

Lesson plan for the patient with a new hearing aid

Week	Games	Voices	Comments/Notes
1	* pEARl Crunch, in quiet * EARonaut, in quiet	Male Male	
2	* ShakespEARe * pEARl Crunch, in light noise	Male Female	
3	* EARonaut, in light noise * MountainEAR	Female Male	
4	* MountainEAR * FarmEAR in the Dell	Female Male	
5	* FarmEAR in the Dell * Treasure EARland	Female Male	
6	* Treasure EARland * pEARl Crunch, in moderate noise	Female All types	
7	* EARonaut, in moderate noise * ShakespEARe	All types All types	
8	* MountainEAR * FarmEAR in the Dell	Child Child	
9	* Treasure EARland * EARonaut, in high noise	Child All types	
10	* pEARl Crunch, in high noise * MountainEAR	All types All types	
11	* FarmEAR in the Dell * Treasure EARland	All types All types	
12	* pEARl Crunch, in high noise * Patient's choice	All types Patient's choice	

	Goals	Tips
Week 1	<p>Play pEARL Crunch at least 10 minutes twice this week with a male talker in quiet.</p> <p>Play EARonaut at least 10 minutes twice this week with a male talker in quiet.</p>	<p>“pEARL Crunch forces you to pay attention to those endings of words that add subtle meaning, such as the plural “s” on a word such as <i>boys</i> or the negative “n’t” in a word such as <i>can’t</i>. These endings are often hard to hear and easy to ignore.”</p> <p>“During every day listening, we tend to listen for the ‘meat’ of the word and not subtle nuances. For instance, we often do not distinguish between the word <i>smile</i> and <i>smiles</i>. pEARL Crunch forces you to pay attention to word endings. Think about it: There’s a big difference between the sentence, “I <i>can</i> pick you up from the airport” and “I <i>can’t</i> pick you up from the airport.”</p> <p>“Try playing a few rounds of EARonaut, first with your hearing aids turned on and then with your hearing aids turned off. You will likely find that you are much more relaxed and confident when you are playing with your hearing aids turned on. Hearing aids can reduce the ‘mental effort’ associated with listening with a hearing loss.”</p> <p>“Especially early in your training, it is easier if you try and remember where 3 or 4 pictures are when they are presented on the screen instead of attempting to memorize all of them.”</p>
Week 2	<p>Play ShakespEARe at least 10 minutes twice this week with a male talker.</p>	<p>“This game may help develop your ability to remember the details of a story. ShakespEARe exercises your ‘auditory memory’, which is the brain’s ability to hold in memory words and sentences that you have recently heard.”</p> <p>“Try playing a few rounds of ShakespEARe with your hearing aids turned on and then play a few rounds with your hearing aids turned off. You will likely find that you do much better with your hearing aids turned on. There are two reasons for the better performance: 1) You are hearing more of the words so you can better select the sentences in the correct order and 2) you</p>

	<p>Play pEARL Crunch at least 10 minutes twice this week with a female talker in light noise.</p>	<p>are using less ‘perceptual effort’ to recognize the words. As a result, your brain can concentrate more deeply on remembering the paragraph.</p> <p>“You can determine what is “light noise”. Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting four pearls for every necklace. Do not move the bar again but train at this noise level.”</p> <p>“Try to ignore the noise and pay attention to which picture matches the word you’ve just heard. This activity will develop your ‘auditory attention’, which is the brain’s ability to focus on one auditory stimulus and ignore other auditory stimuli that are irrelevant and distracting.”</p> <p>“Female voices are often harder to hear than male voices. Many times a new hearing aid will make female voices easier and more pleasant to hear. Try playing a few rounds with your hearing aids turned off and then play a few rounds with your hearing aids turned on. Do you notice a qualitative difference in how the voices sound?”</p>
Week 3	<p>Play EARonaut at least 10 minutes twice this week with a female talker in light noise.</p> <p>Play MountainEAR about 10 minutes twice this week with a male talker.</p>	<p>“Female voices are particularly difficult to hear in background noise, even when you have optimally-fitted hearing aids. Try playing a few rounds of EARonaut with the noise bar set to quiet. Over the next rounds of the game, gradually increase the level of background noise and try to determine the maximum amount of noise that can be present during the game and yet allow you still to hear the female voice. You might find that you are using a lot more ‘mental effort’ when you are listening in noise than when you are listening in quiet. This is a very natural phenomenon.”</p> <p>“This game may help you to recognize words quickly, which is important when you are listening to connected speech. The typical talker of English speaks between</p>

		<p>110 and 150 words per minute. This means that you must have good ‘auditory processing speed’ to understand speech, which is the brain’s ability to quickly process the meaning of words.”</p> <p>“This game may help you to listen more effectively in the presence of background noise because it forces you to pay attention to the target word and ignore competing speech.”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you perform, the more noise is introduced into the training task. The game is programmed to add more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p>
Week 4	Play MountainEAR at least 10 minutes twice this week with a female talker.	<p>“Listening to talkers in a noisy environment can take some adjusting when you have a new hearing aid. You might find that you are more aware of background sounds and that you are hearing some sounds that you had not noticed before. cLEAR auditory training will accelerate the adjustment phase.”</p> <p>“Hearing aids can help you to recognize words faster because your brain can allocate more mental resources to understanding the meaning of the word as opposed to simply trying to figure out what word your ears just heard. Try playing a few rounds with your hearing aid turned on and then play a few rounds with your hearing aids turned off. Do you notice a difference in your speed of responding? ”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to add more noise after you make consecutive correct answers and to subtract noise after you make consecutive incorrect answers.”</p>

	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with a male talker.</p>	<p>“cLEAR teaches you to recognize common words that occur frequently in everyday conversation. Over time, this kind of training will make listening easier for you.”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to add more noise after you make consecutive correct answers and to subtract noise after you make consecutive incorrect answers.”</p>
Week 5	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with a female talker.</p> <p>Play Treasure EARland at least 10 minutes twice this week with a male talker.</p>	<p>“You may find that some of the pictures are a little ambiguous and that it takes some thought to match the word that you hear with the pictures that you see. This ambiguity is intentional. Research has shown that when listening tasks which force the brain to focus on meaning and it requires the brain to think of different possibilities, learning occurs more quickly.”</p> <p>“Hearing aids often improve people’s confidence in their listening skills. Try playing a few rounds of the game with your hearing aids turned on and then play a few rounds with your hearing aids turned off. Do you notice a difference in how confident you feel about your responses? Do you bet more coins when the hearing aids are turned on?”</p> <p>“One purpose of Treasure EARland is to increase your confidence in your ability to recognize words. Research has shown that when you doubt your ability to hear words correctly, you actually don’t hear them as well as when you have high confidence in your ability. The mind becomes distracted by the doubt.”</p>
Week 6	<p>Play Treasure EARland at least 10 minutes twice this week with a female talker.</p>	<p>“This game may help you learn to recognize common, everyday words more easily. This is important because during everyday conversations, we tend to speak and hear many of the same words over and over again. For example during a typical day, you are likely to hear someone say the</p>

	<p>words <i>girl</i>, <i>boy</i>, <i>table</i>, and <i>chair</i>. These are all examples of ‘frequently spoken words’.”</p> <p>“Female voices are often harder to hear than male voices. Many times a new hearing aid will make female voices easier to understand and more pleasant to hear. Try playing a few rounds with your hearing aids turned off and then play a few rounds with your hearing aids turned on. Do you notice a qualitative difference in how the voices sound when listening with the aids versus without the aids?</p> <p>“Try playing a few rounds of the game with your hearing aids turned off and then a few rounds with your hearing aids turned on. You will likely find that the different talkers are much more distracting to your performance when your hearing aids are turned off than when they are turned on. One advantage of using hearing aids is that they allow you to better acclimate to the speech of ‘multiple talkers’.”</p> <p>“Even though listening to all types of talkers is more difficult than listening to a single type of talker, such as a male voice, research has shown that training with all types mixed together leads to faster learning and to better generalization into everyday listening than does training with a single talker type.”</p> <p>“You can determine what is “moderate noise”. Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting between three and four pearls for every necklace. Do not move the bar again but train at this noise level.”</p>
Week 7	<p>Play pEARL Crunch at least 10 minutes twice this week with all types of talkers in moderate noise.</p> <p>Play EARonaut at least 10 minutes twice this week with all types of talkers in moderate noise.</p> <p>“You can determine what is ‘moderate’ noise. Start by setting the noise bar to its midway setting. If this makes it too difficult to hear the words, decrease the noise where you can hear the talkers, but you are still aware of noise. If in the midway setting, you can still easily hear the talkers,</p>

	<p>Play ShakespEARE at least 10 minutes twice this week with all types of talkers.</p>	<p>adjust the noise to be louder. During this process, you will not only exercise your ‘auditory attention’, or the brain’s ability to focus on a single speech stimulus, but you will also develop an awareness of the levels of noise that you can tolerate. This awareness will be helpful when you have to assess whether you will have to make accommodations for a particular setting, such as asking for a quiet section of a noisy restaurant.”</p> <p>“Try to ignore the sound of the talkers’ voices and to focus on the meaning of the sentences that they are speaking. This will develop your ability to understand spoken stories.”</p> <p>“At first you may have a hard time remembering which sentence came first, second, third, fourth and fifth. Try to get at least three sentences in the correct order for each paragraph.”</p>
Week 8	<p>Play MountainEAR at least 10 minutes twice this week with a child talker.</p> <p>Play FarmEAR in the Dell at least 10 minutes twice this week with a child talker.</p>	<p>“The voices of children are typically more difficult to understand than those of adults, especially for people who have hearing loss. This is because children’s voices have a high pitch and people with hearing loss often lose their ability to hear high pitches. In addition, some children do not enunciate their words as clearly as adults do, so they might sound as if they are mumbling.”</p> <p>“Background noise will make children’s voices especially difficult to understand. This is because children tend to talk more softly than adults and because noise is especially detrimental to high pitched voices.”</p> <p>“Children’s voices are often the most difficult types of voices to hear. Try playing a few rounds of the game with your hearing aids turned on and then play a few rounds with them turned off. Do you notice a difference in how the voices sound?”</p>
Week 9	<p>Play Treasure EARland at least 10 minutes twice this week with a child talker.</p>	<p>“This game is difficult, especially when listening to children’s voices. Pay attention</p>

	<p>Play EARonaut at least 10 minutes twice this week with all types of talker in varying noise.</p>	<p>to how confident you feel in your responses as you play this game with children's voices."</p> <p>"Even though this game is designed to develop your phoneme discrimination, which is your ability to decide whether two sounds are the same or different, it is also developing your ability to focus on the meaning of words and developing your sense of self-confidence in your listening abilities."</p> <p>"Try first playing the game with your hearing aids turned off. See how much noise you can tolerate and still feel as if you are performing well. Next, try playing the game with your hearing aids turned on. Are you able to tolerate more noise and still feel that you are performing as best you possibly can?"</p>
Week 10	<p>Play pEARl Crunch at least 10 minutes twice this week with all types of talkers in varying noise.</p> <p>Play MountainEAR at least 10 minutes twice this week with all types of talkers.</p>	<p>"Try first playing the game with your hearing aids turned off. See how much noise you can tolerate and still feel as if you are performing well. Next, try playing the game with your hearing aids turned on. Are you able to tolerate more noise and still feel that you are performing as best you can?"</p> <p>"If you feel that the training is getting too hard, go ahead and turn down the noise with the noise bar. If you feel that the training is getting too easy, turn up the noise."</p> <p>"You may not realize it, but you will likely be just a little bit slower in playing this game now that you are playing with many types of voices. The reason for this is that when you listen to multiple talker types, the brain has to use more 'mental effort' to process the meaning of words than when you listen to the same talker type speak the words. As a result of increased mental effort, the brain has to take more time to</p>

		process meaning, and this will slow down your response time.”
Week 11	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with all types of talkers.</p> <p>Play Treasure EARland at least 10 minutes twice this week with all types of talkers.</p>	<p>“Training with all types of talkers is the most difficult training task. However, research shows that training with a mix of talker types is most effective in training the brain to recognize common, everyday words.”</p> <p>“Playing with all types of talkers is more effortful than playing with a single type of talker. Try playing a few rounds with your hearing aids turned off and then play a few rounds with your hearing aids turned on. Do you feel more relaxed when you are playing with your hearing aids turned on? One goal of Treasure EARland is to reduce the amount of mental effort you need to recognize speech.”</p>
Week 12	<p>Play pEARl Crunch at least 10 minutes twice this week with all types of talkers in high noise.</p> <p>Your choice of game, at least 10 minutes twice this week.</p>	<p>“You can determine what is “high noise”. Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting only two or three pearls for every necklace. Do not move the bar again but train at this noise level.”</p> <p>“When background noise is present, often the first thing a person with hearing loss will notice is that word endings seem to ‘disappear’.” pEARl Crunch is designed to focus your attention specifically on these word endings and let you experiment with how your ears and brain respond to the presence of background noise.”</p> <p>“Even with hearing aids, listening in noise may always be difficult. However, do you feel like you have become better at listening in noise during the past twelve weeks?”</p>

Lesson plan for the patient who complains of listening in noise

Week	Games	Voices	Comments/Notes
1	* pEARl Crunch, in quiet, then moderate, then high noise	Male	
	* EARonaut, in quiet, then moderate, then high noise	Male	
2	* pEARl Crunch, in quiet, then moderate, then high noise	Female	
	* EARonaut, in quiet, then moderate, then high noise	Female	
3	* MountainEAR	Male	
	* MountainEAR	Female	
4	* pEARl Crunch, in quiet, then moderate, then high noise	Child	
	* EARonaut, in quiet, then moderate, then high noise	Child	
5	* MountainEAR	Child	
	* MountainEAR	All types	
6	* FarmEAR in the Dell	Male	
	* Treasure EARland	Male	
7	* FarmEAR in the Dell	Female	
	* Treasure EARland	Female	
8	* FarmEAR in the Dell	Child	
	* Treasure EARland	Child	
9	* pEARl Crunch, in quiet, then moderate, then high noise	All types	
	* EARonaut, in quiet, then moderate, then high noise	All types	
10	* FarmEAR in the Dell	All types	
	* Treasure EARland	All types	
11	* pEARl Crunch, in high noise	All types	
	* EARonaut, in high noise	All types	
12	* FarmEAR in the Dell	All types	
	* Treasure EARland	All types	

	Goals	Tips
Week 1	<p>Play pEARL Crunch for at least 10 minutes twice this week with a male talker in quiet, in moderate noise and then in high noise. You can determine what is “moderate” and “high” noise for you by experimenting with the setting of the noise bar at the bottom of the screen.</p> <p>Play EARonaut for at least 10 minutes twice this week with a male talker in quiet, in moderate and then in high noise. You can determine what is “moderate” and “high” noise for you by experimenting with the setting of the noise bar at the bottom of the screen.</p>	<p>“pEARL Crunch forces you to pay attention to those endings of words that add subtle meaning, such as the plural “s” in the word <i>boys</i> or the negative “n’t” in the word <i>can’t</i>. These endings are often hard to hear and easy to ignore.”</p> <p>“During every day listening, we tend to listen for the ‘meat’ of the word and not for subtle nuances. For instance, we often do not distinguish between the word <i>smile</i> and <i>smiles</i>. pEARL Crunch forces you to pay attention to word endings. Think about it: There’s a big difference between the sentences, “I <i>can</i> pick you up from the airport” and “I <i>can’t</i> pick you up from the airport.”</p> <p>“You will likely find that you are much more relaxed and confident when you are playing the game in quiet than when you are playing the game in high noise. When a person with hearing loss spends time listening in a noisy room, the person must expand an increased amount of ‘mental effort’ to understand the meaning of words than when listening in a quiet room. The reason why you may sometimes feel exhausted after having had to listen in a noisy room is that you have been forced to expend an inordinate amount of mental effort to understand what people were saying.”</p> <p>“Playing EARonaut develops your auditory memory, which is your ability to keep words in your mind as you listen.”</p>
Week 2	<p>Play pEARL Crunch for at least 10 minutes twice this week with a female talker in quiet, in moderate noise and then in high noise.</p>	<p>“Playing pEARL Crunch in increasing amounts of noise will develop your ‘auditory attention’, which is your brain’s ability to focus on one auditory stimulus and ignore other auditory stimuli that are irrelevant and distracting.”</p> <p>“When background noise is present, often the first thing a person with hearing loss will notice is that word endings seem to ‘disappear’.” pEARL Crunch is designed to focus your attention specifically on these</p>

		<p>“You may find that listening to female voices requires more ‘mental effort’ than listening to male voices, especially when there is background noise present. This means that you have to exert more energy to simply recognize a word. This is because noise tends to wipe out, or ‘mask’, high-pitched sounds more so than low-pitched sounds. Because women tend to speak in a higher pitched voice than do men, noise is especially detrimental for listening to their speech.”</p>
Week 4	<p>Play pEARL Crunch for at least 10 minutes twice this week with a child talker type in quiet, in moderate noise and then in high noise. You can determine what is “moderate” and “high” noise for you by experimenting with the setting of the noise bar at the bottom of the screen.</p> <p>Play EARonaut for at least 10 minutes twice this week with a child talker in quiet, in moderate and then in high noise. You can determine what is “moderate” and “high” noise for you by experimenting with the setting of the noise bar at the bottom of the screen.</p>	<p>“Children’s voices are often harder to hear than male voices. Many times the presence of background noise will make children’s voices even harder to hear and to understand. This is because children tend to have voices that are higher in pitch than those of men, and noise is especially detrimental to hearing the high pitches. When you have finished training with the child voices, you might play one more time, but with the male voices. You will likely find that you are able to increase the level of noise for your perceived ‘moderate’ and ‘high’ levels of noise.”</p> <p>“Children often do not enunciate their words as clearly as do adults because they have more immature control of their articulators. When you have finished training with the child voices, you might play one more time, but with the female voices. You will likely find that you are able to increase the level of noise for your perceived ‘moderate’ and ‘high’ levels of noise when listening to the female voices as compared to when listening to the child’s voices.”</p>
Week 5	Play MountainEAR at least 10 minutes twice this week with a child talker.	<p>“This game may help you listen more effectively in the presence of background noise because it forces you to pay attention to the target word and ignore competing speech.”</p> <p>“Try to ignore the background noise and pay attention to which picture matches the word you’ve just heard. This activity will develop ‘auditory attention’, which is the brain’s ability to focus on one auditory</p>

	<p>Play MountainEAR at least 10 minutes twice this week with all types of talkers.</p>	<p>stimulus and ignore other auditory stimuli that are irrelevant and distracting.”</p> <p>“Background noise will make children’s voices especially difficult to understand. This is because children tend to talk more softly than adults and because noise is especially detrimental to high pitched voices.”</p> <p>“You may not realize it, but you will likely be just a little bit slower in playing MountainEAR now that you are playing with many types of voices. The reason for this is that when you listen to multiple talker types, the brain has to use more ‘mental effort’ to process the meaning of words than when you listen to only males or only females speak the words. As a result of increased mental effort, the brain has to take more time to process meaning, and this will slow down your response time.”</p> <p>“Sometimes you might be confused and not be able to decide which picture matches the word that you just heard. This is okay. This game will require that you make quick decisions about what you heard and sometimes this is hard to do.”</p>
Week 6	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with a male talker.</p>	<p>“You may find that some of the pictures are a little ambiguous and that it takes some thought to match the word that you hear with the pictures that you see. This ambiguity is intentional. Research has shown that when listening tasks force the brain to focus on meaning and consider different possibilities, learning occurs more quickly.”</p> <p>“You are learning to recognize common words that occur frequently in everyday conversation. Over time, this kind of training will make listening easier for you.”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is</p>

	<p>Play Treasure EARland at least 10 minutes twice this week with a male talker.</p>	<p>programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p> <p>“One purpose of Treasure EARland is to increase your confidence in your abilities to recognize words. Research has shown that when you doubt your ability to hear words correctly, you actually don’t hear them as well as when you have high confidence in your ability. The mind becomes distracted by the doubt.”</p>
Week 7	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with a female talker.</p> <p>Play Treasure EARland at least 10 minutes twice this week with a female talker.</p>	<p>“As you play FarmEAR in the Dell, the noise in the background will gradually get louder. Try to ignore the noise and pay attention only to the word that names one of the four pictures. This game will also develop your auditory attention.”</p> <p>“Once you hear a word, try to pick the corresponding picture as quickly as you can. This will help you learn how to recognize words when people speak quickly and will develop your auditory processing speed.”</p> <p>“Even though Treasure EARland is designed to develop your phoneme discrimination, which is your ability to decide whether two sounds are the same or different, it is also developing your ability to focus on the meaning of words and developing your sense of self-confidence in your listening abilities.”</p>
Week 8	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with a child talker.</p> <p>Play Treasure EARland at least 10 minutes twice this week with a child talker.</p>	<p>“Sometimes the pictures in FarmEAR in the Dell may be a little confusing. This is okay. The goal is to make you think very hard about the meaning of the words.”</p> <p>“The noise will get louder as you learn how to pay more attention to hearing the words and learn to discriminate between words that sound similar. More noise is a good sign, not a bad sign.”</p>

<p>Week 9</p>	<p>Play pEARL Crunch for at least 10 minutes twice this week with all types of talkers in quiet, in moderate noise and then in high noise.</p> <p>Play EARonaut for at least 10 minutes twice this week with all types of talkers in light, moderate, and high levels of noise.</p>	<p>“Even though listening to all types of talkers is more difficult than listening to all male voices or to all female voices, research has shown that training with all types of talker voices mixed together leads to faster learning and to better generalization to everyday listening than does training with a single-talker type.”</p> <p>“Focus on what is ‘moderate’ noise for you. Start by setting the noise bar to its midway setting. If this makes it too difficult to hear the words, decrease the noise where you can hear the talkers, but you are still aware of noise. If in the midway setting, you can still easily hear the talkers, adjust the noise to be louder. During this process, you will not only exercise your ‘auditory attention’, or the brain’s ability to focus on a single speech stimulus, but you will also develop an awareness of the levels of noise that you can tolerate. This awareness will be helpful when you have to assess whether you will have to make accommodations for a particular setting, such as asking for a quiet section of a noisy restaurant.”</p>
<p>Week 10</p>	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with all types of talkers.</p> <p>Play Treasure EARland at least 10 minutes twice this week with all types of talkers.</p>	<p>“Training with all types of talkers is the most difficult training task. However, research shows that training with “multiple talkers” is most effective in training the brain to recognize common, everyday words”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the harder it gets to identify the words.”</p> <p>“A common complaint the people with hearing loss have when they are forced to listen in the presence of background noise is, <i>I can hear the talker but I can’t understand the words she is saying.</i> The speech may sound mumbled and unclear because noise tends to wipe out, or ‘mask’, those high-pitched consonants, such as the “s”, “f”, “sh”, “t”, and “p” sounds. Imagine if you had to read text that had only the vowel letters and none of the consonant letters. For some people with hearing loss,</p>

		this is analogous to listening in noise---they hear the vowel sounds but not the consonant sounds.”
Week 11	<p>Play pEARL Crunch at least 10 minutes twice this week with all types of talkers in high noise.</p> <p>Play EARonaut at least 10 minutes twice this week with all types of talkers in high noise.</p>	<p>“Start with a softer level of noise. Once you get a pEARL necklace fully “correct” (i.e., you make five right answers in a row with the same necklace), bump up the noise. Then, again, when you get a necklace fully correct, bump up the noise. See how much distance there is between where you first set the noise bar and your “high noise” level, which is the point on the noise bar where you reached a plateau in the level of noise you were able to tolerate before you started making incorrect responses.”</p> <p>“Start with a softer level of noise. With every other set of new planets, bump up the noise level by an amount of your choosing. After you play for 10 minutes, see how much distance there is between where you first set the noise bar and your “high noise” level, which is the point on the noise bar where you reached a plateau in the level of noise you were able to tolerate.”</p>
Week 12	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with all types of talkers.</p> <p>Play Treasure EARland at least 10 minutes twice this week with all types of talkers.</p>	<p>“Try to ignore the noise and pay attention to which picture matches the word you’ve just heard. This activity will develop your ‘auditory attention’, which is the brain’s ability to focus on one auditory stimulus and ignore other auditory stimuli that are irrelevant and distracting.”</p> <p>“Even with hearing aids, listening in noise may always be difficult. However, do you feel like you have become better at listening in noise during the past twelve weeks?”</p>

Lesson plan for the patient who has difficulty hearing the voices of women and children

Week	Games	Voices	Comments/Notes
1	* pEARl Crunch, adjust noise to preference * EARonaut, in quiet	Male Female	
2	* EARonaut, adjust noise to preference * pEARl Crunch, in quiet	Male Female	
3	* FarmEAR in the Dell * MountainEAR	Male Female	
4	* Treasure EARland * MountainEAR	Male Female	
5	* ShakespEARe * pEARl Crunch, adjust noise to preference	Female Female	
6	* EARonaut, in high noise * Treasure EARland	Female Female	
7	* MountainEAR * EARonaut, in quiet	Male Child	
8	* Treasure EARland * pEARl Crunch, in quiet	Male Child	
9	* MountainEAR * ShakespEARe	Child Child	
10	* FarmEAR in the Dell * Treasure EARland	Child Child	
11	* pEARl Crunch, in high noise * EARonaut, in high noise	Child Child	
12	Patient's choice Patient's choice	Female Child	

	Goals	Tips
Week 1	<p>Play pEARL Crunch at least 10 minutes twice this week with a male talker with the noise adjusted to your preference</p> <p>Play EARonaut at least 10 minutes twice this week with a female talker in quiet. Adjust the noise bar to 0.</p>	<p>“pEARL Crunch forces you to pay attention to those endings of words that add subtle meaning, such as the plural “s” in a word like <i>boys</i> or the negative “n’t” in a word like <i>can’t</i>. These endings are often hard to hear and easy to ignore. You are starting with male voices to develop your ability to pay attention to word endings. In later lessons, you will listen to women’s and children’s voices.”</p> <p>“During every day listening, we tend to listen for the ‘meat’ of the word and not subtle nuances. For instance, we often do not distinguish between the words <i>smile</i> and <i>smiles</i>. This game forces you to pay attention to word endings. Think about it: There’s a big difference between, “I <i>can</i> pick you up from the airport” and “I <i>can’t</i> pick you up from the airport.”</p> <p>“This game is important because it is developing your auditory memory, which is your ability to keep words in your mind as you listen.”</p> <p>“Female voices are particularly difficult to hear in background noise, even when you have optimal hearing aids. Try playing a few rounds of EARonaut with the noise bar set to quiet. Over the next rounds, gradually increase the level of background noise and try to determine the maximum of noise that can be present during the game and yet allow you still to hear the female voice speak the words. You might find that you are using a lot more ‘mental effort’ when you are listening in noise than when you are listening in quiet. This is a very natural phenomenon.”</p>
Week 2	<p>Play EARonaut at least 10 minutes twice this week with a male talker with the noise adjusted to your preference.</p>	<p>“Try playing the game in both quiet and with noise. You will likely find that you are much more relaxed and confident when you are playing the game in quiet than when you are playing the game in high noise. When a person with hearing loss spends time listening in a noisy room, the person must expend an increased amount of ‘mental effort’ to understand the</p>

	<p>Play pEARL Crunch at least 10 minutes twice this week with a female talker in quiet.</p>	<p>meaning of words than when listening in a quiet room. The reason why you may sometimes feel exhausted after having had to listen in a noisy room is that you have been forced to expend an inordinate amount of mental effort to understand what people were saying.”</p> <p>“Female voices are often harder to hear than male voices. This is because women tend to have voices that are higher in pitch than those of men, and people with hearing loss often lose their ability to hear high pitches. When you have finished training with the female voices, you might want to play one more time, but with the male voices. You will likely find that you are able to play the game much faster and with less perceptual effort, or mental energy.”</p>
Week 3	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with a male talker.</p>	<p>“FarmEAR in the Dell may help you learn to recognize common, everyday words more easily. This is important because during everyday conversations, we tend to speak and hear many of the same words over and over again. For example during a typical day, you are likely to hear someone say the words <i>girl</i>, <i>boy</i>, <i>table</i>, and <i>chair</i>. These are all examples of ‘frequently spoken words’.”</p> <p>“You may find that some of the pictures are a little ambiguous and that it takes some thought to match the word that you hear with the pictures that you see. This ambiguity is intentional. Research has shown that when listening tasks which force the brain to focus on meaning and it requires the brain to think of different possibilities, learning occurs more quickly.”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p>

	<p>Play MountainEAR about 10 minutes twice this week with a female talker.</p>	<p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p> <p>“MountainEAR teaches you to recognize words quickly, which is important when you are listening to connected speech. The typical talker of English speaks between 110 and 150 words per minute. This means that you must have good ‘auditory processing speed’ to understand speech, which is the brain’s ability to quickly process the meaning of words.”</p>
Week 4	<p>Play Treasure EARland at least 10 minutes twice this week with a male talker.</p> <p>Play MountainEAR at least 10 minutes twice this week with a female talker.</p>	<p>“Treasure EARland may help you listen more effectively in the presence of background noise because it forces you to pay attention to the target word and ignore competing speech.”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p> <p>“Sometimes you might be confused and not be able to decide which picture matches the word that you just heard. This is okay. MountainEAR will require that you make quick decisions about what you heard and sometimes this is hard to do.”</p>
Week 5	<p>Play ShakespEARE at least 10 minutes twice this week with a female talker.</p>	<p>“ShakespEARE may help develop your ability to remember the details of a story. It exercises your ‘auditory memory’, which is the brain’s ability to hold in memory words and sentences that you have recently heard.”</p>

	<p>Play pEARL Crunch at least 10 minutes twice this week with a female talker with the noise adjusted to your preference.</p>	<p>“At first you may have a hard time remembering which sentence came first, second, third, fourth and fifth. Try to get at least three sentences in the correct order for each paragraph.”</p> <p>“Playing pEARL Crunch in increasing amounts of noise will exercise your ‘auditory attention’, which is your brain’s ability to focus on one auditory stimulus and ignore other auditory stimuli that are irrelevant and distracting. As you play, gradually increase the level of noise.”</p> <p>“When background noise is present, often the first thing a person with hearing loss will notice is that word endings seem to ‘disappear’.” pEARL Crunch is designed to focus your attention specifically on these word endings and let you experiment with how your ears and brain respond to the presence of background noise.”</p>
Week 6	<p>Play EARonaut at least 10 minutes twice this week with a female talker in high noise.</p> <p>Play Treasure EARland at least 10 minutes twice this week with a female talker.</p>	<p>“Start with a softer level of noise. With every other set of new planets, bump up the noise level by an amount of your choosing. After you play for 10 minutes, see how much distance there is between where you first set the noise bar and your “high noise” level, which is the point on the noise bar where you reached a plateau in the level of noise you were able to tolerate.”</p> <p>“One purpose of Treasure EARland is to increase your confidence in your abilities to recognize words. Research has shown that when you doubt your ability to hear words correctly, you actually don’t hear them as well as when you have high confidence in your ability. The mind becomes distracted by the doubt.”</p>
Week 7	<p>Play MountainEAR at least 10 minutes twice this week with a male talker.</p>	<p>MountainEAR requires that you make very quick decisions about the meaning of a word. How quickly you decide is referred to as your ‘auditory processing speed.’ Most people with hearing loss tend to have</p>

	<p>Play EARonaut for at least 10 minutes twice this week with a child talker in quiet.</p>	<p>faster auditory processing speed with male voices than with female or child voices.</p> <p>“Children often do not enunciate their words as clearly as do adults because they have more immature control of their articulators. When you have finished training with the child voices, you might play one more time, but with the female voices. You will likely find that you are able to increase the level of noise for your perceived ‘high’ level of noise when listening to the female voices as compared to when listening to the child’s voices.”</p>
Week 8	<p>Play Treasure EARland at least 10 minutes twice this week with a male talker.</p> <p>Play pEARl Crunch for at least 10 minutes twice this week with a child talker in quiet. Adjust the noise bar to 0.</p>	<p>“Even though this game is designed to develop your phoneme discrimination, which is your ability to decide whether two sounds are the same or different, it is also developing your ability to focus on the meaning of words and developing your sense of self-confidence in your listening abilities.”</p> <p>Children tend to speak more softly than do adults and sometimes the level of their voices become softer at the endings of words. For this reason, their speech is often difficult to understand. pEARl Crunch will exercise your ability to attend to word endings that are spoken by children.</p>
Week 9	<p>Play MountainEAR at least 10 minutes twice this week a child talker.</p> <p>Play ShakespEARe at least 10 minutes twice this week with a child talker.</p>	<p>MountainEAR requires you to decide very quickly whether or not a picture matches the word spoken. The time it takes to make this kind of decision is called ‘auditory processing speed.’ Research has shown that people with hearing loss tend to have slower auditory processing speed when listening to children than when listening to adults because children’s speech is harder to hear. MountainEAR is designed to develop your auditory processing speed.</p> <p>Listening to children’s voices can sometimes be difficult because you must concentrate very hard on recognizing each word. This concentration reduces your ability to comprehend the meaning of what</p>

	<p>Play EARonaut at least 10 minutes twice this week with a child talker in high noise.</p>	<p>“Start with a softer level of noise. With every other set of new planets, bump up the noise level by an amount of your choosing. After you play for 10 minutes, see how much distance there is between where you first set the noise bar and your “high noise” level, which is the point on the noise bar where you reached a plateau in the level of noise you were able to tolerate.”</p>
Week 12	<p>Your choice of a game and play at least 10 minutes twice this week with a female talker.</p> <p>Your choice of a game and play at least 10 minutes twice this week with a child talker.</p>	

Lesson plan for the patient who is not yet ready for hearing aids but desires hearing healthcare

Week	Games	Voices	Comments/Notes
1	* pEARl Crunch, adjust noise to preference * EARonaut, adjust noise to preference	Male Male	
2	* ShakespEARE * MountainEAR	Male Male	
3	* FarmEAR in the Dell * Treasure EARland	Male Male	
4	* pEARl Crunch, adjust noise to preference * EARonaut, adjust noise to preference	Female Female	
5	* ShakespEARE * MountainEAR	Female Female	
6	* FarmEAR in the Dell * Treasure EARland	Female Female	
7	* pEARl Crunch, adjust noise to preference * EARonaut, adjust noise to preference	Child Child	
8	* ShakespEARE * MountainEAR	Child Child	
9	* FarmEAR in the Dell * Treasure EARland	Child Child	
10	* pEARl Crunch, adjust noise to preference * EARonaut, adjust noise to preference	All types All types	
11	* ShakespEARE * MountainEAR	All types All types	
12	* FarmEAR in the Dell * Treasure EARland	All types All types	

	Goals	Tips
Week 1	<p>Play pEARL Crunch at least 10 minutes twice this week with a male talker with the noise adjusted to your preference.</p> <p>Play EARonaut at least 10 minutes twice this week with a male talker with the noise adjusted to your preference.</p>	<p>“pEARL Crunch forces you to pay attention to those endings of words that add subtle meaning, such as the plural “s” in the word <i>boys</i> or the negative “n’t” in the word <i>can’t</i>. These endings are often hard to hear and easy to ignore.”</p> <p>“Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting three pearls for every necklace. Do not move the bar again but train at this noise level.”</p> <p>“Especially early in your training, it is easier if you try and remember where 3 or 4 pictures are when they are presented on the screen instead of attempting to memorize all of them.”</p> <p>“Try playing a few rounds of EARonaut with the noise bar set to quiet. Over the next rounds, gradually increase the level of background noise and try to determine the maximum of noise that can be present during the game and yet allow you to still hear the male voices speak the words. You might find that you are using a lot more ‘mental effort’ when you are listening in noise than when you are listening in quiet. This is a very natural phenomenon.”</p>
Week 2	<p>Play ShakespEARe at least 10 minutes twice this week with a male talker.</p> <p>Play MountainEAR about 10 minutes twice this week with a male talker. Listen to the single words in noise and try to increase your coins each round.</p>	<p>“This game may help develop your ability to remember the details of a story. It exercises your ‘auditory memory’, which is the brain’s ability to hold in memory words and sentences that you have recently heard.”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p>

		<p>"This game is important because it may help you to recognize words quickly, which is important when you are listening to connected speech. The typical talker of English speaks between 110 and 150 words per minute. This means that you must have good 'auditory processing speed' to understand speech, which is the brain's ability to quickly process the meaning of words."</p>
Week 3	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with a male talker. Try to complete 3 rounds in less than 3.5 minutes per round.</p> <p>Play Treasure EARland at least 10 minutes twice this week with a male talker.</p>	<p>"You may find that some of the pictures are a little ambiguous and that it takes some thought to match the word that you hear with the pictures that you see. This ambiguity is intentional. Research has shown that when listening tasks which force the brain to focus on meaning and it requires the brain to think of different possibilities, learning occurs more quickly."</p> <p>"If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers."</p>
Week 4	<p>Play pEARl Crunch at least 10 minutes twice this week with a female talker with the noise adjusted to your preference.</p>	<p>"During every day listening, we tend to listen for the 'meat' of the word and not subtle nuances. For instance, we often do not distinguish between the words <i>smile</i> and <i>smiles</i>. This game forces you to pay attention to word endings. Think about it: There's a big difference between, "I <i>can</i> pick you up from the airport" and "I <i>can't</i> pick you up from the airport."</p> <p>"Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting three pearls for every necklace. Do not move the bar again but train at this noise level."</p>

	<p>Play EARonaut at least 10 minutes twice this week with a female talker with the noise adjusted to your preference.</p>	<p>“Female voices are particularly difficult to hear in background noise. Try playing a few rounds of EARonaut with the noise bar set to quiet. Over the next rounds, gradually increase the level of background noise and try to determine the maximum of noise that can be present during the game and yet allow you to still hear the female voice speak the words. You might find that you are using a lot more ‘mental effort’ when you are listening in noise than when you are listening in quiet. This is a very natural phenomenon.”</p> <p>“This game is important because it is developing your auditory memory, or ability to keep words in your mind as you listen.”</p> <p>“Try playing a few rounds of EARonaut with the noise bar set to quiet. Over the next rounds, gradually increase the level of background noise and try to determine the maximum of noise that can be present during the game and yet allow you to still hear the female voices speak the words. You might find that you are using a lot more ‘mental effort’ when you are listening in noise than when you are listening in quiet. This is a very natural phenomenon.”</p>
Week 5	<p>Play ShakespEARE at least 10 minutes twice this week with a female talker.</p> <p>Play MountainEAR at least 10 minutes twice this week with a female talker.</p>	<p>“At first you may have a hard time remembering which sentence came first, second, third, fourth and fifth. Try to get at least three sentences in the correct order for each paragraph.”</p> <p>“This game may help you listen more effectively in the presence of background noise because it forces you to pay attention to the target word and ignore competing speech.”</p> <p>“Sometimes you might be confused and not be able to decide which picture matches the word that you just heard. This is okay. This game will require that you make quick</p>

		decisions about what you heard and sometimes this is hard to do.”
Week 6	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with a female talker.</p> <p>Play Treasure EARland at least 10 minutes twice this week with a female talker.</p>	<p>“Try to ignore the background noise and pay attention to which picture matches the word you’ve just heard. This activity will develop ‘auditory attention’, which is the brain’s ability to focus on one auditory stimulus and ignore other auditory stimuli that are irrelevant and distracting.”</p> <p>“Try to ignore the noise and pay attention to which picture matches the word you’ve just heard. This activity will develop ‘auditory attention’, which is the brain’s ability to focus on one auditory stimulus and ignore other auditory stimuli that are irrelevant and distracting.”</p> <p>“Even though this game is designed to develop your phoneme discrimination, which is your ability to decide whether two sounds are the same or different, it is also developing your ability to focus on the meaning of words and developing your sense of self-confidence in your listening abilities.”</p>
Week 7	<p>Play pEARL Crunch for at least 10 minutes twice this week with a child talker with the noise adjusted to your preference.</p> <p>Play EARonaut for at least 10 minutes twice this week with a child talker with the noise adjusted to your preference.</p>	<p>“Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting three pearls for every necklace. Do not move the bar again but train at this noise level.”</p> <p>“When background noise is present, often the first thing a person with hearing loss will notice is that word endings seem to ‘disappear’.” pEARL Crunch is designed to focus your attention specifically on these word endings and let you experiment with how your ears and brain respond to the presence of background noise.”</p> <p>“Remembering words is very important when you are listening to everyday conversations. When you hear a word, try</p>

		<p>to visualize which planet hides the corresponding picture.”</p> <p>“Try playing a few rounds of EARonaut with the noise bar set to quiet. Over the next rounds, gradually increase the level of background noise and try to determine the maximum of noise that can be present during the game and yet allow you to still hear the child voices speak the words. You might find that you are using a lot more ‘mental effort’ when you are listening in noise than when you are listening in quiet. This is a very natural phenomenon.”</p>
Week 8	<p>Play ShakespEARE at least 10 minutes twice this week with a child talker.</p> <p>Play MountainEAR at least 10 minutes twice this week a child talker.</p>	<p>“Very often in conversations, we “tell stories” about what happened during the day. In this game, you will practice paying attention to the beginnings, middles, and endings of stories.”</p> <p>“Background noise will make children’s voices especially difficult to understand. This is because children tend to talk more softly than adults and because noise is especially detrimental to high pitched voices.”</p>
Week 9	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with a child talker.</p> <p>Play Treasure EARland at least 10 minutes twice this week with a child talker.</p>	<p>“You are learning to recognize common words that occur frequently in everyday conversation. Over time, this kind of training will make listening easier for you.”</p> <p>“One purpose of Treasure EARland is to increase your confidence in your abilities to recognize words. Research has shown that when you doubt your ability to hear words correctly, you actually don’t hear them as well as when you have high confidence in your ability. The mind becomes distracted by the doubt.”</p>
Week 10	<p>Play pEARl Crunch at least 10 minutes twice this week with all types of talkers with the noise adjusted to your preference.</p>	<p>“Even though listening to all types of talkers is more difficult than listening to a single type of talker, such as a male voice, research has shown that training with all types mixed together leads to faster learning and to better generalization to everyday listening than does training with a single talker type.”</p>

	<p>Play EARonaut at least 10 minutes twice this week with all types of talkers with the noise adjusted to your preference.</p>	<p>“Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting three pearls for every necklace. Do not move the bar again but train at this noise level.”</p> <p>“Try playing a few rounds of EARonaut with the noise bar set to quiet. Over the next rounds, gradually increase the level of background noise and try to determine the maximum of noise that can be present during the game and yet allow you to still hear the voices speak the words. You might find that you are using a lot more ‘mental effort’ when you are listening in noise than when you are listening in quiet. This is a very natural phenomenon.”</p>
Week 11	<p>Play ShakespEARE at least 10 minutes twice this week with all types of talkers.</p> <p>Play MountainEAR at least 10 minutes twice this week with all types of talkers.</p>	<p>“Try to ignore the sound of the talkers’ voices and to focus on the meaning of the sentences that they are speaking. This will develop your ability to understand spoken stories.”</p> <p>“Sometimes you might be confused and not be able to decide which picture matches the word that you just heard. This is okay. This game will require that you make quick decisions about what you heard and sometimes this is hard to do.”</p>
Week 12	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with all types of talkers.</p> <p>Play Treasure EARland at least 10 minutes twice this week with all types of talkers.</p>	<p>“Training with all types of talkers is the most difficult training task. However, research shows that training with “multiple talkers” is most effective in training the brain to recognize common, everyday words.”</p>

Lesson plan for the patient who wants to understand the speech of an FCP (crash course). The voice designation of “M/F” stands for “Male or Female” and means that the patient should train with the generic voice type that is the same sex as his or her FCP.

Note: This lesson plan is appropriate for patients who have an FCP who has recorded the training stimuli in a single session at the onset of the patient’s training program. If the FCP hasn’t recorded all stimuli, the missing words, phrases, or sentences will be replaced by generic recordings stored in the cLEAR™ software.

Week	Games	Voices	Comments/Notes
1	* pEARl Crunch, adjust noise to preference	M/F	
	* EARonaut, adjust noise to preference	M/F	
2	* ShakespEARe	M/F	
	* pEARl Crunch, in light noise	FCP	
3	* EARonaut, in light noise	FCP	
	* MountainEAR	M/F	
4	* MountainEAR	FCP	
	* FarmEAR in the Dell	M/F	
5	* FarmEAR in the Dell	FCP	
	* Treasure EARland	M/F	
6	* Treasure EARland	FCP	
	* pEARl Crunch, in moderate noise	FCP	
7	* EARonaut, in moderate noise	FCP	
	* ShakespEARe	FCP	
8	* MountainEAR	FCP	
	* FarmEAR in the Dell	FCP	
9	* Treasure EARland	FCP	
	* EARonaut, in high noise	FCP	
10	* pEARl Crunch, in high noise	FCP	
	* MountainEAR	FCP	
11	* FarmEAR in the Dell	FCP	
	* Treasure EARland	FCP	
12	* pEARl Crunch, in high noise	FCP	
	* Patient’s choice	FCP	

Week 1	Play pEARl Crunch at least 10 minutes twice this week with the talker type that is the same sex as your FCP with the noise adjusted to your preference.	“pEARl Crunch forces you to pay attention to those endings of words that add subtle meaning, such as the plural “s” in the word <i>boys</i> or the negative “n’t” in the word <i>can’t</i> . These endings are often hard to hear and easy to ignore.”
---------------	---	--

	<p>Play EARonaut at least 10 minutes twice this week with the talker type that is the same sex as your FCP with the noise adjusted to your preference.</p>	<p>“During every day listening, we tend to listen for the ‘meat’ of the word and not subtle nuances. For instance, we often do not distinguish between the words <i>smile</i> and <i>smiles</i>. This game forces you to pay attention to word endings. Think about it: There’s a big difference between, “I <i>can</i> pick you up from the airport” and “I <i>can’t</i> pick you up from the airport.”</p> <p>“This game will get a little easier the more you play because you are training your ears to pay attention to word endings.”</p> <p>“Especially early in your training, it is easier if you try and remember where 3 or 4 pictures are when they are presented on the screen instead of attempting to memorize all of them.”</p> <p>“Earonaut exercises your auditory memory, which is the ability to keep words in your mind as you listen.”</p>
Week 2	<p>Play ShakespEARE at least 10 minutes twice this week with the talker type that is the same sex as your FCP.</p> <p>Play pEARl Crunch at least 10 minutes twice this week with your FCP’s voice in light noise.</p>	<p>“ShakespEARE may help develop your ability to remember the details of a story. It exercises your ‘auditory memory’, which is the brain’s ability to hold in memory words and sentences that you have recently heard.”</p> <p>“At first you may have a hard time remembering which sentence came first, second, third, fourth and fifth. Try to get at least three sentences in the correct order for each paragraph.”</p> <p>“pEARl Crunch forces you to pay attention to those endings of words that add subtle meaning, such as the plural “s” in a word like <i>boys</i> or the negative “n’t” in a word like <i>can’t</i>. These endings are often hard to hear and easy to ignore.”</p> <p>“You can determine what is “light noise”. Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a</p>

		point where you are getting four pearls for every necklace. Do not move the bar again but train at this noise level.”
Week 3	<p>Play EARonaut at least 10 minutes twice this week with your FCP’s voice in light noise.</p> <p>Play MountainEAR about 10 minutes twice this week with a talker type that is the same sex as your FCP.</p>	<p>“Try playing a few rounds of EARonaut with the noise bar set to quiet. Over the next rounds, gradually increase the level of background noise and try to determine the maximum of noise that can be present during the game and yet allow you to still hear your FCP speak the words. You might find that you are using a lot more ‘mental effort’ when you are listening in noise than when you are listening in quiet. This is a very natural phenomenon.”</p> <p>“Remembering words is very important when you are listening to everyday conversations. When you hear a word, try to visualize which planet hides the corresponding picture.”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p> <p>“Playing MountainEAR may help you to recognize words more quickly, which is important when you are listening to connected speech. The typical talker of English speaks between 110 and 150 words per minute. This means that you must have good ‘auditory processing speed’ to understand speech, which is the brain’s ability to quickly process the meaning of words.”</p>
Week 4	Play MountainEAR at least 10 minutes twice this week with your FCP’s voice.	“Sometimes you might be confused and not be able to decide which picture matches the word that you just heard. This is okay. This game will require that you make quick decisions about what you heard and sometimes this is hard to do.”

	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with a talker type that is the same sex as your FCP.</p>	<p>“You may find that some of the pictures are a little ambiguous and that it takes some thought to match the word that you hear with the pictures that you see. This ambiguity is intentional. Research has shown that when listening tasks which force the brain to focus on meaning and it requires the brain to think of different possibilities, learning occurs more quickly.”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p>
Week 5	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with your FCP’s voice.</p> <p>Play Treasure EARland at least 10 minutes twice this week with a talker type that is the same sex as your FCP.</p>	<p>“Try to ignore the noise and pay attention to which picture matches the word you’ve just heard. This activity will develop ‘auditory attention’, which is the brain’s ability to focus on one auditory stimulus and ignore other auditory stimuli that are irrelevant and distracting.”</p> <p>“One purpose of Treasure EARland is to increase your confidence in your abilities to recognize words. Research has shown that when you doubt your ability to hear words correctly, you actually don’t hear them as well as when you have high confidence in your ability. The mind becomes distracted by the doubt.”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p>
Week 6	<p>Play Treasure EARland at least 10 minutes twice this week with your FCP’s voice.</p>	<p>“Learning to discriminate and recognize words in the presence of background noise will increase your confidence to engage in</p>

		the speech rhythms and cadences that the FCP employs when speaking, and this will help you recognize the FCP's words more quickly."
Week 8	<p>Play MountainEAR at least 10 minutes twice this week with your FCP.</p> <p>Play FarmEAR in the Dell at least 10 minutes twice this week with your FCP.</p>	<p>"Many people with hearing loss feel that they only can understand what their FCP says if the FCP speaks very slowly. Training with MountainEAR will exercise your ability to understand your FCP when the FCP speaks with a normal speaking rate."</p> <p>"By playing FarmEAR in the Dell, you are learning to recognize common words that occur frequently in everyday conversations with your FCP. Over time, this kind of training will make listening easier for you."</p>
Week 9	<p>Play Treasure EARland at least 10 minutes twice this week with your FCP.</p> <p>Play EARonaut at least 10 minutes twice this week with your FCP's voice in high noise.</p>	<p>"Even though this game is designed to develop your phoneme discrimination, which is your ability to decide whether two sounds are the same or different, it is also developing your ability to focus on the meaning of words and developing your sense of self-confidence in your listening abilities."</p> <p>"You can determine what is 'high' noise. Start by setting the noise bar to its midway setting. If this makes it too difficult to hear the words, decrease the noise where you can hear the talkers, but you are still aware of noise. At first, you may find that what is a high noise level for you is very near the quiet position on the noise bar. With continued practice, you might be able to tolerate more noise."</p>
Week 10	Play pEARl Crunch at least 10 minutes twice this week with all your FCP's voice in high noise.	<p>"You can determine what is 'high noise'. Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting three pearls for every necklace. Do not move the bar again but train at this noise level."</p> <p>"When background noise is present, often a person with hearing loss will notice that word endings seem to 'disappear'." pEARl Crunch is designed to focus your attention specifically on these word endings and let</p>

	<p>Play MountainEAR at least 10 minutes twice this week with your FCP's voice.</p>	<p>you experiment with how your ears and brain respond to the presence of background noise."</p> <p>"You may find that you can recognize the words more quickly when they are spoken by your FCP than when they are spoken by a talker of the opposite sex. Try playing MountainEAR with your FCP's voice. After several trials, then play MountainEAR with the voice of talkers of the same sex as your FCP. Do you find that you recognize words faster with your FCP's voice? Does it seem easier to recognize the words when they are spoken by your FCP? Familiarity of the talker has a very positive effect upon your ability to recognize speech."</p>
Week 11	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with your FCP's voice.</p> <p>Play Treasure EARland at least 10 minutes twice this week with your FCP's voice.</p>	<p>"Sometimes you might be confused and not be able to decide which picture matches the word that you just heard. This is okay. This game will require that you make quick decisions about what you heard and sometimes this is hard to do."</p> <p>"Even though this game is designed to develop your phoneme discrimination, which is your ability to decide whether two sounds are the same or different, it is also developing your ability to focus on the meaning of words and developing your sense of self-confidence in your listening abilities."</p>
Week 12	<p>Play pEARl Crunch at least 10 minutes twice this week with your FCP's voice in high noise.</p> <p>You choose a game, but play with the voice of your FCP</p>	<p>"You can determine what is "high noise". Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting three pearls for every necklace. Do not move the bar again but train at this noise level."</p>

Lesson plan for the patient who wants to understand the speech of an FCP (staged in over time). The voice designation of “M/F” stands for “Male or Female” and means that the patient should train with the generic voice type that is the same sex as his or her FCP.

Note: this lesson plan is appropriate for patients who have an FCP who does not want to record the training stimuli in a single session. FCP should record the stimuli in 3 sessions:

Before Week 1, session 1: Stimuli for pEARl Crunch, ShakespEARe

Before Week 7, sessions 2 & 3: Word stimuli

Week	Games	Voices	Comments/Notes
1	* EARonaut, adjust noise to preference	M/F	
	* pEARl Crunch, in quiet	FCP	
2	* ShakespEARe	FCP	
	* MountainEAR	M/F	
3	* pEARl Crunch, in light noise	FCP	
	* FarmEAR in the Dell	M/F	
4	* ShakespEARe	FCP	
	* Treasure EARland	M/F	
5	* pEARl Crunch, in high noise	FCP	
	* EARonaut, in light noise	M/F	
6	* pEARl Crunch, in high noise	FCP	
	* ShakespEARe	FCP	
7	* MountainEAR	FCP	
	* FarmEAR in the Dell	FCP	
8	* Treasure EARland	FCP	
	* EARonaut, in high noise	FCP	
9	* MountainEAR	FCP	
	* FarmEAR in the Dell	FCP	
10	* Treasure EARland	FCP	
	* pEARl Crunch, in high noise	FCP	
11	* ShakespEARe	FCP	
	* Patient's choice	FCP	
12	* Patient's choice	FCP	
	* Patient's choice	FCP	

	Goals	Tips
Week 1	<p>Play EARonaut at least 10 minutes twice this week with a talker type that is the same sex as your FCP with the noise adjusted to your preference.</p> <p>Play pEARl Crunch at least 10 minutes twice this week with your FCP's voice in quiet.</p>	<p>"Especially early in your training, it is easier if you try and remember where 3 or 4 pictures are when they are presented on the screen instead of attempting to memorize all of them."</p> <p>"pEARl Crunch forces you to pay attention to those endings of words that add subtle meaning, such as the plural "s" or the negative "n't" These endings are often hard to hear and easy to ignore."</p> <p>"During every day listening, we tend to listen for the 'meat' of the word and not subtle nuances. For instance, we often do not distinguish between the words <i>smile</i> and <i>smiles</i>. This game forces you to pay attention to word endings. Think about it: There's a big difference between, "I <i>can</i> pick you up from the airport" and "I <i>can't</i> pick you up from the airport."</p>
Week 2	<p>Play ShakespEARe at least 10 minutes twice this week with your FCP's voice.</p> <p>Play MountainEAR about 10 minutes twice this week with a talker type that is the same sex as your FCP.</p>	<p>"Your FCP's voice may sound different to you because of your hearing loss, and will sound especially different if you have just received a new hearing aid or cochlear implant. By listening to your FCP speak sentences, you will likely begin to recognize the speech rhythms and cadences that the FCP employs when speaking, and this will help you recognize the FCP's words more quickly."</p> <p>"If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers."</p> <p>"This game is important because it may help you to recognize words quickly, which is important when you are listening to connected speech. The typical talker of English speaks between 110 and 150 words per minute. This means that you must have</p>

		<p>good ‘auditory processing speed’ to understand speech, which is the brain’s ability to quickly process the meaning of words.”</p>
Week 3	<p>Play pEARL Crunch at least 10 minutes twice this week with your FCP’s voice in light noise.</p> <p>Play FarmEAR in the Dell at least 10 minutes twice this week with a talker type that is the same sex as your FCP.</p>	<p>“You can determine what is “light noise”. Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting four pearls for every necklace. Do not move the bar again but train at this noise level.”</p> <p>“Even though your FCP’s voice may be very familiar to you because you have listened to and talked with your FCP for a long time, you may not realize that you have not been attending to important word endings. When listening becomes difficult, the brain tends to pay less attention to word endings. Training with pEARL Crunch will exercise your auditory attention and lead you to pay more attention to word endings.”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p> <p>“You may find that some of the pictures are a little ambiguous and that it takes some thought to match the word that you hear with the pictures that you see. This ambiguity is intentional. Research has shown that when listening tasks which force the brain to focus on meaning and it requires the brain to think of different possibilities, learning occurs more quickly.”</p> <p>“You are learning to recognize common words that occur frequently in everyday conversation. Over time, this kind of training will make listening easier for you.”</p>

		<p>to visualize which planet hides the corresponding picture.”</p> <p>“You can determine what is ‘light’ noise. Start by setting the noise bar to its midway setting. If this makes it too difficult to hear the words, decrease the noise where you can hear the talkers, but you are still aware of noise. If in the midway setting, you can still easily hear the talkers, adjust the noise to be louder. During this process, you will not only exercise your ‘auditory attention’, or the brain’s ability to focus on a single speech stimulus, but you will also develop an awareness of the levels of noise that you can tolerate. This awareness will be helpful when you have to assess whether you will have to make accommodations for a particular setting, such as asking for a quiet section of a noisy restaurant.”</p>
Week 6	<p>Play pEARL Crunch at least 10 minutes twice this week with your FCP’s voice in high noise.</p> <p>Play ShakespEARe at least 10 minutes twice this week with your FCP’s voice.</p>	<p>“You can determine what is “high noise”. Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting three pearls for every necklace. Do not move the bar again but train at this noise level.”</p> <p>“ShakespEARe is designed to enhance your everyday conversations with your FCP by making listening easier and more successful. Very often in conversations, we “tell stories” about what happened during the day. In this game, you will practice paying attention to the beginnings, middles, and endings of stories, as told by your FCP.”</p>
Week 7	Play MountainEAR at least 10 minutes twice this week with your FCP’s voice.	<p>“You may find that you can recognize the words more quickly when they are spoken by your FCP than when they are spoken by a talker of the opposite sex. Try playing MountainEAR with your FCP’s voice. After several trials, then play MountainEAR with the voice of talkers of the same sex as your FCP. Do you find that you recognize words faster with your FCP’s voice? Does it seem easier to recognize the words when they</p>

	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with your FCP's voice.</p>	<p>are spoken by your FCP? Familiarity of the talker has a very positive effect upon your ability to recognize speech."</p> <p>"You are learning to recognize common words that occur frequently in everyday conversations with your FCP. Over time, this kind of training will make listening easier for you and participating in conversations much easier."</p> <p>"Try to ignore the noise and pay attention to which picture matches the word you've just heard. This activity will develop 'auditory attention', which is the brain's ability to focus on one auditory stimulus and ignore other auditory stimuli that are irrelevant and distracting."</p> <p>"Sometimes you might be confused and not be able to decide which picture matches the word that you just heard. This is okay. This game will require that you make quick decisions about what you heard and sometimes this is hard to do."</p>
Week 8	<p>Play Treasure EARland at least 10 minutes twice this week with your FCP's voice.</p> <p>Play EARonaut at least 10 minutes twice this week with your FCP's voice in high noise.</p>	<p>"Even though this game is designed to develop your phoneme discrimination, which is your ability to decide whether two sounds are the same or different, it is also developing your ability to focus on the meaning of words and developing your sense of self-confidence in your listening abilities."</p> <p>"Try playing a few rounds of EARonaut with the noise bar set to quiet. Over the next rounds, gradually increase the level of background noise and try to determine the maximum of noise that can be present during the game and yet allow you still to hear your FCP speak the words. You might find that you are using a lot more 'mental effort' when you are listening in noise than when you are listening in quiet. This is a very natural phenomenon."</p>
Week 9	<p>Play MountainEAR at least 10 minutes twice this week with your FCP's voice.</p>	<p>"Many people with hearing loss feel that they only can understand what their FCP</p>

	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with your FCP's voice.</p>	<p>says if the FCP speaks very slowly. Training with MountainEAR will exercise your ability to understand your FCP when the FCP speaks with a normal speaking rate."</p> <p>"Sometimes you might be confused and not be able to decide which picture matches the word that you just heard. This is okay. This game will require that you make quick decisions about what you heard and sometimes this is hard to do."</p>
Week 10	<p>Play Treasure EARland at least 10 minutes twice this week with your FCP's voice.</p> <p>Play pEARl Crunch at least 10 minutes twice this week with all your FCP's voice in high noise.</p>	<p>Learning to discriminate and recognize words in the presence of background noise will increase your confidence to engage in social situations, such as eating out at restaurants. Treasure EARland exercises your word discrimination abilities and your ability to hear your FCP in noisy settings.</p> <p>"You can determine what is 'high' noise. Start by setting the noise bar to its midway setting. If this makes it too difficult to hear the words, decrease the noise where you can hear the talkers, but you are still aware of noise. At first, you may find that what is a high noise level for you is very near the quiet position on the noise bar. With continued practice, you might be able to tolerate more noise."</p>
Week 11	<p>Play ShakespEARE at least 10 minutes twice this week with your FCP's voice.</p> <p>Your choice of game, at least 10 minutes twice this week, but play with the voice of your FCP.</p>	<p>"ShakespEARE is designed to enhance your everyday conversations with your FCP by making listening easier and more successful. Very often in conversations, we "tell stories" about what happened during the day. In this game, you will practice paying attention to the beginnings, middles, and endings of stories, as told by your FCP."</p>
Week 12	<p>Your choice of game, at least 10 minutes twice this week, but play with the voice of your FCP.</p>	

	Your choice of game, at least 10 minutes twice this week, but play with the voice of your FCP.	
--	--	--

Lesson plan for the patient with central auditory processing disorder or cognitive difficulties

Week	Games	Voices	Comments/Notes
1	* pEARl Crunch, adjust noise to quiet and then with each “new necklace”, add just a little more noise * FarmEAR in the Dell	Male Male	
2	* EARonaut, adjust noise to quiet and then with each new trial, add just a little more noise * Treasure EARland	Male Male	
3	* MountainEAR * ShakespEARe	Male Male	
4	* pEARl Crunch, adjust noise to quiet and then with each “new necklace”, add just a little more noise * FarmEAR in the Dell	Female Female	
5	* EARonaut, adjust noise to quiet and then with each new trial, add just a little more noise * Treasure EARland	Female Female	
6	* MountainEAR * ShakespEARe	Female Female	
7	* pEARl Crunch, adjust noise to quiet and then with each “new necklace”, add just a little more noise * FarmEAR in the Dell	Child Child	
8	* EARonaut, adjust noise to quiet and then with each new trial, add just a little more noise * Treasure EARland	Child Child	
9	* MountainEAR * ShakespEARe	Child Child	
10	* pEARl Crunch, adjust noise to preference * EARonaut, adjust noise to preference	All types All types	
11	* ShakespEARe * MountainEAR	All types All types	
12	* FarmEAR in the Dell * Treasure EARland	All types All types	

	Goals	Tips
Week 1	<p>Play pEARL Crunch at least 10 minutes twice this week with a male talker starting in quiet and then adding noise on the scroll bar with each play.</p> <p>Play FarmEAR in the Dell at least 10 minutes twice this week with a male talker.</p>	<p>“pEARL Crunch forces you to pay attention to those endings of words that add subtle meaning, such as the plural “s” in the word <i>boys</i> or the negative “n’t” in the word <i>can’t</i>. These endings are often hard to hear and easy to ignore.”</p> <p>“During every day listening, we tend to listen for the ‘meat’ of the word and not subtle nuances. For instance, we often do not distinguish between the words <i>smile</i> and <i>smiles</i>. This game forces you to pay attention to word endings. Think about it: There’s a big difference between, “I <i>can</i> pick you up from the airport” and “I <i>can’t</i> pick you up from the airport.”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p> <p>“Try to ignore the background noise and pay attention to which picture matches the word you’ve just heard. This activity will develop ‘auditory attention’, which is the brain’s ability to focus on one auditory stimulus and ignore other auditory stimuli that are irrelevant and distracting.”</p> <p>“You may find that some of the pictures are a little ambiguous and that it takes some thought to match the word that you hear with the pictures that you see. This ambiguity is intentional. Research has shown that when listening tasks which force the brain to focus on meaning and it requires the brain to think of different possibilities, learning occurs more quickly.”</p>
Week 2	<p>Play EARonaut at least 10 minutes twice this week with a male talker starting in quiet and then adding noise on the scroll bar with each play.</p>	<p>“Try playing a few rounds of EARonaut with the noise bar set to quiet. Over the next rounds, gradually increase the level of background noise and try to determine the maximum of noise that can be present during the game and yet allow you still to</p>

	<p>Play Treasure EARland for about 10 minutes twice this week with a male talker.</p>	<p>hear the male talkers speak the words. You might find that you are using a lot more ‘mental effort’ when you are listening in noise than when you are listening in quiet. This is a very natural phenomenon.”</p> <p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p> <p>“One purpose of Treasure EARland is to increase your confidence in your abilities to recognize words. Research has shown that when you doubt your ability to hear words correctly, you actually don’t hear them as well as when you have high confidence in your ability. The mind becomes distracted by the doubt.”</p>
Week 3	<p>Play MountainEAR at least 10 minutes twice this week with a male talker.</p> <p>Play ShakespEARE Island at least 10 minutes twice this week with a male talker.</p>	<p>“If the noise seems to be getting louder, that means that you are actually getting better at listening in noise because the better you do, the more noise is introduced into the training task. The game is programmed to have more noise after you make consecutive correct answers and less noise after you make consecutive incorrect answers.”</p> <p>“This game may help develop your ability to remember the details of a story. It exercises your ‘auditory memory’, which is the brain’s ability to hold in memory words and sentences that you have recently heard.”</p> <p>“At first you may have a hard time remembering which sentence came first, second, third, fourth and fifth. Try to get at least three sentences in the correct order for each paragraph.”</p>

	<p>Play ShakespEARE Island at least 10 minutes twice this week with a female talker.</p>	<p>connected speech. The typical talker of English speaks between 110 and 150 words per minute. This means that you must have good ‘auditory processing speed’ to understand speech, which is the brain’s ability to quickly process the meaning of words.”</p> <p>“Sometimes you might be confused and not be able to decide which picture matches the word that you just heard. This is okay. This game will require that you make quick decisions about what you heard and sometimes this is hard to do.”</p> <p>You may have a hard time remembering which sentence came first, second, third, fourth and fifth. As you play, you will develop your ability to remember the ordering of the sentences.</p>
Week 7	<p>Play pEARl Crunch at least 10 minutes twice this week with a child talker starting in quiet and then adding noise on the scroll bar with each play.</p> <p>Play FarmEAR in the Dell at least 10 minutes twice this week with a child talker.</p>	<p>Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting three or four pearls for every necklace. Do not move the bar again but train at this noise level.”</p> <p>“This game is designed to help you to recognize common, everyday days more easily.”</p> <p>“Background noise will make children’s voices especially difficult to understand. This is because children tend to talk more softly than adults and because noise is especially detrimental to high pitched voices.”</p>
Week 8	<p>Play EARonaut at least 10 minutes twice this week with a child talker starting in quiet and then adding noise on the scroll bar with each play.</p>	<p>“When you listen in noise, you may find that it is more difficult to remember what people say. This game exercises your ability to remember words, even if listening conditions are difficult.”</p> <p>“Children’s voices are harder to hear than those of men or women. You might find that you have a hard time remembering the</p>

	<p>Play Treasure EARland for about 10 minutes twice this week with a child talker. Listen to the single words in noise and try to increase your coins each round.</p>	<p>words. That's okay because this is only natural."</p> <p>"Try playing a few rounds of EARonaut with the noise bar set to quiet. Over the next rounds, gradually increase the level of background noise and try to determine the maximum of noise that can be present during the game and yet allow you still to hear the voice the words. You might find that you are using a lot more 'mental effort' when you are listening in noise than when you are listening in quiet. This is a very natural phenomenon."</p> <p>"This game teaches you to hear differences between words that sound very similar. Discriminating words is a very important skill for successful listening."</p> <p>"Even though this game is designed to develop your phoneme discrimination, which is your ability to decide whether two sounds are the same or different, it is also developing your ability to focus on the meaning of words and developing your sense of self-confidence in your listening abilities."</p>
Week 9	<p>Play MountainEAR at least 10 minutes twice this week with a child's voice.</p> <p>Play ShakespEARE Island at least 10 minutes twice this week with a child talker.</p>	<p>"Remember, if the noise seems to be getting louder as you play, this means you are getting better at listening and paying attention to the words."</p> <p>"Children's voices are especially hard to hear when you are listening in noise. MountainEAR exercises your ability to understand the meaning of words, even if you are having a hard time hearing."</p> <p>"Because children's voices are especially hard to hear, you may have a difficult time remembering the story. This is okay. You will get better with practice."</p> <p>"This game is developing your ability to remember the beginning, middle, and endings of stories. This is an important skill when listening to people in your everyday conversations."</p>

<p>Week 10</p>	<p>Play pEARL Crunch at least 10 minutes twice this week with a mix of talkers starting in quiet and then adding noise on the scroll bar with each play.</p> <p>Play EARonaut at least 10 minutes twice this week with a mix of talkers starting in quiet and then adding about steps of noise on the scroll bar with each play.</p>	<p>“Start by playing the game in quiet. On the second trial, bump up the noise just a little. On each subsequent trial, bump up the noise just a little more until you reach a point where you are getting two or three pearls for every necklace. Do not move the bar again but train at this noise level.”</p> <p>“Concentrate on hearing the endings of the words as this will help you to select the correct picture.”</p> <p>“Try playing a few rounds of EARonaut with the noise bar set to quiet. Over the next rounds, gradually increase the level of background noise and try to determine the maximum of noise that can be present during the game and yet allow you still to hear the voices speak the words. You might find that you are using a lot more ‘mental effort’ when you are listening in noise than when you are listening in quiet. This is a very natural phenomenon.”</p>
<p>Week 11</p>	<p>Play MountainEAR at least 10 minutes twice this week with a mix of talkers.</p> <p>Play ShakespEARe Island at least 10 minutes twice this week with a mix of talkers.</p>	<p>“You may not realize it, but you will likely be just a little bit slower in playing this game now that you are playing with many types of voices. The reason for this is that when you listen to multiple talker types, the brain has to use more ‘mental effort’ to process the meaning of words than when you listen to the same talker type speak the words. As a result of increased mental effort, the brain has to take more time to process meaning, and this will slow down your response time.”</p> <p>“Take your time in playing this game. The goal in this game is to remember what you heard and not to finish the game quickly.”</p> <p>“Try to ignore the sound of the talkers’ voices and to focus on the meaning of the sentences that they are speaking. This will develop your ability to understand spoken stories.” “Even though listening to all types of talkers is more difficult than listening to a single type of talker, such as a male voice, research has shown that training with all types mixed together leads to faster learning and to better generalization to</p>

		everyday listening than does training with a single talker type.”
Week 12	<p>Play FarmEAR in the Dell at least 10 minutes twice this week with a mix of talkers.</p> <p>Play Treasure EARland for about 10 minutes twice this week with a mix of talkers.</p>	<p>“Training with all types of talkers is the most difficult training task. However, research shows that training with “multiple talkers” is most effective in training the brain to recognize common, everyday words.”</p> <p>“Listening to a variety of talkers is challenging so don’t become discouraged if you have difficulty in distinguishing the words.”</p> <p>“As you continue to play, try betting more coins and increasing your confidence in your ability to listen.”</p>