same.
8. To point one to four named body parts.	While washing/ changing/ bathing a doll- show me your hands, rub soap on your hand, leg, face, tummy...
9. To name one object.	Take a small bag with a few things. What's inside?  Feel and guess. Pull it out see and name.
10.To point to pictures in a book/ picture talk.	- Stimulate the child with the names of the pictures when the child is looking at a book. Then name a picture and let the child try pointing to what you have said. - Reinforce each correct response verbally or by clapping.
11.To scribble spontaneously.	Give your child chalk and slate / thick crayons. Allow scribbling spontaneously.
12.To begin understanding the use of objects.	While playing with your child, demonstrate the use of simple objects. Stimulate the child with the same in daily routine.

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19 to 24 months	1. To match familiar objects/ colors.	Have some pairs of the same objects. Take one object and let the child try matching that with the same pair. Have limited pairs initially to avoid distraction.  E.g., Match a bowl with another same bowl.
	2. To build a tower of 5 to 6 blocks.	Sit with your child and play building tower or nesting cups.
	3. To imitate vertical strokes.	<ul style="list-style-type: none"> <li>- You can encourage this with thick crayons slate and chalk.</li> <li>- You can have the same with wheat flour on a plate.</li> <li>- You can make it on floor by duppta or any object and let the child copy it.</li> </ul>
	4. To thread 3 beads.	Same color beads/ alternate color beads.
	5. To begin to tear the paper.	Tear and stick paper in a shape drawn.
	6. To imitate ordering of nesting cups.	Demonstrate to the child and then let him/ her try the same.
	7. To complete a simple pull-out puzzle.	Demonstrate to the child and then let him/ her try the same.
	8. To begin to categorize objects in play.	Let the child help you in household tasks like arranging clothes in the cupboard, fruits/ vegetables in the basket etc. Give verbal stimulation simultaneously about each category. Let the child sort his toys in the different baskets after playing.
	9. To activate the mechanical toy.	Demonstrate the same and then let the child explore by him/ herself.

	10.To begin to claim their own things “mine” and naming others things.	Laying the table activity. Whose plate /glass/ drying clothes. Child gives clothes one at a time mom asked whose towel/ shirt/ pants.
	11.To make choices one out of two.	After a bath layout two sets of clothes, do you want the red shirt or the blue shirt? Lunch time, do you want bread or chapatti? Play time, do you want to play with a ball or cars?
	12.To distinguish 2 prepositions. E.g., in, under.	Hide objects along with the child in different places. In the cupboard, under the bed...They ask for the object. This is for memory too.
	13.To follow any 3 directions.	Give instructions in daily routine. E.g., Stand up, go in the kitchen and get a glass. Reinforce the appropriate response. You can play games like “Simon says”.
	14.To refer to self by name.	Show the child his/ her photo and name the photo. Model correct language by referring to yourself correctly e.g. “Give it to mummy” when you want the child to give something to you.
	15.To ask for more.	Model to ask for more from another family member. Reinforce the correct response from the child.
	16.To comprehend “Another”.	Model to ask for another. Reinforce the correct response from the child.
25 to 30 months	1. To use toys appropriately.	Play with the child with his toys to demonstrate the appropriate use.
	2. To imitate vertical, horizontal lines	You can encourage this with a slate and chalk.

	and circles.	You can have the same with wheat flour on a plate.
3.	To match identical pictures.	<ul style="list-style-type: none"> <li>- Have some pairs of the same pictures. Take one picture and let the child try matching that with the same pair.</li> <li>- Have limited pairs initially to avoid distraction. E.g., Match a ball with another same ball.</li> </ul>
4.	To match identical shapes.	Have some pairs of the same shapes. Take one shape and let the child try matching that with the same pair. Have limited pairs initially to avoid distraction. E.g., Match a circle with another circle. You can have a cardboard cut-out of shapes for matching.
5.	To put two parts of a whole together.	You can have cut-outs of two parts. E.g., a tail and body of a dog, the Wheels of a car, and its body. Add another cut-out as a distractor. Let the child match the parts with trial and error.
6.	To understand number concepts one and two.	Play the game of nine pins with two plastic bottles, flashcards of nos. 1 and 2 with the no. symbol 1 and a circle drawn, no. 2 and 2 circles. Throw a ball to drop the bottles. Place the fallen bottle on the flashcard.
7.	To count up to two.	Counting blocks, beads, vegetables etc.
8.	To recognize self in the photograph.	Have a family photo album talk about each member.
9.	To start to discriminate big/ little.	Give the experience of all possible big and little objects at home. E.g., difference between a child's belongings and your belongings as big and little. That is a difference in brush size, plate size etc.

10.To match primary colors.	<ul style="list-style-type: none"> <li>- Have your child and you wear the same colored clothes.</li> <li>- You can also have homemade picture cards of the same color for matching.</li> </ul>
11.To begin to formulate a negative judgment.	Keep 3 objects, ball, car and balloon. Give me the car and the balloon but not the ball.
12.To understand something is heavy.	Demonstrate this by your body language in trying to pick up heavy objects. If possible give the heavy object in his hand Vs. a light object within the child's lifting capacity.
13.To sort objects.	Let the child help you in household tasks like arranging clothes in the cupboard, fruits/ vegetables in the basket etc. Give verbal stimulation simultaneously about each category. Let the child sort his toys in the different baskets after playing.
14.To begin to understand; What do we do with?	Demonstrate correct usage of objects in daily routine. You can ask the child to get an appropriate object for you. E.g., Get me something to drink water.
15.To dramatize mother and baby.	With help of a big doll and a small doll, you can introduce the mother and baby concept.
16.To match related objects: Shoe and socks.	<ul style="list-style-type: none"> <li>- Demonstrate correct pairing of objects in daily routine.</li> <li>- You can ask the child to get an appropriate object for you. E.g., Get me something to drink water. Keep daily routine objects - brush, paste, shirt, pants, and bat ball, to match.</li> </ul>



Chronological Age	Goals	Exemplar activities for 2.7 to 5.0 years
31 – 36 Months	1. To share toys and takes turns more appropriately.	<ul style="list-style-type: none"> <li>- Visit the park - taking turns at the swing, slide, etc.</li> <li>- Building a tower with blocks.</li> <li>- Passing the parcel.</li> <li>- Turn-taking in conversation</li> <li>- Pretend play.</li> </ul>
	2. To develop parallel play.	<ul style="list-style-type: none"> <li>- Set of blocks/ puzzles/ play dough given to a group of kids.</li> <li>- Give the child wheat flour balls, a rolling pin when mom makes chapatti so the child too can roll out chapattis.</li> <li>- Involving the child in household chores like peeling potatoes, drying clothes, etc.</li> </ul>
	3. To begin to develop an interest in writing and drawing.	<ul style="list-style-type: none"> <li>- Give crayons to scribble on newsprint.</li> <li>- Paints and brush to colour within a shape.</li> <li>- Trace patterns.</li> </ul>
	4. To begin fantasy play.	<ul style="list-style-type: none"> <li>- Dress up like doctor/ mummy/ papa and do role play.</li> <li>- After buying vegetables, the child takes the role of the vegetable seller.</li> <li>- Tea party with kitchen toys.</li> </ul>
	5. To match six colour cards.	<ul style="list-style-type: none"> <li>- Keep pairs of colour cards face down, open two cards randomly at a time if they match - make a pair if they don't try again.</li> <li>- Put different coloured pairs of socks/ hankies/ blocks in a box. Sort by matching and making pairs.</li> </ul>
	6. To sort and categorize: toys etc. 1. Blocks & Pegs 2. Food 3. Animals 4. Toys	<p>Sorting blocks/ vegetables / fruits/ buttons/ shoes and socks according to colour/ shape/ size.</p> <ul style="list-style-type: none"> <li>- Tower of same coloured blocks, putting similar pegs in a row.</li> <li>- Sorting pictures of the food as per taste - sweet/ sour/ bitter/ crunchy.</li> <li>- Sort pet/ wild, birds/ animals/ fish.</li> </ul>

5. Vegetables 6. Fruits 7. Vehicles 8. Clothes	<ul style="list-style-type: none"> <li>- Separate soft toys/ noise-making toys/ movable toys.</li> <li>- Choose same coloured vegetables/ need peeling/ salad veg.</li> <li>- Fruits that need peeling/ eaten without cutting/ juicy/ no. of seeds - one, many</li> <li>- Seen on the road/ in water/ in the sky.</li> <li>- No of wheels.</li> <li>- Girls clothes/ boys clothes.</li> <li>- According to size.</li> <li>- According to use.</li> <li>- According to season.</li> </ul>
7. To name objects when part of it is shown in a picture.	<ul style="list-style-type: none"> <li>- Keep pictures of a button, shoelace, wheel of cycle/ car/ bus/ train, to match with shirt/ shoe/ vehicle.</li> <li>- Ear of a cup, the handle of a kettle, pod of a pea, tails of animals/ beaks of birds- crow, sparrow, parrot, duck.</li> </ul>
8. To add two missing body parts to a drawing.	<ul style="list-style-type: none"> <li>- Make cards with parts of face missing- one eye/ ear/ nose/ eyebrow etc.</li> </ul>
9. To show interest in how and why things work.	<ul style="list-style-type: none"> <li>- Open a lock - with a key.</li> <li>- Wind a key to start a toy.</li> <li>- Open the lid of toothpaste, powder box.</li> </ul>
10. To complete 3-4 interlocking puzzle pieces.	<ul style="list-style-type: none"> <li>- Cut out pictures from the newspaper into 2-3 pieces to make a puzzle.</li> <li>- Interlocking plastic blocks to make a shape.</li> </ul>
11. To imitate drawing a cross.	<ul style="list-style-type: none"> <li>- Give ice-cream sticks to make a cross.</li> <li>- Draw a cross with a crayon.</li> <li>- Make a cross with a shoelace on the lacing board.</li> </ul>
12. To identify four common objects by function. E.g., point to the one we sleep on.	Identify the item needed for combing hair, brushing teeth, bathing, drinking water etc.

13.To develop the concept of boy/ girl.	- Boy and girl cut-outs to be made- along with clothes, tie, earrings, bangles, dress up the paper cut-outs.
14.To understand qualitative contrasts. E.g., hot/ cold.	- Sorting things that are hot/ cold, big/ small, sweet/ spicy, smooth/ rough. - Running when fast beats are heard and walking when slow beats are heard. - Discriminate between loud and soft sounds and whispers.
15.To identify 2-3 colours.	- Identify primary colours- red, yellow, blue, green. - Put on your red dress, bring blue pants.
16.To thread four beads.	- Thread beads of the same colour to make a necklace. - Thread beads of alternate colours to make a necklace.
17.To put small pegs in a peg-board.	Listen to a sound and put pegs in a pegboard.
18.To understand concept of opposite. E.g.yes/ no, run/ stop, give/ take, push/ pull.	- Play a game of Simon says. - Play some music for the game musical chairs for run/ stop. - Play a card game to make a set of cards - 4 players 5 cards each 1, 2, 3, 4, 5 from the pack of cards distributed. Make a set of 5 diamonds/ spades/ clubs/ hearts. Make a set by saying please give me. I don't have/ take.
19.To begin to understand the time concept. E.g., soon, later, wait.	- Use of story books in which time-related stories cab be narrated. - Use of role-play activities. - Use normal conversation.
20.To name 2-3 colours.	Make card game "I have" with colours.
21.To match four coloured blocks with corresponding picture strips.	Game of blocks. Make coloured patterns on paper to match and create.
22.To engage in make-believe activities.	Role play, dumb charades- pick up a card and act out as seen in the card.

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23.To match textures.	Collect material of different textures- smooth, rough, furry, soft, hard, stickyput them in a bag. Put one hand in the bag. Feel and identify. Pick up 2 similar textures.
24.To arrange 5-6 rings in order of size.	Collect bangles of different sizes to arrange.
25.To match clothes to people. E.g. baby's nappy.	Involve the child in drying clothes activity- ask the child to give you wet clothes from the bucket, identify whose clothes before drying E.g., Papas shirt, baby's towel.
26.To match food to animals. E.g., carrot-rabbits.	<ul style="list-style-type: none"> <li>- Play with pictures cards to match.</li> <li>- Create a story of a hungry bird going to different animals saying I'm hungry please give me food. Goes to the cat who gives milk. The bird says "I don't drink milk" Story can continue with animals offering their food to the bird.</li> </ul>
27.To match objects to relate shapes.	Make a scrap book of shapes- collect pictures or draw things that are round, square and rectangle.
28.To match related pictures. E.g. umbrella-rain.	Collect pictures of things that go together to match.
29.To select three same from four objects (three identical).	<p>Select cards from a set for</p> <ul style="list-style-type: none"> <li>- Same colour</li> <li>- Same function</li> <li>- Same texture</li> <li>- Same taste</li> </ul>
30.To identify which one does not belong? and answer why?	<p>Out of 4 objects pick the odd one out</p> <ul style="list-style-type: none"> <li>- Different colour</li> <li>- Different shape/ size</li> </ul>

		- Different category- bird/ animal/ vegetable/ fruit
	31.To select by description (one or two descriptors).	Show/ point to the thing that is big and round/ red and juicy.
	32.To develop problem-solving skills. E.g. how can we...?	Create situations in daily routine. E.g., hide the butter knife while applying butter on bread. Let the child think and solve the problem. Riddles according to age.
	33.To hold up fingers to tell age.	Demonstrate counting age at home (for child and siblings).
	34.To develop concepts : 1. Big 2. Tall 3. All 4. Soft 5. Heavy	<ul style="list-style-type: none"> <li>- Daily routine objects big plate belong to father. Big basket, big chapatti, etc.</li> <li>- Father is tall while the child is short. In story books show giraffe Vs rat.</li> <li>- In daily routine, use the phrases like all of us will eat lunch/ go to sleep etc. Use the same phrases in story narration.</li> <li>- Use soft materials like sponge, dough, clay etc.</li> <li>- Use of soft toys. Let the child feel the texture.</li> <li>- With facial expressions and body language demonstrate picking up heavy objects like a basket full of toys, a bucket full of water etc.</li> </ul>
37 – 42 Months	1. To begin one to one correspondence.	To touch a toy. Say the number loudly while touching it.
	2. To follow directions using concepts E.g. empty/ full.	Demonstrate empty/ full with help of baskets, cups, plates which get empty and full. Then in conversation give instructions to get an empty cup/ glass or fill it with water.



3. To follow directions using concepts. E.g. same/ different.	Demonstrate with same/ different clothes. Then give instructions in routine play games like “Simon Says”
4. To develop more difficult concepts. E.g. quality, quantity, texture.	In daily routine introduce these concepts e.g., hard/ soft, rough/ smooth, more/ less, same/ different etc.
5. To compare objects.	Once the child learns to differentiate quality, quantity, etc. comparing objects gets easier in daily routine.
6. To begin simple problem-solving.	Create a situation E.g., hiding a towel after bathing and child searching for it.
7. To develop imagination.	Use of fairy tales to develop imaginations.
8. To distinguish a day activity from a night activity. E.g., playing/ sleeping.	Fixing the routine for day and night activities helps to distinguish day/ night activities. Role play for the same can be done.
9. To identify colours.	In routine show objects of different colours and ask to name them.
10. To understand concepts - Next to - Besides - Between	- Games like “Simon says”, “Stand next to papa”. - Daily routine commands: stand, besides... can be used.
11. To understand concepts - Tall/ short - Long/ short	- Compare heights of father/ child, huge doll/ short doll. - With help of long/ short chalk or pencils. - Make long/ short snakes with clay.

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12.To understand comparatives - Longer - Heavier - Bigger	<ul style="list-style-type: none"> <li>- Have objects of different categories.</li> <li>- E.g., two snakes and bombard with stimulation of one is a long snake and the other one is even longer. Same way introduce concepts like heavier and bigger with two objects of comparison.</li> </ul>
13.To count up to three.	Play games: “Simon Says”. Daily routine give commands to give 3 toys, 3 fruits etc.
14.To complete 5-6 piece puzzles.	Homemade cardboard puzzles, wooden puzzles can be used.
15.To point to different objects.	Give commands in daily routine.
16.To give “both”.	Give commands in daily routine after a demonstration. E.g., you ate both chocolates, both of us will play.
17.To match sets of cubes.	Homemade cubes can be used for matching.
18.To name missing objects (1 out of 3).	Purposely have one item less in a set e.g., have a shirt, socks, and handkerchief but miss out socks.
19.To imitate a V shape.	With help of chalk-slate, clay, flour.
20.To tell how an object is used E.g., what do you do with a pencil?	Ask questions in daily routines about the use of different objects.
21.To recognise/ name a familiar melody.	Listen to a melody on your mobile. Let the child guess it.
22.To understand where objects belong.	Mix the objects. Let the child keep at appropriate places. E.g., a shirt in the cupboard.
23.To sequence a three-part story with pictures.	Demonstrate while narrating a story and then let the child do it.

	24. To sequence 2-3 directions.	Games like “Simon Says”. Give instructions in daily routine.
	25. To role-play adult’s work.	Arrange role play. Let the child take the adult’s role.
	26. To select by descriptions (3-4 descriptors).	Play a game where you describe (in a closed set initially), E.g., give me something which has a tail, it barks and eats bones.
<b>43 – 48 months</b>	1. To draw simple objects.	Give opportunity with chalk and slate.
	2. To understand the time concept. 1. Today/ tomorrow / yesterday.	With help of the experience book, introduce what will be done today about the past, (yesterday) and then introduce what will be done tomorrow.
	2. Morning / afternoon/ night.	Set activities for the respective time of the day. E.g., bathing morning.
	3. To tell how many fingers and toes.	Let the child count fingers and toes. And then count for the other person. Then ask him/her how many fingers/ toes are there?
	4. To associate an object with an occupation E.g., thermometer - doctor.	Introduce through picture books, role play of doctor, teacher etc. Make cards of the association at home from cardboard.
	5. To continue to develop imagination.	Use of fairy tales to develop imaginations. Create situations e.g., imagine you are a...
	6. To increase the span of concentration.	This can be increased gradually. Starting from lesser time to more gradually.
	7. To match patterns.	With chalk and slate, paper-pencil you can draw one and then let the child match with the other 3 distractor patterns.
	8. To trace a diamond.	You can make it at home by sticking sand on the cardboard in a diamond shape. Let the child trace it.
	9. To draw a diagonal line on an 8 cm square.	You can draw and the child can copy on other paper.

10.To complete a 6 piece interlocking puzzle.	You can make it at home with cardboard.
11.To name objects as same or different.	Show one object and introduce another E.g., a mango and another apple. Ask the child if they are the same or different.
12.To draw a square in imitation.	You can draw and the child can copy on other paper.
13.To count by rote 1 to 10.	Have poems with numbers in them. 1-2 buckle my shoe.
14.To match sequence/ patterns of blocks.	With chalk and slate, paper-pencil you can draw one and then let the child match with the other 3 distractor patterns.
15.To copy a series of 5 strokes.	With help of chalk-slate, paper-pencil, let the child copy.
16.To understand <ul style="list-style-type: none"> <li>- Top</li> <li>- Middle</li> <li>- Bottom</li> </ul>	<ul style="list-style-type: none"> <li>- Demonstrate by keeping objects on top of a cupboard.</li> <li>- Show that the vegetables are put in the middle in a bread sandwich.</li> <li>- In the cupboard show that certain things are kept at the bottom of the rack.</li> </ul>
17.To identify 5 out of 13, by descriptions E.g., which one burns/ swims?	Play guessing game by providing a description, initially in a closed set.
18.To draw an animal with the trunk, head, legs and two features.	You can draw and let the child copy initially. Later he can do his own.
19.To draw a simple house.	You can draw and let the child copy initially. Later he can do his own.
20.To name 3 shapes e.g. square, circle, triangle.	Ask the child in daily routine e.g., the shape of a roti.
21.To make comparisons of <ul style="list-style-type: none"> <li>- Size</li> <li>- Weight</li> <li>- Speed</li> </ul>	<ul style="list-style-type: none"> <li>- Showing objects of different sizes and describing them</li> <li>- Showing objects of different weight and describing them</li> <li>- Have a running race. Demonstrate person who runs fast and slow</li> </ul>
22.To identify the odd one out and justify.	Mix objects with gross differences E.g., 3 fruits and one toy and take out the odd one out.



	23.To identify objects missing from a scene E.g., bed room without bed.	With the help of a toy bedroom set purposely miss out on the bed and then let the child realize it.
	24.To identify missing parts of an object E.g. hands of a clock.	You can draw without the hands, let him/ her observe and identify.
	25.To device alternate endings for stories.	Let the story come to an end; you give an alternative, let the child think of another.
	26.To predict E.g., what would happen if...?	With the help of stories. Then initiate a conversation to ask what would happen if.
	27.To finish If, then statements.	Use of storybooks and start a conversation E.g., If it rains then what will do?
<b>49 – 54 Months</b>	1. To count 4 objects.	Let the child count objects in daily routine E.g., counting of toys.
	2. To understand number concepts up to 5.	Give 5 objects to the child. E.g., 5 chocolates, 5 handkerchiefs to arrange in a cupboard.
	3. To comprehend the 5 senses.	Use of books. You can purposely open/ close eyes/ ears to understand the importance of sense.
	4. To copy a triangle.	Use of paper-pencil for the same.
	5. To know 5 textures.	Let the child feel the textures in daily routines E.g., smooth table, rough cloth etc.
	6. To count by rote 1 to 15.	Repeatedly count various objects at home till 15.
	7. To recall 4 objects seen in a picture.	Play a game of showing pictures, covering them and trying to recall.
	8. To understand the name of some coins.	Stimulation of names of coins while shopping in the market. E.g., let's pay one rupee.
	9. To name 8 colours.	Give option to the child for choosing his clothing of various colours. Let him/ her name it.
	10.To tell the colour of unseen objects E.g., what colour is banana?	Initiate a conversation in daily routine.



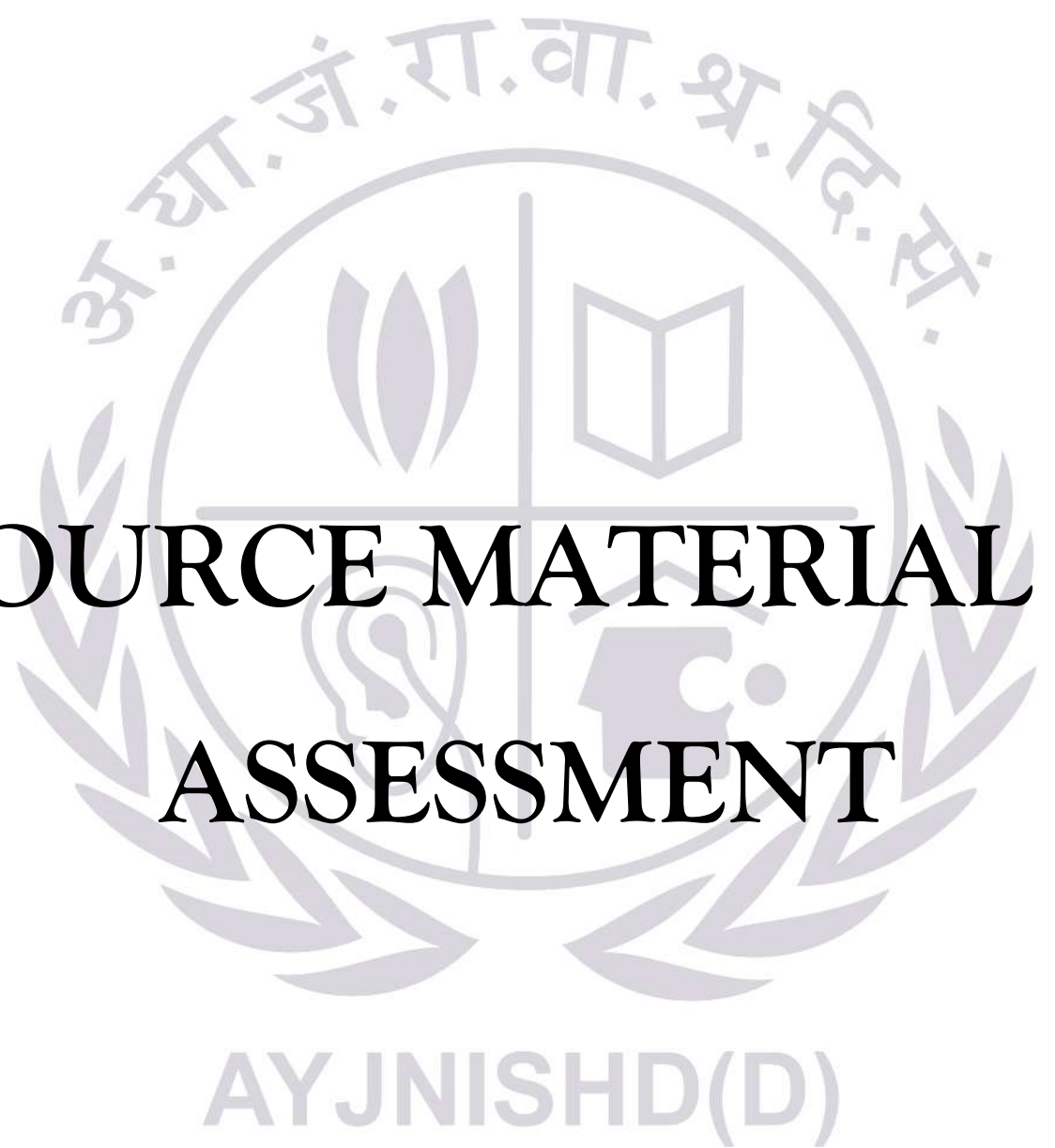
54 – 60 Months	11.To sequence 4 pictures.	Use of story sequence cards. First, demonstrate and then let the child try it.
	12.To tell the object that is missing (1 from 5).	Purposely miss out on an object in a set. E.g., while eating gets a plate, glass but not a spoon. Let the child observe and answer.
	13.To name 6 items in a category in one minute E.g., animals, food, toys.	Turn-taking game of each person naming one category.
	1. To identify/ recite the days of the week.	Use of rhymes with names of the week E.g., Solomon Brandy.
	2. Sight vocab of the names of the days.	Stimulation with a calendar will be helpful. The child will gradually learn sight-reading.
	3. To discuss about the weather/ season – sunny, rainy, windy, cloudy, cold and relate to the clothes, food for that season.	Exposure in daily routine E.g., it's raining – let's take an umbrella. Use of story books E.g., It was hot. So...went to an ice-cream parlour.
	4. To ask questions – Where? What? Who? 5. To describe a picture article + adjective/ noun + verb/ noun + verb + object.	<ul style="list-style-type: none"> <li>- Use of picture description cards.</li> <li>- Use of experience books of child experience.</li> <li>- Model the correct language.</li> </ul>
	6. To answer questions - Who? What? Where? What colour?	Ask relevant questions during daily interactions. E.g., where is papa, what do you want to eat today. Give options initially E.g., rice or chapatti?
	7. To narrate a short story after it has been narrated.	Narrate a short story, initially with a colourful book. Help the child to narrate it back, by asking relevant questions.
	8. To identify and recite a poem.	Turn-taking to identify and recite rhymes. Reinforce appropriate behaviour.
	9. Concept of number from 1-10 Rote counting 1-20.	Counting the chocolates, beads etc.

10.To use words to express thoughts and feelings and to share the experience	<ul style="list-style-type: none"> <li>- Ask the child to share his/ her experience after coming from school, a party, and picnic etc.</li> <li>- Let the child hear your conversations of sharing experiences.</li> </ul>
11.To see the difference between things they see and what they really are.	Demonstrate these differences in daily life situations.
12.To see the relationship of cause and effect (If....then that will happen).	<ul style="list-style-type: none"> <li>- In story narration: ... fell down...he will get hurt.</li> <li>- In daily routine: papa forgot his umbrella...he will get wet.</li> </ul>
13.To understand sequence (of stories, events of personal experiences).	In daily routine e.g., first brush teeth, then take bath...wear clothes ...eat breakfast...go to school. Use of story sequence cards can be done.
14.To understand and use prepositions. <ul style="list-style-type: none"> <li>- in/ on</li> <li>- over/ under</li> <li>- behind</li> <li>- up/ down</li> </ul>	Play games like 'treasure hunt'. Modelling language while finding out the hidden object. E.g., let's search under the table in the bag, behind the door etc. Stimulations of up/ down can be given while climbing the stairs. Then ask related questions E.g., where is the shoe and expect the correct answer.
15.To understand the feelings of others (through stories- anger, jealousy, cruelty).	Use of storybooks with proper modelling of language about correct emotions. Describing when someone is angry.
16.To take turns in conversation, games.	Play games in a small group, where you can demonstrate turn-taking.
17.To imagine (what will happen if ...).	In story narration. E.g., what will happen if...drops the glass?
18.To understand the concept of time (main hour, half-hour).	Use of real watch/ wall clock and indicate each main hour and half hour. Setting targets at these timings.

AYJNISHD(D)

	19.To state the use of things (pencil, comb, brush, knife).	Role play to demonstrate the use. Create situations where the child will answer these questions. E.g., What will the doll do with the comb? Transfer these conversations into a daily routine.
	20.To identify things that belong to a particular place (what goes into a bag, kitchen, garden, hall and bedroom).	Mix different things at home and let the child arrange them after your demonstration. E.g., the cup fits into the kitchen, shirt in the cupboard, books in the school bag, etc.





# RESOURCE MATERIAL FOR ASSESSMENT

AYJNISHD(D)

### PRE AND POST TEST ASSESSMENT FORMATS

<b>Name:</b> <b>CA:</b> <b>HA:</b> <b>Date of Assessment:</b>	
<b>Audition:</b> Categories of Auditory Perception (Use) Step:	
<b>Speech:</b> Speech Intelligibility Rating Scale (Use) Score:	
<b>Language:</b> Integrated Scale Development (Use) Receptive Language Age: Expressive Language Age:	
<b>Cognition:</b> Integrated Scale Development (Use) Cognition Age:	



### Category of Auditory Perception

Sr. No.	Category of performance	Quiet	Noise	Time after CI (Months)								
				Before CI	3	6	9	12	15	18	21	24
12.	Uses telephone with unfamiliar speakers											
11.	Uses telephone with familiar speakers											
10.	Follows taped stories											
9.	Understands conversation with unfamiliar speaker without lip reading											
8.	Understands conversation with familiar speaker											
7.	Responds appropriately to simple questions											
6.	Understands some spoken words without per formatives											
5.	Understands some common phrases											
4.	Understands some spoken words with additional per formatives											
3.	Can identify some environmental sounds											
2.	Responds to some speech sounds											
1.	Detects some environmental sounds											
0.	Unaware of environmental sounds.											

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### Speech Intelligibility Rating Scale

Score	Interpretation
0	Normal
1	Can understand with little effort; however feel speech is not normal
2	Can understand with little effort occasionally need to ask for repetition
3	Can understand with concentration and effort specially be sympathetic listener
4	Can understand with difficulty and concentration by family, but not others
5	Can understand with effort if content is known
6	Cannot understand at all even when content is known

AYJNISHD(D)



## Integrated Scales of Development

from Listen Learn and Talk

*Hear now. And always*





## Integrated Scales of Development

Language enables us to comprehend and express ideas, thoughts, opinions and emotions.

In the language learning process, understanding the language heard, that is, receptive language, always precedes the development of expressive language. A young baby will turn when her mother calls her, or wave goodbye when asked, long before she can say her own name or say bye bye. As well as learning to understand and express language, the development of pragmatic skills is necessary in order to use language appropriately in different social contexts and for different purposes.

From birth to school age is a time of enormous development in a child's life. A baby grows from a totally dependent being into a competent communicator and an independent thinker and learner by the time she begins school.

The following tables are an integrated scale that outline typical stages of development in the areas of listening, receptive and expressive language, speech, cognition and social communication. They have been adapted from a number of sources:

- Cottage Acquisition Scales for Listening, Language and Speech
- Preschool Language Scale – 4 (PLS 4)
- The Bzoch-League Receptive-Expressive Emergent Language Scale Second Edition
- (REEL - 2)
- The Early Learning Accomplishment Profile Kit (E-LAP)
- The Learning Accomplishment Profile Revised Edition Kit (LAP-R)
- The Rosetti Infant-Toddler Language Scale
- St. Gabriel's Curriculum

A child with hearing impairment follows these stages of development. However, she will need greater exposure to spoken language from the earliest possible time. Language, speech, cognition and pragmatic skills should be developed concurrently through listening in a systematic program that follows the typical stages of development.

It is important to remember that the skills listed on the following pages are based on an average.

There is a considerable range between the earliest and latest times children achieve the various milestones. Your child may not reach a milestone within the given timeframe, but this does not mean that they will not achieve it. These developmental scales are meant as a guide only. They have been included to assist in the provision of a program to suit the individual needs of a particular child.

For full reference and description see Listen Learn and Talk (Ref. Z60407). This is an auditory habilitation resource from Cochlear.

## 0 to 3 Months

Listening (Audition)	Receptive Language	Expressive Language	Speech	Cognition	Social Communication (Pragmatics)
<ul style="list-style-type: none"> <li>• Auditory awareness</li> <li>• Responds to sound by smiling, head turning, stilling, startling</li> <li>• Responds to loud sounds</li> <li>• Recognizes mother's/ caregiver's voice</li> </ul>	<ul style="list-style-type: none"> <li>• Startles to sudden noises</li> <li>• Responds to speaker's face</li> <li>• Responds to talking by quietening or smiling</li> <li>• Quietens with familiar voice</li> </ul>	<ul style="list-style-type: none"> <li>• Cries to express hunger and anger</li> <li>• Begins to vocalize to express pleasure</li> <li>• Occasionally vocalizes in response to voicelike sounds</li> </ul>	<ul style="list-style-type: none"> <li>• Cries</li> <li>• Begins vocalizing other than crying, e.g. coos, gurgles</li> </ul>	<ul style="list-style-type: none"> <li>• Awareness of familiar people/situations</li> <li>• Looks at objects/faces briefly</li> <li>• Anticipates certain events, e.g. being fed</li> </ul>	<ul style="list-style-type: none"> <li>• Appears to listen to speaker</li> <li>• Has brief eye contact but by 3 months regularly looks directly at speaker's face, localizes speaker with eyes and starts to watch mouth rather than whole face</li> <li>• Smiles/coos in response, in particular to mother/ caregiver</li> </ul>



## 4 to 6 Months

Listening (Audition)	Receptive Language	Expressive Language	Speech	Cognition	Social Communication (Pragmatics)
<ul style="list-style-type: none"> <li>• Sound begins to have meaning</li> <li>• Listens more acutely</li> <li>• Starts to associate meaning to sound, e.g. responds to own name occasionally</li> <li>• Responds to changes in vocal inflections</li> <li>• Starts to localize source of voice with accuracy</li> <li>• Listens to own voice</li> </ul>	<ul style="list-style-type: none"> <li>• Frequently localizes sound source with head or eye turn</li> <li>• Occasionally responds to own name</li> <li>• Discriminates between angry and friendly vocal tones, e.g. cries in response to an angry voice</li> <li>• Usually stops crying in response to voice</li> </ul>	<ul style="list-style-type: none"> <li>• Vocalizes for needs and wants</li> <li>• Vocalizes in response to singing</li> <li>• Blows raspberries, coos, yells</li> <li>• Vocalizes in response to speech</li> <li>• Starts to use a variety of vocalizations to express pleasure and displeasure</li> <li>• Vocalizes when alone or with others</li> </ul>	<ul style="list-style-type: none"> <li>• Laughs</li> <li>• Blows raspberries</li> <li>• Coos</li> <li>• Yells</li> <li>• Starts to change duration, pitch and intensity (prosodic features)</li> <li>• Uses vowel [a] as in car</li> <li>• Produces sounds with consonant features – friction noises, nasal [m]</li> <li>• Plays at making sounds</li> </ul>	<ul style="list-style-type: none"> <li>• Looks at objects and reaches for them</li> <li>• Starts to learn about cause and effect, e.g. plays with rattle</li> <li>• Recognizes familiar people</li> <li>• Brings objects to mouth</li> </ul>	<ul style="list-style-type: none"> <li>• Maintains eye contact</li> <li>• Loves games such as round and round the garden</li> <li>• Produces different vocalizations for different reasons</li> <li>• Imitates facial expressions</li> <li>• Takes the initiative in vocalizing and engages adult in interaction</li> <li>• Starts to understand vocal turn taking, e.g. vocalizes in response to adult vocal input</li> </ul>

## 7 to 9 Months

Listening (Audition)	Receptive Language	Expressive Language	Speech	Cognition	Social Communication (Pragmatics)
<ul style="list-style-type: none"> <li>Localizes sound source with accuracy</li> <li>Discriminates suprasegmental aspects of duration, pitch and intensity</li> <li>Has longer attention span</li> <li>Associates meaning to words</li> <li>Discriminates vowel and syllable content</li> </ul>	<ul style="list-style-type: none"> <li>Appears to recognize names of family members in connected speech, even when person named is not in sight</li> <li>Responds with appropriate arm gestures to such words as up, high, bye bye, etc.</li> <li>Enjoys music or singing</li> <li>Appears to listen to whole conversation between others</li> <li>Regularly stops activity when name is called</li> <li>Appears to recognize the names of a few common objects by localizing them when they are named</li> <li>More regularly stops activity in response to "no"</li> <li>Will sustain interest up to a minute while looking at pictures or books with adult</li> </ul>	<ul style="list-style-type: none"> <li>Repeats CV syllables in babble [pa pa]</li> <li>Starts to respond with vocalizations when called by name</li> <li>Plays more games, e.g. pat a cake, peek a boo, hand clapping, etc. and vocalizes during games</li> <li>Appears to "sing"</li> <li>Vocalizes to greet a familiar adult</li> <li>Calls to get attention</li> <li>Uses some gestures and language appropriately, e.g. shakes head for "no"</li> <li>Vocalizes loudly</li> </ul>	<ul style="list-style-type: none"> <li>Babbles CV CV [pa pa] [ba ba]</li> <li>Clicks tongue</li> <li>Uses a "singsong" voice</li> <li>Imitates patterns of intonation</li> <li>Uses low central vowels most frequently [o] (hot) [ae] (bat) [a] (car)</li> <li>Uses some consonants [p, b, m, d]</li> </ul>	<ul style="list-style-type: none"> <li>Imitates physical action</li> <li>Recognizes familiar objects</li> <li>Places object in one hand and then the other</li> <li>Holds one cube and takes another</li> <li>Smiles at self in mirror</li> <li>Loves hiding and finding games</li> <li>Gives, points, shows</li> <li>Pulls rings off peg</li> </ul>	<ul style="list-style-type: none"> <li>Begins to understand that communication is a two-way process</li> <li>Shows a desire to interact with people</li> <li>Becomes more lively to familiar people</li> <li>Demonstrates anticipation of activities</li> <li>Nods, waves and claps</li> <li>Calls to get attention</li> <li>Requests by reaching and pointing</li> <li>Enjoys frolic play</li> <li>Continues to develop turn taking skills</li> <li>Begins book sharing by looking at pictures in a book with adult</li> </ul>

## 10 to 12 Months

Listening (Audition)	Receptive Language	Expressive Language	Speech	Cognition	Social Communication (Pragmatics)
<ul style="list-style-type: none"> <li>• Associates meaning to more words</li> <li>• Monitors own voice and voices of others</li> <li>• Localizes sound from a distance</li> <li>• Discriminates speaker's voice from competing stimuli</li> </ul>	<ul style="list-style-type: none"> <li>• Appears to enjoy listening to new words</li> <li>• Generally able to listen to speech without being distracted by other competing sounds</li> <li>• Occasionally gives toys and objects to adult on verbal request</li> <li>• Occasionally follows simple commands, e.g. <i>Put that down.</i></li> <li>• Responds to music with body or hand movement in approximate time</li> <li>• Demonstrates understanding of verbal requests with appropriate head and body gestures</li> <li>• Shows increased attention to speech over prolonged periods of time</li> </ul>	<ul style="list-style-type: none"> <li>• Uses jargon of 4 or more syllables - short sentence-like structures without true words</li> <li>• Starts to use varied jargon patterns with adult intonation patterns when playing alone</li> <li>• Initiates speech gesture games such as round and round the garden</li> <li>• Talks to toys/objects using longer verbal patterns</li> <li>• Frequently responds to songs or rhymes by vocalizing</li> <li>• Imitates action paired with sound</li> <li>• May use first words, e.g. <i>bye bye, mama</i></li> </ul>	<ul style="list-style-type: none"> <li>• Imitates sounds and number of syllables</li> <li>• used by others</li> <li>• o Uses suprasegmental features</li> <li>• o Uses longer strings of repeated syllables</li> <li>• o Vowels and consonants are systematically varied</li> <li>• [ba di ba di]</li> <li>• o Mostly uses plosives and nasals [p, b, d, m]</li> </ul>	<ul style="list-style-type: none"> <li>• Resists when toy is taken away</li> <li>• Relates an action to an object, e.g. spoon with stirring, car with pushing</li> <li>• Responds to laughter by repeating action</li> <li>• Takes peg from peg board</li> <li>• Matches two identical objects</li> <li>• Attempts to build a two block tower</li> </ul>	<ul style="list-style-type: none"> <li>• Starts to understand question and answer, e.g. shakes head appropriately for "no"</li> <li>• Understanding of interaction continues to develop</li> <li>• Understands greetings</li> <li>• Turn taking skills continue to develop</li> <li>• Vocalizes in response to mother's call</li> <li>• Indicates desire to change activities</li> <li>• Responds to laughter by repeating action</li> <li>• Begins directing others by tugging, pushing</li> <li>• Vocalizes with gesture to protest</li> <li>• Enjoys games and initiates them</li> </ul>



## 13 to 15 Months

Listening (Audition)	Receptive Language	Expressive Language	Speech	Cognition	Social Communication (Pragmatics)
<ul style="list-style-type: none"> <li>Identifies more words</li> <li>Processes simple language</li> <li>Auditory memory of one item at the end of a phrase/sentence</li> <li>Discriminates between familiar phrases</li> <li>Follows one step directions that are familiar</li> </ul>	<ul style="list-style-type: none"> <li>Understands more new words each week</li> <li>Follows one step directions during play</li> <li>Understands simple where questions, e.g. <i>Where's daddy?</i></li> <li>Recognizes and demonstrates understanding of many objects by pointing</li> <li>Understands more familiar phrases</li> <li>Begins to recognize names of various body parts, e.g. eyes, hands</li> <li>Enjoys rhymes</li> </ul>	<ul style="list-style-type: none"> <li>Uses 7 or more words consistently</li> <li>Uses voice and gesture to obtain desired object</li> <li>Continues to use jargon with more true words developing</li> <li>Incorporates pausing and intonation into jargon</li> <li>Imitates new words spontaneously</li> <li>Sings</li> </ul>	<ul style="list-style-type: none"> <li>Imitates alternated vowels</li> <li>Approximates single words</li> <li>Uses most vowels in vocal play</li> <li>Uses more front consonants plosives [p, b, d], nasals [m, n]</li> <li>Uses fricative [h]</li> <li>Uses semivowel [w]</li> </ul>	<ul style="list-style-type: none"> <li>Sustains interest in desired object for two minutes and more</li> <li>Places circle in shape board</li> <li>Builds a tower with two cubes</li> <li>Begins to make marks on paper with thick crayon</li> <li>Imitates more actions, e.g. patting doll</li> <li>Demonstrates functional use of objects</li> <li>Removes lid of box to find hidden toy</li> </ul>	<ul style="list-style-type: none"> <li>Continues to develop eye contact with speaker for longer periods</li> <li>Takes turns as expressive language develops</li> <li>Plays fetching game</li> <li>Involves others by showing things, e.g. shoes/clothing during play</li> <li>Begins to understand "wh" questions</li> </ul>

## 16 to 18 Months

Listening (Audition)	Receptive Language	Expressive Language	Speech	Cognition	Social Communication (Pragmatics)
<ul style="list-style-type: none"> <li>• Discriminates between more phrases</li> <li>• Identifies and associates more words to related objects, e.g. toys, body parts, food, clothing</li> <li>• Imitates words heard</li> </ul>	<ul style="list-style-type: none"> <li>• Understands more simple questions</li> <li>• Begins to understand longer phrases with key word in middle of sentence</li> <li>• Develops category vocabulary</li> <li>• Identifies more body parts</li> <li>• Finds familiar object not in sight</li> <li>• Understands 50 or more words</li> <li>• Identifies some clothing items, toys and food</li> </ul>	<ul style="list-style-type: none"> <li>• Jargon disappears</li> <li>• Increases vocabulary, 10 or more meaningful words</li> <li>• Decreases use of gesture – relies on talking to communicate</li> <li>• Imitates words heard</li> <li>• Asks for more</li> </ul>	<ul style="list-style-type: none"> <li>• Increases single word approximations</li> <li>• Most vowels present</li> <li>• Still mainly producing front consonants [p, b, d, m, n, h, w]</li> </ul>	<ul style="list-style-type: none"> <li>• Imitates circular scribble</li> <li>• Places 3 to 6 pegs in pegboard</li> <li>• Retrieves desired toy from behind an obstacle</li> <li>• Picks up small objects</li> <li>• Turns bottle upside down to obtain toy</li> <li>• Points to pictures in a book and begins to turn pages</li> <li>• Demonstrates object permanence</li> </ul>	<ul style="list-style-type: none"> <li>• Requests object or help from adult by gesturing and vocalizing</li> <li>• Initiates vocal interaction</li> <li>• Prefers to be with familiar people</li> <li>• Shows caution with strangers</li> <li>• Imitates other children</li> </ul>



## 19 to 24 Months

Listening (Audition)	Receptive Language	Expressive Language	Speech	Cognition	Social Communication (Pragmatics)
<ul style="list-style-type: none"> <li>• Auditory memory of 2 items</li> <li>• Discriminates songs</li> <li>• Comprehends a variety of phrases</li> <li>• Discriminates descriptive phrases</li> <li>• Follows a two step direction, e.g. <i>Get your ball and throw it.</i></li> <li>• Identifies by category</li> </ul>	<ul style="list-style-type: none"> <li>• Completes two requests with one object</li> <li>• Chooses two familiar objects</li> <li>• Comprehends action phrases</li> <li>• Points to a range of body parts, e.g. elbow, cheek</li> <li>• Begins to understand personal pronouns – my, mine, you</li> <li>• Recognizes new words daily</li> <li>• Increases comprehension - decodes simple syntax</li> <li>• By 24 months understands 250 - 300 words</li> </ul>	<ul style="list-style-type: none"> <li>• Occasionally imitates 2 - 3 word phrases</li> <li>• Uses new words regularly</li> <li>• Increases expressive vocabulary to 30 words or more</li> <li>• Attempts "stories" – longer utterances in jargon to get message across</li> <li>• Begins to use own name when talking about self</li> <li>• Uses possessive pronouns – mine</li> <li>• May ask where questions Where car?</li> <li>• By 24 months may use 2 - 3 word phrases with nouns, some verbs and some adjectives</li> </ul>	<ul style="list-style-type: none"> <li>• Approximates words</li> <li>• Substitutes /w/ for /r/</li> <li>• Uses suprasegmental features</li> <li>• Most vowels and diphthongs present</li> <li>• Consonants [k, g, t, ng] emerging</li> <li>• Consonants [p, b, m, h, n, d] established – used in initial position in words</li> <li>• Consonants often omitted in medial and final position</li> </ul>	<ul style="list-style-type: none"> <li>• Imitates symbolic play, e.g. household activities</li> <li>• Uses one object as symbol for another</li> <li>• Places triangle, circle, square in shape board</li> <li>• Imitates vertical strokes</li> <li>• Threads three beads</li> <li>• Begins to tear paper</li> <li>• Imitates ordering of nesting cups</li> <li>• Begins to categorize objects in play</li> <li>• Uses two toys together</li> <li>• Stacks blocks/builds tower</li> <li>• Completes simple pull out puzzle</li> <li>• Activates mechanical toy</li> </ul>	<ul style="list-style-type: none"> <li>• Begins to develop more self confidence and is happy to be with other people</li> <li>• Initiates pretend play</li> <li>• Responds to requests from adults</li> <li>• Practices adult-like conversation about familiar themes</li> <li>• Uses words to interact</li> <li>• Requests information, e.g. What is this?</li> <li>• Develops turn taking in conversation</li> </ul>

## 25 to 30 Months

Listening (Audition)	Receptive Language	Expressive Language	Speech	Cognition	Social Communication (Pragmatics)
<ul style="list-style-type: none"> <li>• Auditory memory of 2 items in different linguistic contexts</li> <li>• Listens to familiar songs on tape</li> <li>• Comprehends longer utterances</li> <li>• Listens from a distance</li> </ul>	<ul style="list-style-type: none"> <li>• Begins to understand complex language</li> <li>• Comprehends more complex action phrases</li> <li>• Understands functions, e.g. What do we use for drinking? – points to up</li> <li>• Begins to understand size differences, e.g. big/little</li> <li>• Begins to understand prepositions, e.g. in, on, under</li> <li>• Receptive vocabulary increases</li> <li>• Begins to understand concept of quantity, e.g. one, all</li> <li>• Understands pronouns, e.g. he, she, they, we</li> </ul>	<ul style="list-style-type: none"> <li>• Uses 2 – 3 word phrases more consistently</li> <li>• Uses some personal pronouns, e.g. me, you</li> <li>• Asks for help using two or more words, e.g. wash hands</li> <li>• Begins to name primary colors</li> <li>• Refers to self by pronoun me</li> <li>• Repeats 2 numbers counting</li> <li>• Answers "wh" questions, e.g., <i>What's that?</i>, <i>What's ... doing?</i>, <i>Who?</i></li> <li>• Recites nursery rhymes and favorite songs</li> <li>• Understands and answers "can you". Uses negation, e.g. don't, no</li> </ul>	<ul style="list-style-type: none"> <li>• Loves experimenting with prosodic features</li> <li>• Begins to use stress correctly</li> <li>• Repeats words and phrases</li> <li>• Consonants [f, y] emerging</li> <li>• Consonants, e.g. [m, p, b] used in final position</li> <li>• Word/phrases shortened—medial consonants often omitted</li> <li>• Tends to over pronounce words</li> <li>• Different pronunciation of the same word occurs frequently</li> <li>• Whispers</li> </ul>	<ul style="list-style-type: none"> <li>• Continues symbolic play, e.g. talking on the phone</li> <li>• Completes actions, e.g. clap hands and high 5s</li> <li>• Uses toys appropriately</li> <li>• Performs related activities at play</li> <li>• Turns one page at a time</li> <li>• Imitates vertical, horizontal lines and circle</li> <li>• Matches identical picture to picture and shape to shape</li> <li>• Puts two parts of a whole together</li> <li>• Understands number concept of one and two</li> </ul>	<ul style="list-style-type: none"> <li>• Enjoys talking, e.g. pretends to have a conversation on the phone</li> <li>• Completes actions, e.g. <i>Give me five</i></li> <li>• Begins to develop parallel play with other children</li> <li>• Talks more in play</li> <li>• Shares toys</li> <li>• Asks for help using two or more words</li> <li>• Uses longer utterances</li> </ul>

## 31 to 36 Months

Listening (Audition)	Receptive Language	Expressive Language	Speech	Cognition	Social Communication (Pragmatics)
<ul style="list-style-type: none"> <li>Continues to expand auditory memory - 3 item auditory memory with different linguistic features</li> <li>Sequences 2 pieces of information in order</li> <li>Listens to stories on tape</li> <li>Follows 2 - 3 directions</li> </ul>	<ul style="list-style-type: none"> <li>Understands most common verbs</li> <li>Understands and responds to more complex language and commands</li> <li>Carries out 2 - 3 verbal commands in one sentence</li> <li>Understands several prepositions, e.g. in, on, under</li> <li>Expands concept development</li> <li>Identifies parts of an object</li> <li>Understands time concept, e.g. today, yesterday, tomorrow</li> <li>Understands <i>What is missing?</i>/<i>Which one does not belong?</i></li> </ul>	<ul style="list-style-type: none"> <li>Knows gender vocabulary</li> <li>Talks about what has drawn</li> <li>Gives both first and last name when asked</li> <li>Relates recent experiences</li> <li>Converses in 3 - 4 word simple sentences</li> <li>Begins using more complex language</li> <li>Uses questions, e.g. who, what, where, why</li> <li>Uses pronouns, e.g. he, she, they, we, you, me</li> <li>Uses some plurals</li> <li>Uses possessives</li> <li>Uses more negatives, e.g. not, none, nobody</li> <li>Begins to use and/because</li> <li>Names three or more colors</li> </ul>	<ul style="list-style-type: none"> <li>Makes some substitutions [f] for [th], [w] for [r]</li> <li>Medial consonants still inconsistent</li> <li>Final consonants inserted more regularly</li> <li>Consonants [l, r, sh, s, z, ch] emerging</li> <li>Vowels and diphthongs established</li> <li>Omits some unstressed parts of speech</li> <li>Pronunciation becomes more correct</li> <li>Whispers frequently</li> </ul>	<ul style="list-style-type: none"> <li>Shares toys and takes turns more appropriately</li> <li>Develops parallel play</li> <li>Begins to develop interest in writing and drawing</li> <li>Begins fantasy play</li> <li>Matches six color cards</li> <li>Sorts and categorizes, e.g. blocks and pegs</li> <li>Names object when part of it is shown in a picture</li> <li>Adds two missing body parts to a drawing</li> <li>Shows interest in how and why things work</li> <li>Completes 2 - 3 interlocking puzzle pieces</li> <li>Imitates drawing a cross</li> </ul>	<ul style="list-style-type: none"> <li>Takes turns and shares</li> <li>Recites rhymes</li> <li>Acts out songs - sometimes changes endings</li> <li>Engages in make-believe activities</li> <li>Begins to ask permission of others</li> <li>Expresses feeling</li> <li>Initiates conversation</li> <li>Uses questions for a variety of reasons, e.g. to obtain information, to request</li> </ul>



## 37 to 42 Months

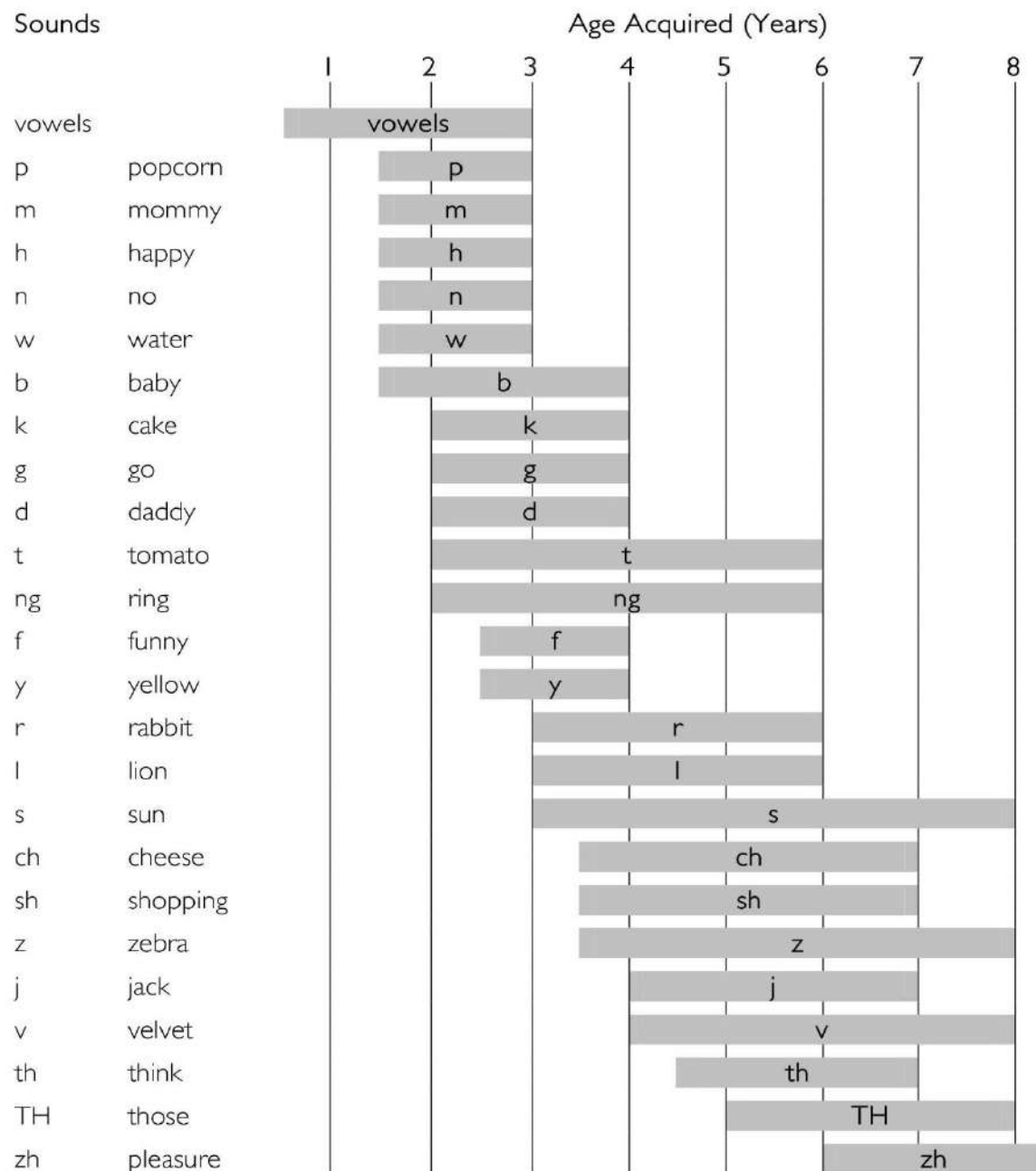
Listening (Audition)	Receptive Language	Expressive Language	Speech	Cognition	Social Communication (Pragmatics)
<ul style="list-style-type: none"> <li>• Auditory memory increases to 5 items</li> <li>• Sequences 3 or more pieces of information in order</li> <li>• Retells a short story</li> <li>• Follows 3 directions</li> <li>• Processes complex sentence structures</li> <li>• Tracks a 6 word sentence</li> </ul>	<ul style="list-style-type: none"> <li>• Can listen to a 10 - 15 minute story</li> <li>• Comprehends an increasing level of complex language</li> <li>• Understands more difficult concepts, e.g. quality, texture, quantity</li> <li>• Understands concept of day/night, e.g. distinguishes day from night activities</li> <li>• Follows directions using concepts of empty/full, same/different</li> <li>• Understands locational prepositions, e.g. next to</li> <li>• Begins to understand comparatives, e.g. I am taller than you.</li> <li>• Understands about 900 words</li> </ul>	<ul style="list-style-type: none"> <li>• Holds conversations using many correct grammatical structures (plurals, possession, pronouns, prep, adj.)</li> <li>• Uses "when" and "how many" questions</li> <li>• Uses so/because</li> <li>• Relays a message</li> <li>• Describes what objects can be used for</li> <li>• Starts to answer "what if?" questions</li> <li>• Answers What is missing?</li> <li>• Identifies which one does not belong and answers Why?</li> <li>• Attempts to answer problem-solving questions, e.g. What if?</li> <li>• Uses about 500 intelligible words</li> </ul>	<ul style="list-style-type: none"> <li>• Uses some blends, e.g. [mp, pt, br, dr, gr, sm]</li> <li>• Consonants [j, v, th] emerging</li> <li>• Some substitutions still made, e.g. [gw] for [gr] in blends</li> <li>• Pronunciations of words more stable from one production to the next</li> </ul>	<ul style="list-style-type: none"> <li>• Begins one-to-one correspondence</li> <li>• Follows directions using concepts, e.g. empty, full, same, different</li> <li>• Develops more difficult concepts, e.g. quality, quantity, texture</li> <li>• Compares objects</li> <li>• Begins simple problem solving</li> <li>• Develops imagination</li> </ul>	<ul style="list-style-type: none"> <li>• Takes turns</li> <li>• Plays with other children more appropriately</li> <li>• Shows understanding of others' feelings/needs</li> <li>• Interacts through simple conversation</li> <li>• Initiates conversation</li> <li>• Enjoys role-plays</li> </ul>

## 43 to 48 Months

Listening (Audition)	Receptive Language	Expressive Language	Speech	Cognition	Social Communication (Pragmatics)
<ul style="list-style-type: none"> <li>Processes longer and more complex language structures, e.g. <i>Can you find something that lives in a tree, has feathers and a yellow crest?</i></li> <li>Follows directions with more difficult concepts, e.g. <i>Put the thick blue square behind the empty jug.</i></li> <li>Re-tells longer stories in detail - 5 or more sentences</li> <li>Tracks an 8 word sentence</li> </ul>	<ul style="list-style-type: none"> <li>Continues to expand vocabulary comprehension</li> <li>Understands singular/plural</li> <li>Understands difference between past/present/future</li> <li>Answers final word analogies</li> <li>Identifies objects missing from scene</li> <li>Understands day/morning/ afternoon/night</li> <li>Makes comparisons of speed/weight</li> <li>Understands 1500 - 2000 words</li> </ul>	<ul style="list-style-type: none"> <li>Uses his/her/their</li> <li>More consistent use of plurals – irregular and regular</li> <li>Talks about pictures and story books</li> <li>Uses more sophisticated imaginative play</li> <li>Uses negatives and some modals, e.g. shouldn't/ won't/ can't</li> <li>Uses comparisons</li> <li>Makes inferences</li> <li>Develops colloquial expressions</li> <li>Uses How much? How? questions</li> <li>Uses 800 - 1500 words</li> <li>Uses more complex language structures</li> <li>Spontaneous utterances are mostly grammatically correct</li> </ul>	<ul style="list-style-type: none"> <li>Reduces omissions and substitutions</li> <li>Most consonants established</li> <li>More blends emerging in initial and final position</li> <li>Rate and rhythm normal</li> <li>Uses appropriate loudness level</li> <li>Uses appropriate intonation</li> <li>For accompanying chart, see Sounds of Speech pg 43.</li> </ul>	<ul style="list-style-type: none"> <li>Draws simple objects</li> <li>Understands time concepts, e.g. today/ tomorrow/ yesterday/ morning/ afternoon/ night</li> <li>Tells how many fingers and toes</li> <li>Associates an object with an occupation, e.g. thermometer/doctor</li> <li>Continues to develop imagination</li> <li>Concentration increases</li> <li>Copies simple picture line drawings</li> <li>Matches patterns</li> <li>Makes inferences</li> </ul>	<ul style="list-style-type: none"> <li>Increases confidence and self esteem</li> <li>Requests made from others, e.g. shop/retail assistant</li> <li>Uses intonation appropriately</li> <li>Initiates conversation</li> <li>Adapts to changes of topic</li> <li>Uses language for different communicative intent, e.g. obtaining information, giving information, expressing needs/ feelings, bargaining</li> </ul>



## Sounds of Speech\*



\* Typical average upper age limits of consonant production

### Acknowledgement

Source: Estabrooks, W. (1998) Cochlear Implant for Kids, © 1998 Warren Estabrooks and The Alexander Graham Bell Association of the Deaf, Inc. Reprinted by Permission.

## Integrated Scales of Development Tracking Form

This form is designed to be used with Integrated Scales of Development (Listen Learn and Talk - Cochlear 2005).

### How to use the ISD tracking form:

1. Complete the child's name and information in the space at the top of the form.
2. Record the child's progress by reference to the Integrated Scales of Development
3. The vertical column along the left side records the child's hearing age (HA), ie. The child's developmental progress from the time of first effective sound access – hearing aids fitting or cochlear implant switch-on.
4. The horizontal row across the top of the form shows the six key areas of development which will be followed:
  - Audition or Listening
  - Receptive Language: what does the child understand
  - Expressive Language: what does the child say
  - Speech: how does the child say it
  - Cognition: thinking processes.
  - Communication: social interaction with others (Pragmatics)
5. For each hearing age (HA) stage, there are two spaces.

**( + ) emerging skills or goals.** This means that the child is starting to develop skills at this stage but has not fully achieved them yet. These are goals that the parents and therapist are working on.

**( √ ) achieved skills or goals.** This means that the child is demonstrating the particular skills of that HA stage in their spontaneous language and interactions at home, with parents, various members of the family, and later with friends.

**For each of the six vertical columns. Mark the start date in ( + ) column, and later, the achieved date ( √ ) on the correct line.**

For a clearer visual view of the child's developmental progress, you can also fill in the spaces with the related colors, as shown in the top row. However, the dates of start, and achievement are the key information.

### 6. CA column

For each HA stage, record the child's CA (chronological age) in the CA column. This is important information: to be able to consistently observe the gap between the HA and CA. We expect this to reduce over time.

The general expectation for a child diagnosed with a hearing impairment under the age of 12 months and following an auditory habilitation program, is that they can achieve age appropriate listening and spoken language levels by school age. ...'provided they are in a stimulating language enriched environment where learning through listening is the focus.'

(Listen Learn and Talk p13, Auditory Habilitation Theory).

### Expectations would be different for those children who have additional problems.

Regular monitoring of the child's progress is recommended. This form will give a clear overview of progress in the 6 key areas of development, relative to hearing age (HA) and chronological age (CA).

# Integrated Scales of Development Tracking Form

NAME:

DOB:

S/O:

Date of Birth

Switch-On Date

HA months	CA	Listening	Receptive Language	Expressive Language	Speech	Cognition	Social Communication
43 - 48		√	√	√	√	√	√
		+	+	+	+	+	+
37 - 42		√	√	√	√	√	√
		+	+	+	+	+	+
31 - 36		√	√	√	√	√	√
		+	+	+	+	+	+
25 - 30		√	√	√	√	√	√
		+	+	+	+	+	+
19 - 24		√	√	√	√	√	√
		+	+	+	+	+	+
16 - 18		√	√	√	√	√	√
		+	+	+	+	+	+
13 - 15		√	√	√	√	√	√
		+	+	+	+	+	+
10 - 12		√	√	√	√	√	√
		+	+	+	+	+	+
7 - 9		√	√	√	√	√	√
		+	+	+	+	+	+
4 - 6		√	√	√	√	√	√
		+	+	+	+	+	+
0 - 3		√	√	√	√	√	√
		+	+	+	+	+	+





# Ali Yavar Jung National Institute of Speech and Hearing Disabilities (Divyangjan)

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