Practice Exercise #2

Step 1: Get Familiar with Your Equipment

1. View **Pure Tone Video Tutorial Modules 5 – 7**.

2. Identify the power source (battery or adaptor cord).

3. Identify the headphones, cords and jacks and where they attach to the screening unit. Note visual indicators that help you align the components, especially ensuring that the left and right jacks are inserted correctly into the audiometer.

4. Identify the controls for:
   - Turning the equipment on and off.
   - Selecting the screening tones, including location of tone (left or right ear).
   - Adjusting the intensity or loudness of the tone as measured in decibels (dB).
   - Adjusting the frequency or "pitch" of a tone as measured in Hertz (Hz).
   - Selecting the type of tone, continuous/steady or intermittent (warble, frequency modulated, or pulse). Intermittent is recommended.

5. Identify the control for presenting the tone (stimulus button).

Step 2: Conduct Self-Listening Check

Complete all of the steps outlined below which you will also find included on the ***Pure Tone Screening Checklist*** at the end of this handout. The Self-Listening Check should be completed on each day before screening children to ensure equipment is working:

- ☐ Review condition of cords, jacks, and headband.
- ☐ Place headphones over own ears, turn equipment on, and set
  - tone location for right ear,
  - tone type to pulse, warble or frequency modulate,
  - intensity level to 10 or 20 dB (the quietest level your own ear can hear),
  - frequency to 2000 Hz.
- ☐ Push the tone presentation button, listening for any crackling sounds or the absence or distortion of the expected tone that would indicate an equipment problem.
- ☐ Repeat at 4000 Hz and 1000 Hz.
- ☐ Change tone location to left ear and repeat at 2000, 4000, and 1000 Hz.
- ☐ Change tone type to a continuous/steady state presentation and hold down the tone presentation button with one hand while moving

Step 3: Screen Other Adults

Using the ***Pure Tone Screening Checklist***, follow each step for "Conditioning" and "Complete Screening" on at least four other adults. It is strongly recommended that a pediatric audiologist or experienced Pure Tone screener assist you as you learn this process. Ask the person you are screening to remain still and quiet and as cooperative as possible. They should not attempt to pretend to be a child during this practice. Screen a variety of adults until you are confident in your skills and can easily recall the screening sequence. Use the forms below to record the results for each individual being screened.

Adult 1

- **Conduct Visual Inspection** (consult HCP/obtain medical clearance when necessary)
- **Condition** child to respond to tones at 60 and 40 dB levels
- **Screen** (Right Ear first, then Left Ear)

Child's Left Ear	Child's Right Ear
Conditioned response check 2000 Hz (60 dB) ____	**Conditioned response check** 2000 Hz (60 dB) ____
(20 dB) Screening	**(20 dB) Screening**
2000 Hz ____ ____ ____ ____	2000 Hz ____ ____ ____ ____
4000 Hz ____ ____ ____ ____	4000 Hz ____ ____ ____ ____
1000 Hz ____ ____ ____ ____	1000 Hz ____ ____ ____ ____
Overall Ear Result: ☐ Pass ☐ Not Pass	**Overall Ear Result:** ☐ Pass ☐ Not Pass

For each tone presented, document:
✓ ***Response*** *or*
– ***Non-response***
Maximum of 4 presentations per Hz level; 2 responses = Hz pass

2 responses** at **each Hz level** required for **Overall Ear Pass

Adult 2

- **Conduct Visual Inspection** (consult HCP/obtain medical clearance when necessary)
- **Condition** child to respond to tones at 60 and 40 dB levels
- **Screen** (Right Ear first, then Left Ear)

Child's Left Ear	Child's Right Ear
Conditioned response check 2000 Hz (60 dB) ____	**Conditioned response check** 2000 Hz (60 dB) ____
(20 dB) Screening	**(20 dB) Screening**
2000 Hz ____ ____ ____ ____	2000 Hz ____ ____ ____ ____
4000 Hz ____ ____ ____ ____	4000 Hz ____ ____ ____ ____
1000 Hz ____ ____ ____ ____	1000 Hz ____ ____ ____ ____
Overall Ear Result: ☐ Pass ☐ Not Pass	**Overall Ear Result:** ☐ Pass ☐ Not Pass

For each tone presented, document:
✓ ***Response*** *or*
– ***Non-response***
Maximum of 4 presentations per Hz level; 2 responses = Hz pass

2 responses** at **each Hz level** required for **Overall Ear Pass

Adult 3

- **Conduct Visual Inspection** (consult HCP/obtain medical clearance when necessary)
- **Condition** child to respond to tones at 60 and 40 dB levels
- **Screen** (Right Ear first, then Left Ear)

Child's Left Ear	Child's Right Ear
Conditioned response check 2000 Hz (60 dB) ____	**Conditioned response check** 2000 Hz (60 dB) ____
(20 dB) Screening	**(20 dB) Screening**
2000 Hz ____ ____ ____ ____	2000 Hz ____ ____ ____ ____
4000 Hz ____ ____ ____ ____	4000 Hz ____ ____ ____ ____
1000 Hz ____ ____ ____ ____	1000 Hz ____ ____ ____ ____
Overall Ear Result: ☐ Pass ☐ Not Pass	**Overall Ear Result:** ☐ Pass ☐ Not Pass

For each tone presented, document:
✓ ***Response*** *or*
– ***Non-response***
Maximum of 4 presentations per Hz level; 2 responses = Hz pass

2 responses** at **each Hz level** required for **Overall Ear Pass

Adult 4

- **Conduct Visual Inspection** (consult HCP/obtain medical clearance when necessary)
- **Condition** child to respond to tones at 60 and 40 dB levels
- **Screen** (Right Ear first, then Left Ear)

Child's Left Ear	Child's Right Ear
Conditioned response check 2000 Hz (60 dB) ____	**Conditioned response check** 2000 Hz (60 dB) ____
(20 dB) Screening	**(20 dB) Screening**
2000 Hz ____ ____ ____ ____	2000 Hz ____ ____ ____ ____
4000 Hz ____ ____ ____ ____	4000 Hz ____ ____ ____ ____
1000 Hz ____ ____ ____ ____	1000 Hz ____ ____ ____ ____
Overall Ear Result: ☐ Pass ☐ Not Pass	**Overall Ear Result:** ☐ Pass ☐ Not Pass

For each tone presented, document:
✓ ***Response*** *or*
– ***Non-response***
Maximum of 4 presentations per Hz level; 2 responses = Hz pass

2 responses** at **each Hz level** required for **Overall Ear Pass

Pure Tone Screening Skills Checklist

✓ Set-up

_____Appropriate, quiet environment selected.
_____Sound-level check completed to ensure noise level under 50 dB.
_____Documentation forms, pen, screening toys, and supplies to comply with universal precautions policy placed within easy reach.
_____Equipment and seating arranged so child will not view screener's hands directly, or via reflective surfaces, during screening.
_____Condition of cords, jacks, and headphones inspected during equipment assembly.
_____Headphones cleaned prior to Self-Listening Check and each child's screening process.

✓ Self-Listening Check of Equipment

Headphones placed over screener's ears and tone intensity set to 10 – 20 dB:
___Tone type set to pulse, warble, or frequency modulated and tones presented to Right ear while clarity of sound checked at 2000, 1000 and 4000 Hz. Sequence repeated for Left ear.
___Tone type set to steady state, tone presented continuously to Right ear while cords moved/manipulated to check for sound break, crackle or distortions. Repeated for Left ear.

✓ Child Preparation and Appraisal

_____Outer ear and ear canal inspected visually.
_____As playful, positive rapport established with child, appraisal made of developmental level to determine how to initiate Conditioning (with/without headphones, use of toys, etc.)
_____Individual(s) in the room instructed to minimize noise/distraction.

✓ Conditioning

_____Facing child, clear explanation provided throughout process.
_____Clean headphones placed snugly (Right ear/red, Left ear/blue).
_____Audiometer set to Right ear, 2000 Hz, 60 dB level--tone presented while child's hand manipulated to make desired response—sequence repeated until child understands "game."
_____Tone presented with child making desired response without assistance—sequence repeated at 60 dB, then 40 dB, varying time between presentations to assess reliability of responses.
_____Determination made of whether child can complete Pure Tone screening or is unable to respond consistently and will require an OAE screening instead.

✓ Screening and Documentation

_____Child repositioned so he/she cannot see screener.

Right ear:

_____Audiometer set to Right ear, 2000 Hz, reminder reference tone provided at 60 dB to check that child is attentive/responsive.
_____Audiometer set to 2000 Hz, 20 dB screening tones presented.
_____Audiometer set to 4000 Hz, 20 dB screening tones presented.
_____Audiometer set to 1000 Hz, 20 dB screening tones presented.

Left ear:

_____ Audiometer set to Left ear, 2000Hz, reminder reference tone provided at 60 dB to check that child is attentive/responsive.
_____Audiometer set to 2000 Hz, 20 dB screening tones presented.
_____Audiometer set to 4000 Hz, 20 dB screening tones presented.
_____Audiometer set to 1000 Hz, 20 dB screening tones presented.

_____Overall Right and Left ear results documented.
_____Overall outcome determined and follow-up step(s) identified.
_____Child rewarded for participation regardless of outcome.

Maximum of 4 presentations per Hz level;
2 responses = Hz pass

Responses documented on **Screening Form**:
✓ ***Response*** *or*
– ***Non-response***

2 ✓ Responses at **each Hz level** required for ***Overall Ear Pass***

If either ear does ***Not Pass*** **follow-up required**