

Functional Auditory Performance Indicators (FAPI)

An Integrated Approach to Auditory Skill Development

FAPI Overview

The **Functional Auditory Performance Indicators (FAPI)** assesses the functional auditory skills of children with hearing loss. It can be used by parents, therapists, early interventionists, and teachers. The profile lists auditory skills in an integrated hierarchical order. There are seven categories.

- 1. Sound Awareness:** The child is aware that an auditory stimulus is present. The child may demonstrate awareness of loud environmental sounds, noisemakers, music, and/or speech.
- 2. Sound is Meaningful:** The child attends to sounds and associates a variety of auditory stimuli with their sound source. The stimuli include loud environmental sounds or noisemakers, music, vocalizations (non-true words) and speech stimuli. A child may simply attend to a sound, which is relatively easy. Or, the child may match the sound with its sound source - a more difficult skill.
- 3. Auditory Feedback:** The child monitors the sounds s/he hears. A child may demonstrate this skill by responding to sound when amplification is turned on, by vocalizing in order to monitor when the amplification is working, and/or by noticing his/her own vocalizations.
- 4. Localizing Sound Source:** The child searches for and/or finds the auditory stimulus. Searching is a prerequisite skill for localizing. Children with hearing in only one ear may not be able to localize to the sound source.
- 5. Auditory Discrimination:** The child distinguishes the characteristics of different sounds including environmental sounds, suprasegmental characteristics of speech (e.g., intensity, duration, pitch), non-true words, and true words.
- 6. Short-term Auditory Memory:** The child can hear, remember, repeat, and recall a sequence of numbers. This skill is developmentally appropriate for children who are two years of age and older. Numbers are used in order to isolate the skill – auditory memory – that is being tested.
- 7. Linguistic Auditory Processing:** The child utilizes auditory information to process language. This category measures the ways in which audition is used to sequence language, to learn and use morphemes, to learn and use syntactic information, and to understand spoken language.

A profile of a child's functional auditory skills is generated after administering all items on the profile. The seven categories are hierarchical. In addition, auditory performance indicators in each category are listed in hierarchical order. Please note that while this scale is hierarchical, it is appropriate for a child to be working on many skills at the same time. Approximately 4-8 skills can be addressed simultaneously. By working on multiple skills from different categories, the child will be learning an *integrated* approach to auditory skill development.

Performance is plotted on the profile sheet located at the beginning of the checklist. Based on careful review of this profile, goals for enhancing auditory skills can be determined.

Format of The Functional Auditory Performance Indicators

Each category has specific skills listed for that category. Some categories have one specific skill, others have a short list of skills. Furthermore, each skill can be assessed in a variety of conditions. These conditions provide a qualitative report on the child's success with a particular skill. The conditions are specific to each category. Some of these conditions are:

- ◆ responses to auditory stimuli that are paired with *visual cues* contrasted to responses to an *auditory stimulus alone*
- ◆ responses to auditory stimuli that are presented in *close proximity* to the child versus responses to stimuli that are *presented far away*
- ◆ responses to auditory stimuli that are given in a *noisy situation* versus responses to stimuli that are given in a *quiet room*.
- ◆ responses to auditory stimuli that are observed when the child is *prompted* to listen versus *spontaneous* responses to auditory stimuli

Reporting Functional Skills

The FAPI is administered over time and at any point in time, the FAPI can be scored. The FAPI is scored by measuring a child's performance on each skill in each category. The scores are calculated and then transferred to the profile page that is found at the beginning of the test protocol. The scored profile provides the interventionist or therapist with information that identifies a child's unique strengths and needs. The profile is used to create goals for a child's individualized program.

- ◆ There are seven categories. Each category receives a percentage score. This percentage score identifies the child's listening skills for the items in that category. When the score in a category is in the "acquired" range (80%-100%), the child has mastered the skills for that category.
- ◆ It is important to identify the conditions for each skill that make listening easier for the child and the conditions that make listening more challenging. Easier listening conditions include auditory stimuli paired with visual cues, quiet listening conditions, stimuli that are presented close to the child, and prompted responses. More difficult listening conditions include; auditory-only stimuli, distance hearing, listening in noisy situations, and spontaneous responses. It is appropriate to work on several skills in each category until the child can listen in both easy and difficult listening conditions.
- ◆ Notice the child's strengths. Which categories have the highest score? Which skills within a category has the child acquired? Skills that are "in process" are also strengths.
- ◆ The results of the FAPI are used to identify goals for intervention, for therapy, and/or for classroom instruction. The percentage scores in each category and the weighted scores for each skill identify skills that need improvement. All items in the "not present" and "emerging" categories need improvement. It is the intent of the scale to identify and work on several skills at the same time.

Procedure for Administration and Scoring

1. Each skill can be assessed in a variety of ways. Including direct observation of a child's response to specific stimuli and/or parent report. Each skill is evaluated according to the specific conditions noted on the form. There is a section for "Observations & Comments" that can be used to enter information about the child's performance.

2. A four-tiered scoring paradigm has been created. The skill is ranked by the person administering the checklist by indicating the level of attainment (NP, E, P, A) for each skill. The level of attainment is determined by these criteria:

Level of Skill Attainment	Corresponding Occurrence	Value Given
a. The skill is not present	(NP) = 0-10% occurrence	(Score value = 0)
b. The skill is emerging	(E) = 11-35% occurrence	(Score value = 1)
c. The skill is in process	(P) = 36-79% occurrence	(Score value = 2)
d. The skill is acquired	(A) = 80-100% occurrence	(Score value = 3)

3. In the scoring column, compute the score for each skill. Do this by multiplying each skill by a factor of 1, 2, or 3, as indicated. If the skill is rated between 0 and 10%, it is considered "not present" and should be scored as "zero" (0).
4. Compute the score for a category by adding the weighted scores for all skills in that category. Compute the percentage for that category.
5. Transfer the scores for each category to the profile at the bottom of the first Performance Profile page.

Sample Scoring

Categories of Auditory Development	Auditory Performance Indicators	Scoring <i>N=0-10%, E=11-35%, P=36-79%, A=80-100%</i>	Observations & Comments
Sound Awareness	responds to loud environmental sounds (vacuum) or noisemakers (drum, bell) <u>A</u> with visual cues <u>A</u> auditory only <u>A</u> close (3') <u>P</u> far (10') <u>A</u> in quiet <u>E</u> noise <u>A</u> prompted <u>P</u> spontaneous	$\frac{0}{0}$ not present = 0 $\frac{1}{1}$ emerging x 1 = 1 $\frac{2}{2}$ in process x 2 = 4 $\frac{5}{5}$ acquired x 3 = 15 Skill Score <u>20</u>	
	responds to music <u>A</u> with visual cues <u>A</u> auditory only <u>A</u> close (3') <u>P</u> far (10') <u>A</u> in quiet <u>E</u> noise <u>A</u> prompted <u>A</u> spontaneous	$\frac{0}{0}$ not present = 0 $\frac{1}{1}$ emerging x 1 = 1 $\frac{2}{2}$ in process x 2 = 4 $\frac{5}{5}$ acquired x 3 = 15 Skill Score <u>20</u>	
	responds to speech <u>A</u> with visual cues <u>A</u> auditory only <u>A</u> close (3') <u>A</u> far (10') <u>A</u> in quiet <u>A</u> noise <u>A</u> prompted <u>A</u> spontaneous	$\frac{0}{0}$ not present = 0 $\frac{3}{3}$ emerging x 1 = 3 $\frac{0}{0}$ in process x 2 = 0 $\frac{5}{5}$ acquired x 3 = 15 Skill Score <u>18</u>	
		Category Score: 58/72 <u>80.5%</u>	

- ◆ The category is "Sound Awareness". There are 3 skills in this category. The skills are:
 1. responds to loud environmental sounds or noisemakers
 2. responds to music
 3. responds to speech

- ◆ The first skill is "responds to loud environmental sounds or noisemakers". The child demonstrates different levels of competence in eight different conditions:
 - ◆ 5 conditions are "acquired"
 - ◆ 2 conditions are "in process"
 - ◆ 1 condition is "emerging"

- ◆ The weighted scores for the specific conditions are calculated. The scores are determined as follows:
 - ◆ 5 conditions are "acquired". An acquired score receives a weight of 3 points.
5 skills x weighted score of 3 = 15
 - ◆ 2 conditions are "in process". An in process score receives a weight of 2 points.
2 skills x weighted score of 2 = 4
 - ◆ 1 condition is "emerging". An emerging score receives a weight of 1 point.
1 skill x weighted score of 1 = 1

- ◆ The weighted scores are added together.
15 + 4 + 1 = 20.
The child's score for this specific skill, "responds to loud environmental sounds or noisemakers", is 20 points.

- ◆ The same procedure is used to obtain a skill score for the next 2 skills, "responds to speech" and "responds to music". The child received scores for the 3 skills in this category.
 - ◆ responds to loud environmental sounds or noisemakers = 20 points
 - ◆ responds to music = 20 points
 - ◆ responds to speech = 18 points

The points for the 3 skills are added together to obtain a total score of 58 points for the category "Sound Awareness". There is a possible score of 72 points. By dividing the earned score (58 points) by the total number of possible points (72 points) the child receives a percentage score of 80.5% for this category.

Functional Auditory Performance Indicators: An Integrated Approach to Auditory Skill Development

Performance Profile

Name Luke DOB 3 Yrs. Old Date _____ Examiner _____ 3 Mos. Post Implant

Sound Awareness	Sound is Meaningful	Auditory Feedback	Localizing Sound Source	Auditory Discrimination	Short-term Auditory Memory	Linguistic Auditory Processing
1. Responds to loud environmental sounds or noisemakers. 2. Responds to music. 3. Responds to speech.	1. Attends to loud environmental sounds or noisemakers. 2. Attends to music. 3. Attends to vocalizations. 4. Attends to discourse. 5. Identifies loud environmental sounds or noisemakers with their source. 6. Identifies speaker making vocalizations. 7. Identifies speaker using discourse.	1. Vocalizations increase when amplification is on 2. Notices own vocal productions. 3. Monitors status of amplification by making noises or vocalizing.	1. Searches for loud environmental sounds or noisemakers. 2. Searches for source of music. 3. Searches for source of vocalizations. 4. Searches for source of discourse. 5. Localizes to loud environmental sounds or noisemakers. 6. Localizes to source of music. 7. Localizes to source of speaker making vocalizations. 8. Localizes to source of speaker using discourse.	1. Discrimination of non-linguistic information: <ul style="list-style-type: none"> • Loud vs soft • Fast vs slow • Continuous vs abrupt • High vs low pitch • Meaningful environmental sounds 2. Discrimination of vocal utterances – non-true word productions: <ul style="list-style-type: none"> • Vowels • Number of syllables 3. Communicative intent of the utterance. 4. Discrimination of oral utterances – true word productions: <ul style="list-style-type: none"> • Onomatopoeia sounds • Child's own name • Familiar commands • Number of syllables or words in utterance • Familiar words based on vowel differences • Familiar words based on consonant differences • Familiar words based on syllable differences 	1. Memory <ul style="list-style-type: none"> • 1-2 digits • 3-4 digits • 5-6 digits 	1. Sequencing 2. Closure 3. Syntactic and morphologic analysis. 4. Suprasegmental analysis using auditory feedback. 5. Auditory comprehension.
Category Score: <u>80.5%</u>	Category Score: <u>39%</u>	Category Score: <u>42%</u>	Category Score: <u>28%</u>	Category Score: <u>9%</u>	Category Score: <u>0%</u>	Category Score: <u>.02%</u>
Acquired						
In Process						
Emerging						
Not Present						

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

(Shade in appropriate box for each category after determining the percentage *for that category*)

Functional Auditory Performance Indicators: An Integrated Approach to Auditory Skill Development

Performance Profile

Name _____ DOB _____ Date _____ Examiner _____

	Sound Awareness	Sound is Meaningful	Auditory Feedback	Localizing Sound Source	Auditory Discrimination	Short-term Auditory Memory	Linguistic Auditory Processing
	1. Responds to loud environmental sounds or noisemakers. 2. Responds to music. 3. Responds to speech.	1. Attends to loud environmental sounds or noisemakers. 2. Attends to music. 3. Attends to vocalizations. 4. Attends to discourse. 5. Identifies loud environmental sounds or noisemakers with their source. 6. Identifies speaker making vocalizations. 7. Identifies speaker using discourse.	4. Vocalizations increase when amplification is on 5. Notices own vocal productions. 6. Monitors status of amplification by making noises or vocalizing.	1. Searches for loud environmental sounds or noisemakers. 2. Searches for source of music. 3. Searches for source of vocalizations. 4. Searches for source of discourse. 5. Localizes to loud environmental sounds or noisemakers. 6. Localizes to source of music. 7. Localizes to source of speaker making vocalizations. 8. Localizes to source of speaker using discourse.	1. Discrimination of non-linguistic information: <ul style="list-style-type: none"> • Loud vs soft • Fast vs slow • Continuous vs abrupt • High vs low pitch • Meaningful environmental sounds • Intent of utterance based on suprasegmental features • Mom's vs dad's voice • Male vs female child's voice 2. Discrimination of vocal utterances – non-true word productions: <ul style="list-style-type: none"> • Vowels • Number of syllables 3. Communicative intent of the utterance. 4. Discrimination of oral utterances – true word productions: <ul style="list-style-type: none"> • Onomatopoeia sounds • Child's own name • Familiar commands • Number of syllables or words in utterance • Familiar words based on vowel differences • Familiar words based on consonant differences • Familiar words based on syllable differences 	2. Memory <ul style="list-style-type: none"> • 1-2 digits • 3-4 digits • 5-6 digits 	1. Sequencing 2. Closure 3. Syntactic and morphologic analysis. 4. Suprasegmental analysis using auditory feedback. 5. Auditory comprehension.
	Category Score: _____%	Category Score: _____%	Category Score: _____%	Category Score: _____%	Category Score: _____%	Category Score: _____%	Category Score: _____%
100%				Acquired			
90%				In Process			
80%				Emerging			
70%				Not Present			
60%							
50%							
40%							
30%							
20%							
10%							
0%							

(Shade in appropriate box for each category after determining the percentage *for that category*)

Functional Auditory Performance Indicators (FAPI)

An Integrated Approach to Auditory Skill Development

Name _____ DOB _____

Type of amplification _____ Usage: consistent inconsistent

Examiner _____

N = not present (0-10%) E = emerging (11-35%) P = in process (36-79%) A = acquired (80-100%)

Categories of Auditory Development	Auditory Performance Indicators	Scoring <i>N=0-10%, E=11-35%, P=36-79%, A=80-100%</i>	Observations & Comments
Sound Awareness	<p>responds to loud environmental sounds (vacuum) or noisemakers (drum, bell)</p> <p>___ with visual cues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ prompted ___ spontaneous</p> <p>responds to music</p> <p>___ with visual cues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ prompted ___ spontaneous</p> <p>responds to speech</p> <p>___ with visual cues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ prompted ___ spontaneous</p>	<p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>Category Score: ___/72 ___%</p>	
Sound is Meaningful	<p>attends (e.g., pauses & listens) to loud environmental sounds (vacuum) or noisemakers (drum, bell)</p> <p>___ with visual cues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ prompted ___ spontaneous ___ brief ___ sustained</p> <p>attends (e.g., pauses & listens) to music</p> <p>___ with visual cues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ prompted ___ spontaneous ___ brief ___ sustained</p> <p>attends (e.g., pauses & listens) to vocalizations (e.g., exaggerated suprasegmentals)</p> <p>___ with visual cues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ prompted ___ spontaneous ___ brief ___ sustained</p> <p>attends (e.g., pauses & listens) to discourse (e.g., connected speech)</p> <p>___ with visual cues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ prompted ___ spontaneous ___ brief ___ sustained</p> <p>identifies loud environmental sounds (vacuum) or noisemakers (drum, bell) with their source</p> <p>___ with visual cues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ prompted ___ spontaneous</p>	<p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p>	

Categories of Auditory Development	Auditory Performance Indicators	Scoring <i>N=0-10%, E=11-35%, P=36-79%, A=80-100%</i>	Observations & Comments
Sound is Meaningful	<p>identifies speaker who is producing vocalizations</p> <p>___ with visual cues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ prompted ___ spontaneous</p> <p>identifies speaker who is producing discourse</p> <p>___ with visual cues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ prompted ___ spontaneous</p>	<p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>Category Score: ___/168 ___%</p>	
Auditory Feedback	<p>vocalizations increase when amplification is turned on</p> <p>___ in quiet ___ noise</p> <p>notices own vocal productions</p> <p>___ in quiet ___ noise ___ prompted ___ spontaneous</p> <p>monitors status of amplification by making noises or vocalizing</p> <p>___ in quiet ___ noise</p>	<p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>Category Score: ___/24 ___%</p>	
Localizing Sound Source	<p>searches for loud environmental sounds (vacuum, telephone) or noisemakers (drum, bell)</p> <p>___ close (3') ___ far (10') ___ another room ___ inside ___ outside ___ in quiet ___ noise ___ prompted ___ spontaneous</p> <p>searches for source of music</p> <p>___ close (3') ___ far (10') ___ another room ___ inside ___ outside ___ in quiet ___ noise ___ prompted ___ spontaneous</p> <p>searches for source of vocalizations (e.g., exaggerated suprasegmentals)</p> <p>___ close (3') ___ far (10') ___ another room ___ inside ___ outside ___ in quiet ___ noise ___ prompted ___ spontaneous</p> <p>searches for source of discourse (e.g., connected speech)</p> <p>___ close (3') ___ far (10') ___ another room ___ inside ___ outside ___ in quiet ___ noise ___ prompted ___ spontaneous</p> <p>localizes to loud environmental sounds (vacuum, telephone) or noisemakers (drum, bell)</p> <p>___ close (3') ___ far (10') ___ another room ___ inside ___ outside ___ in quiet ___ noise ___ prompted ___ spontaneous ___ various levels ___ various angles</p>	<p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p>	<p>AUTHORS' NOTE: Some localization skills may not be applicable to children who are aided monaurally, who have unilateral hearing loss, or who have monaural cochlear implants.</p>

Categories of Auditory Development	Auditory Performance Indicators	Scoring <i>N=0-10%, E=11-35%, P=36-79%, A=80-100%</i>	Observations & Comments
Localizing Sound Source	<p>localizes to source of music <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> another room <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> prompted <input type="checkbox"/> spontaneous <input type="checkbox"/> various levels <input type="checkbox"/> various angles</p> <p>localizes to source of speaker making vocalizations (e.g., exaggerated suprasegmentals) <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> another room <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> prompted <input type="checkbox"/> spontaneous <input type="checkbox"/> various levels <input type="checkbox"/> various angles</p> <p>localizes to source of speaker using discourse <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> another room <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> prompted <input type="checkbox"/> spontaneous <input type="checkbox"/> various levels <input type="checkbox"/> various angles</p>	<p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = <input type="checkbox"/> <input type="checkbox"/> in process x 2 = <input type="checkbox"/> <input type="checkbox"/> acquired x 3 = <input type="checkbox"/> Skill Score <input type="checkbox"/></p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = <input type="checkbox"/> <input type="checkbox"/> in process x 2 = <input type="checkbox"/> <input type="checkbox"/> acquired x 3 = <input type="checkbox"/> Skill Score <input type="checkbox"/></p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = <input type="checkbox"/> <input type="checkbox"/> in process x 2 = <input type="checkbox"/> <input type="checkbox"/> acquired x 3 = <input type="checkbox"/> Skill Score <input type="checkbox"/></p> <p>Category Score: <input type="checkbox"/>/240 <input type="checkbox"/>%</p>	
Auditory Discrimination	<p><u>Discrimination of non-linguistic information:</u></p> <p>loud vs soft sounds <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>fast vs slow <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>continuous vs abrupt <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>high vs low pitch <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>meaningful environmental sounds <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>intent of utterance based on supra- segmental features (e.g. angry voice vs happy voice) <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>mom's vs dad's voice <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>male vs female child's voice <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p>	<p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = <input type="checkbox"/> <input type="checkbox"/> in process x 2 = <input type="checkbox"/> <input type="checkbox"/> acquired x 3 = <input type="checkbox"/> Skill Score <input type="checkbox"/></p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = <input type="checkbox"/> <input type="checkbox"/> in process x 2 = <input type="checkbox"/> <input type="checkbox"/> acquired x 3 = <input type="checkbox"/> Skill Score <input type="checkbox"/></p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = <input type="checkbox"/> <input type="checkbox"/> in process x 2 = <input type="checkbox"/> <input type="checkbox"/> acquired x 3 = <input type="checkbox"/> Skill Score <input type="checkbox"/></p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = <input type="checkbox"/> <input type="checkbox"/> in process x 2 = <input type="checkbox"/> <input type="checkbox"/> acquired x 3 = <input type="checkbox"/> Skill Score <input type="checkbox"/></p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = <input type="checkbox"/> <input type="checkbox"/> in process x 2 = <input type="checkbox"/> <input type="checkbox"/> acquired x 3 = <input type="checkbox"/> Skill Score <input type="checkbox"/></p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = <input type="checkbox"/> <input type="checkbox"/> in process x 2 = <input type="checkbox"/> <input type="checkbox"/> acquired x 3 = <input type="checkbox"/> Skill Score <input type="checkbox"/></p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = <input type="checkbox"/> <input type="checkbox"/> in process x 2 = <input type="checkbox"/> <input type="checkbox"/> acquired x 3 = <input type="checkbox"/> Skill Score <input type="checkbox"/></p>	

Categories of Auditory Development	Auditory Performance Indicators	Scoring <i>N=0-10%, E=11-35%, P=36-79%, A=80-100%</i>	Observations & Comments
Auditory Discrimination	<p><u>Discrimination of oral utterances - non-true word productions:</u></p> <p>vowels: <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>number of syllables: <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p><u>Discrimination of communicative intent of the utterance (e.g. statement, question, exclamation):</u></p> <p><input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p><u>Discrimination of oral utterances – true word productions:</u></p> <p>onomatopoeia sounds (e.g., ding-dong, moo, choo-choo): <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>child's own name: <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>familiar commands (e.g., stop, come here, wait): <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>number of syllables or words in utterance (one vs two vs three): <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>familiar words based on vowel differences (cat/cut, pat/pet, dig/dog): <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>familiar words based on consonant differences (cat/hat, dad/mad, bye/ my): <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p> <p>familiar words based on syllable differences (mommy/tummy) : <input type="checkbox"/> close (3') <input type="checkbox"/> far (10') <input type="checkbox"/> inside <input type="checkbox"/> outside <input type="checkbox"/> in quiet <input type="checkbox"/> noise <input type="checkbox"/> closed set <input type="checkbox"/> open set</p>	<p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = ___ <input type="checkbox"/> in process x 2 = ___ <input type="checkbox"/> acquired x 3 = ___ Skill Score ___</p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = ___ <input type="checkbox"/> in process x 2 = ___ <input type="checkbox"/> acquired x 3 = ___ Skill Score ___</p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = ___ <input type="checkbox"/> in process x 2 = ___ <input type="checkbox"/> acquired x 3 = ___ Skill Score ___</p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = ___ <input type="checkbox"/> in process x 2 = ___ <input type="checkbox"/> acquired x 3 = ___ Skill Score ___</p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = ___ <input type="checkbox"/> in process x 2 = ___ <input type="checkbox"/> acquired x 3 = ___ Skill Score ___</p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = ___ <input type="checkbox"/> in process x 2 = ___ <input type="checkbox"/> acquired x 3 = ___ Skill Score ___</p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = ___ <input type="checkbox"/> in process x 2 = ___ <input type="checkbox"/> acquired x 3 = ___ Skill Score ___</p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = ___ <input type="checkbox"/> in process x 2 = ___ <input type="checkbox"/> acquired x 3 = ___ Skill Score ___</p> <p><input type="checkbox"/> not present = 0 <input type="checkbox"/> emerging x 1 = ___ <input type="checkbox"/> in process x 2 = ___ <input type="checkbox"/> acquired x 3 = ___ Skill Score ___</p> <p>Category Score: ___/432 ___%</p>	

Categories of Auditory Development	Auditory Performance Indicators	Scoring <i>N=0-10%, E=11-35%, P=36-79%, A=80-100%</i>	Observations & Comments
Short-term Auditory Memory	<p>Memory: Auditory recall of digits demonstrated by a response within moments of the stimulus.</p> <p>Check mode used:</p> <ul style="list-style-type: none"> <input type="checkbox"/> spoken response <input type="checkbox"/> signed response, with or without speech <input type="checkbox"/> pointing to picture or object <input type="checkbox"/> action demonstrating understanding (writing, securing object) <p>1-2 digits</p> <p>___ with visual clues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise</p> <p>3-4 digits</p> <p>___ with visual clues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise</p> <p>5-6 digits</p> <p>___ with visual clues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise</p> <p>Using numerals may not be developmentally appropriate for very young children. Auditory memory may also be assessed by imitating a series of syllable patterns (e.g. oo / ah) or animal sounds. (e.g., moo / baaa / quack / ruf)</p>	<p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>Category Score: ___/54 ___%</p>	
Linguistic Auditory Processing	<p>Linguistic Auditory Processing: Higher level auditory skills demonstrating the child's ability to process linguistic information.</p> <p><i>Note: Simultaneous activity refers to processing auditory information while engaged in another activity, (e.g., listening while taking notes, listening while coloring), while single activity refers to processing only one event (e.g., the auditory information).</i></p> <p>Sequencing: Correct sequential order of the auditory linguistic stimuli heard.</p> <p>Check type of auditory stimuli used and indicate # of critical elements for each:</p> <ul style="list-style-type: none"> <input type="checkbox"/> digits/word (examples: child repeats, orders pictures, points) ___ 2 ___ 3 ___ 4 ___ 5 <input type="checkbox"/> short phrases (example: go to store - buy bread - walk home - make sandwich) ___ 2 ___ 3 ___ 4 ___ 5 <input type="checkbox"/> sentences (example: It is snowing outside. Get your coat from the closet. Let's go outside. Let's build a snowman. ___ 2 ___ 3 ___ 4 ___ 5 <p>Check mode used:</p> <ul style="list-style-type: none"> <input type="checkbox"/> spoken response <input type="checkbox"/> signed response with speech <input type="checkbox"/> signed response without speech <input type="checkbox"/> pointing to picture, object, digit or word <input type="checkbox"/> action demonstrating understanding (writing, securing object) <p>___ with visual clues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ familiar vocabulary ___ unfamiliar vocabulary ___ single activity ___ simultaneous activities</p>	<p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p>	

Categories of Auditory Development	Auditory Performance Indicators	Scoring <i>N=0-10%, E=11-35%, P=36-79%, A=80-100%</i>	Observations & Comments
Linguistic Auditory Processing	<p>Closure: Child demonstrates understanding of a whole word, phrase, or sentence when part is missing.</p> <p>Check type of auditory stimuli used:</p> <p><input type="checkbox"/> Phrases examples: Thin sharp _____ (pencil, knife).; Big round _____ (ball, sun).</p> <p><input type="checkbox"/> Sentences example: I went to buy bread at the _____ (store, market).</p> <p>Check mode used:</p> <p><input type="checkbox"/> spoken response <input type="checkbox"/> signed response with speech <input type="checkbox"/> signed response without speech <input type="checkbox"/> pointing to picture, object, or word <input type="checkbox"/> action demonstrating understanding (writing, securing object)</p> <p>___ with visual clues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ familiar vocabulary ___ unfamiliar vocabulary ___ single activity ___ simultaneous activities</p> <p>Syntactic and Morphologic Analysis: Integrates rules of syntax when auditory information is presented and applies rules of expressive language correctly</p> <p>Auditory stimuli: sentences</p> <p>Examples:</p> <ul style="list-style-type: none"> ◆ The boy plays<u> </u>outside. (familiar vocabulary) ◆ The boy playe<u>d</u> outside. ◆ The boy is playi<u>ng</u> outside. ◆ He anticipat<u>e</u>s the school bus coming. (unfamiliar vocabulary) ◆ He anticipat<u>ed</u> the school bus coming. ◆ He was anticipat<u>ing</u> the school bus coming. <p>Check mode used:</p> <p><input type="checkbox"/> spoken response <input type="checkbox"/> signed response with speech <input type="checkbox"/> signed response without speech <input type="checkbox"/> pointing to picture or word <input type="checkbox"/> action demonstrating understanding (writing, securing object)</p> <p>___ with visual clues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ familiar vocabulary ___ unfamiliar vocabulary ___ single activity ___ simultaneous activities</p>	<p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p>	

Categories of Auditory Development	Auditory Performance Indicators	Scoring <i>N=0-10%, E=11-35%, P=36-79%, A=80-100%</i>	Observations & Comments
Linguistic Auditory Processing	<p>Suprasegmental Analysis using Auditory Feedback: Correcting the rhythm, stress, and intonation patterns of speech using auditory feedback.</p> <p>Check type of auditory stimuli used:</p> <ul style="list-style-type: none"> <input type="checkbox"/> words example: tel e phone vs tel e phone <input type="checkbox"/> phrases example: Who are you? Who are you? Who are you? <input type="checkbox"/> sentences example I don't know where it is! I don't know where it is! I don't know where it is! <p>Check mode used:</p> <ul style="list-style-type: none"> <input type="checkbox"/> spoken response <input type="checkbox"/> signed response with speech <input type="checkbox"/> signed response without speech <input type="checkbox"/> pointing to picture or word <input type="checkbox"/> action demonstrating understanding (writing, securing object) <p>___ with visual clues ___ auditory only ___ close (3') ___ far (10') ___ in quiet ___ noise ___ familiar vocabulary ___ unfamiliar vocabulary ___ single activity ___ simultaneous activities</p> <p>Auditory Comprehension: Child understands and utilizes auditory information and his/her general knowledge of language to derive meaning in a variety of situations.</p> <p>auditory conversations (example: actively participates in auditory conversation)</p> <p>Check mode used:</p> <ul style="list-style-type: none"> <input type="checkbox"/> spoken response <input type="checkbox"/> signed response with speech <input type="checkbox"/> signed response without speech <input type="checkbox"/> action demonstrating understanding (writing, securing or manipulating object) <p>___ with visual clues ___ auditory only ___ in quiet ___ noise ___ familiar vocabulary ___ unfamiliar vocabulary ___ single activity ___ simultaneous activities</p> <p>electronic or recorded sound sources (example: understands messages from tape recorders, intercoms, message recorders, VCRs, film projectors)</p> <p>Check mode used:</p> <ul style="list-style-type: none"> <input type="checkbox"/> spoken response <input type="checkbox"/> signed response with speech <input type="checkbox"/> signed response without speech <input type="checkbox"/> manipulates picture or object <input type="checkbox"/> action demonstrating understanding (writing, securing object) <p>___ with visual clues ___ auditory only ___ in quiet ___ noise ___ familiar vocabulary ___ unfamiliar vocabulary ___ single activity ___ simultaneous activities</p>	<p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p>	

Categories of Auditory Development	Auditory Performance Indicators	Scoring <i>N=0-10%, E=11-35%, P=36-79%, A=80-100%</i>	Observations & Comments
Linguistic Auditory Processing	<p>phone conversations (example: conducts telephone conversations) Check mode used:</p> <ul style="list-style-type: none"> <input type="checkbox"/> spoken response <input type="checkbox"/> signed response with speech <input type="checkbox"/> signed response without speech <input type="checkbox"/> action demonstrating understanding (writing, securing object) <p>___ in quiet ___ noise ___ familiar vocabulary ___ unfamiliar vocabulary ___ single activity ___ simultaneous activities</p> <p>academic content (understands information in classroom setting) Check mode used:</p> <ul style="list-style-type: none"> <input type="checkbox"/> spoken response <input type="checkbox"/> signed response with speech <input type="checkbox"/> signed response without speech <input type="checkbox"/> action demonstrating understanding (writing, securing object) <p>___ with visual clues ___ auditory only ___ in quiet ___ noise ___ familiar vocabulary ___ unfamiliar vocabulary ___ single activity ___ simultaneous activities</p> <p>directions (listens for details utilizing memory and sequencing skills) Check mode used:</p> <ul style="list-style-type: none"> <input type="checkbox"/> spoken response <input type="checkbox"/> signed response with speech <input type="checkbox"/> signed response without speech <input type="checkbox"/> action demonstrating understanding (writing, securing object) <p>___ with visual clues ___ auditory only ___ in quiet ___ noise ___ familiar vocabulary ___ unfamiliar vocabulary ___ single activity ___ simultaneous activities</p>	<p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>___ not present = 0 ___ emerging x 1 = ___ ___ in process x 2 = ___ ___ acquired x 3 = ___ Skill Score ___</p> <p>Category Score: ___/234 ___%</p>	