

# Adult Cochlear Implant Home-Based Auditory Training Manual

Prelingual or Long Duration Hearing Loss

Recipient's name: .....



*Hear now. And always*







# **Adult Cochlear Implant Home-Based Auditory Training Manual**

**Prelingual or Long Duration Hearing Loss**



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# About auditory training

## Why do we do auditory training?

Your cochlear implant helps you to hear sound. However, this sound is very different from natural hearing. When you have heard limited sound and speech before, or if it has been a long time since you have heard sound and speech, you will need to do some listening practice so you can get the most out of your cochlear implant. When you do listening practice exercises it is called auditory training. Auditory training helps you learn to use the speech you hear with your cochlear implant and improve your communication. Listening practice should start in the weeks following the switch-on of the cochlear implant.

## How do we do auditory training?

The auditory training exercises in this manual are for you to complete at home. You will be guided through the manual by your clinician. How much is heard and how quickly listening progresses with a cochlear implant differs between people. Therefore, this manual includes a range of exercises, and they become more difficult as you go through the manual. The exercises start with practice in working out what the sound and speech are from a list of options. Then there are more challenging exercises for practice in repeating the speech you hear and understanding speech.

## How do I know which exercises to complete?

There is an Auditory Training Exercise Plan in this manual. At each appointment your clinician will discuss with you which exercises you might like to try and will give you tips on how best to do them. It's a good idea to write your plan down at each appointment, and there is also room for you to write notes about your progress. At your next appointment you can go through your notes with your clinician.

## Hard-copy exercises or computer-based exercises?

This manual includes a range of exercises. You can also do some of the training using a computer program called Angel Sound™, if you have access to a computer and wish to do this. While most of the Angel Sound exercises are different from the exercises in this manual, they can be used for training on some of the same skills. There are notes in the manual to let you know which Angel Sound exercises can be done, and your clinician can help with this.

The hard-copy exercises look like this:

 Exercise

The Angel Sound exercises look like this:

 Angel Sound™ Exercise

## Angel Sound program

The Angel Sound computer program is an interactive auditory training program especially designed for cochlear implant recipients to practise hearing and recognising sound and speech. The level of difficulty is automatically adjusted to match the user's developing listening skills. The program provides feedback, highlighting areas the user should continue to practise. The training and testing results can be shared with your clinician, who will provide further advice on your auditory training.

The Angel Sound program can be downloaded and installed on your computer. Alternatively, you can request to have a CD version mailed to you, which can then be installed on your computer. Information about Angel Sound, as well as the download link, is available on the following website: <http://angelsound.emilyfufoundation.org>. Refer to Appendix 2 for some tips on using Angel Sound.

## How long do I need to continue doing auditory training?

The length of time that you need to do auditory training varies. It depends on how long you have had a hearing loss, if you were able to use a hearing aid in your implanted ear before your cochlear implant, and how much listening practice you get with your cochlear implant in your everyday life. Regular auditory training during the first few months after you get your implant will be helpful. Your clinician will guide you on when to use this manual and which exercises should be done.

### Tips for your training partner (speaker)

Your clinician will discuss with you and demonstrate how to use this manual. There are also some tips throughout the manual, and a few extra tips below:

- It is a good idea to practise the listening exercises each day at home at the same time, so it is part of your regular day.
- Initially find a quiet part of the home to do the training.
- Auditory training is mostly done with hearing alone (without lip reading). The best way to do the training is for the listener to look down so they can't see the speaker's face. Avoid covering the speaker's mouth as this changes the sound of the speech.
- The speaker tells the listener which parts of their response was correct. The speaker should give positive feedback. Instead of saying: "no, that was wrong", say: "**listen again**", "**nearly right, listen to the end of the sentence again**", or "**it sounds a bit like that word but it's a different word**".
- If the recipient is having difficulty with the exercise, the speaker may need to change it using the tips provided in the manual. For example, the speaker can speak more slowly, emphasise particular words or let the recipient see the speaker's face. However, the speaker should always end by saying the word or sentence by hearing alone (without lip reading).

- Over time, as the recipient's listening skills improve, the speaker can make the exercises more challenging by:
  - increasing the distance between the recipient and the speaker (for example, by sitting across a table) or sitting on the side without the implant
  - offering less repeats – encourage more attempts to identify the words.

## Essential tips for auditory training

### Auditory training will be the most beneficial if you:

- concentrate on using listening alone (unless instructed to also use lip reading in the exercise)
- listen with your cochlear implant alone (if you use a hearing aid in the other ear, turn it off during the training time)
- practise in a quiet room at first
- practise when you are feeling fresh and relaxed
- practise regularly – about 30 minutes a day, five days each week
- before you start, check that you are using the sound processor program and settings you hear best with
- use a conversational level voice

# Auditory Training Exercise Plan

Auditory Training Exercise Plan			
Exercises to complete		Recipient notes	
– completed by clinician and recipient – note module/exercise and/or page number		– completed by recipient	
Remember to look at the "Essential Tips" (page 7) before you start each session			
Date: ___ / ___ / ___	Time since switch-on: _____	..... ..... ..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... ..... ..... ..... ..... ..... ..... .....
Date: ___ / ___ / ___	Time since switch-on: _____	..... ..... ..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... ..... ..... ..... ..... ..... ..... .....
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Date: ___ / ___ / ___	Time since switch-on: _____	..... ..... ..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... ..... ..... ..... ..... ..... ..... .....
Date: ___ / ___ / ___	Time since switch-on: _____	..... ..... ..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... ..... ..... ..... ..... ..... ..... .....

# Section A

## Getting started

Practice working out the sound and speech from a list of possibilities

# Module 1: Environmental sounds checklist

## Why?

To help you develop an awareness of the sounds around you in the environment and learn to identify these environmental sounds.

## How?

Spend some time each day listening to the sounds around you and see if you can identify the sounds. Complete the following list as you go.

Exercise	
Lower pitched (deeper) sounds	
<input type="checkbox"/> fridge humming	<input type="checkbox"/> kettle boiling
<input type="checkbox"/> man's voice	<input type="checkbox"/> air conditioning
<input type="checkbox"/> car engine from inside the car	<input type="checkbox"/> wind
<input type="checkbox"/> fan	<input type="checkbox"/> a zipper
Higher pitched (squeakier) sounds	
<input type="checkbox"/> birds	<input type="checkbox"/> child's voice
<input type="checkbox"/> car indicators	<input type="checkbox"/> clothes rubbing together
<input type="checkbox"/> cicadas	<input type="checkbox"/> wire coat hangers on a metal rod
<input type="checkbox"/> tapping on computer keyboard	<input type="checkbox"/> microwave or washing machine beeps
<input type="checkbox"/> frying food	<input type="checkbox"/> light switch
<input type="checkbox"/> rubbing hands together	
Rhythmic sounds	
<input type="checkbox"/> phone ringing	<input type="checkbox"/> road crossing beeps
<input type="checkbox"/> footsteps	<input type="checkbox"/> knocking at the door
<input type="checkbox"/> tap dripping	<input type="checkbox"/> clock ticking
Continuous sounds	
<input type="checkbox"/> fridge motor	<input type="checkbox"/> vacuum cleaner
<input type="checkbox"/> rain on roof	<input type="checkbox"/> waves at the beach
<input type="checkbox"/> shopping centre	<input type="checkbox"/> clothes dryer

Very soft sounds			
<input type="checkbox"/>	own breathing	<input type="checkbox"/>	ice cubes melting
<input type="checkbox"/>	chopping apples or onions	<input type="checkbox"/>	rustling of tissue paper
<input type="checkbox"/>	pet drinking from a bowl	<input type="checkbox"/>	cat purring
<input type="checkbox"/>	gas escaping from a drink can	<input type="checkbox"/>	scissors opening and closing
<input type="checkbox"/>	spray from perfume or deodorant container	<input type="checkbox"/>	shuffling a pack of cards
Distant sounds			
<input type="checkbox"/>	traffic in distance	<input type="checkbox"/>	waves at the beach
<input type="checkbox"/>	neighbour coming and going	<input type="checkbox"/>	children at a playground
<input type="checkbox"/>	car coming down the road	<input type="checkbox"/>	aeroplane flying overhead
Louder sounds			
<input type="checkbox"/>	cutlery being placed in drawer	<input type="checkbox"/>	running water into the sink
<input type="checkbox"/>	toilet flushing	<input type="checkbox"/>	own chewing
<input type="checkbox"/>	cup on bench	<input type="checkbox"/>	motor bike passing by
<input type="checkbox"/>	dog barking	<input type="checkbox"/>	stirring a cup of liquid with a spoon
<input type="checkbox"/>	plastic bags or packaging	<input type="checkbox"/>	jangling keys
<input type="checkbox"/>	traffic		
List some sounds you heard in the first week with your cochlear implant that you had forgotten			

## Module 2: Environmental sounds training

### Angel Sound™ Exercise

#### Basic Module – Environment Sounds

##### Why?

You can use this task to practise identifying common everyday sounds, such as the sound of a bird, a car horn or a doorbell. Being able to match sounds with objects or events around you may assist you in developing your memory for sound. Sounds may be very different with the cochlear implant, and you may need to learn or re-learn some sounds.

##### How?

- On the main module screen, click on "**Basic Module**", and then on the left hand side of the screen click on "**Environment Sounds**". Refer to Appendix 2 (Tips for using the Angel Sound™ program) if needed.
- Click on the "**Preview**" button to practise listening to the environmental sounds. There are 100 different sounds, with 12 sounds on each page. You can move to the next group of sounds by clicking on the "**Forward**" button.
- Click on the "**Training**" button to do the training task. In each task, a sound is presented and you choose which one you think it was.
- There are four levels ranging from easier to harder:
  - **Level 1:** choose from two sounds (in quiet)
  - **Level 2:** choose from four sounds (in quiet)
  - **Level 3:** choose from six sounds (in quiet)
  - **Level 4:** choose from six sounds (in background noise)
- Your clinician will guide you on which levels to practise. You can also select the recommended training level if you have performed a test.
- Run a test (click on the "**Test**" button) every now and then so the program can recommend the appropriate training level for you.

You can click on the "**Result**" button to see your previous test results, the amount of completed training time, and your training progress.

## Module 3: Identifying word and sentence length

### Single word length

#### Why?

To practise listening to the syllables in words and the rhythm of words.

#### How?

The speaker will say each of the words on each line, pointing to each in turn. This will help to train you to hear the differences between the words. The speaker will then choose one word to say and you will try to identify which word it was. Try this task with lip reading first if you find it difficult, then practise with hearing alone.

- If you are unable to work out the word, the speaker will say the words several times, pointing to each. Then try again through listening only.

Exercise 1*					
List A (4-syllable difference)			List B (3-syllable difference)		
1	man	mysteriously	1	day	medicinal
2	pie	opportunity	2	egg	altogether
3	time	intelligently	3	crazy	organisation
4	zone	organisation	4	turkey	intelligently
List C (2-syllable difference)			List D (1-syllable difference)		
1	gem	general	1	pie	painful
2	reindeer	medicinal	2	somebody	medicinal
3	vacation	investigation	3	shade	sandwich
4	magazine	mysteriously	4	repeat	radio

\*Hunt, P. Analytic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd.

## How?

Now try this exercise again, with a choice of three words. The speaker will say each of the words on each line, pointing to each in turn. Listen to the words. The speaker will then choose one word to say and you will try to identify which word it was. You can do this task with lip reading first if you find it difficult, then practise with hearing alone.

- If you are unable to work out which word was said, the speaker will then say the words several times, pointing to the words. This will help to train you to hear the differences between the words.

Exercise 2*			
1	cheerful	eventual	time
2	game	happy	chocolate
3	Christmas	hall	beautiful
4	charm	company	plastic
5	telephone	ping	sandman
6	encyclopaedia	yellow	love
7	water	awareness	wait
8	rob	barber	basketball
9	chipmunk	chain	championship
10	no	notice	nomination

\*Hunt, P. Analytic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd.

## How?

Now try this exercise again, with a choice of five words. This is a more difficult listening task, so well done on making the progress you have. The speaker will say each of the words on each line, pointing to each in turn. Listen to the words. The speaker will then choose one word to say and you will try to identify which word it was. You can do this task with lip reading first if you find it difficult, then practise with hearing alone.

- If you are unable to work out which word was said, the speaker will then say the words several times, pointing to the words. This will help to train you to hear the differences between the words.

Exercise 3*					
1	man	mother	magazine	magnificent	mysteriously
2	night	neighbour	newspaper	never-ending	independently
3	pie	police	painfully	experiment	opportunity
4	time	turkey	telephone	transportation	intelligently
5	day	reindeer	somebody	medicinal	Indian summer
6	egg	garden	government	altogether	accommodation
7	farm	famous	favourite	information	unfortunately
8	voice	virtue	vacation	variation	investigation
9	sand	sandwich	summertime	disappointment	magnificently
10	zone	crazy	position	reasonable	organisation
11	shade	shiver	permission	transportation	professionally
12	beige	measure	conclusion	unusual	occasionally
13	gem	justice	general	January	vegetable juice
14	rat	repeat	radio	romantically	recommendation
15	need	mustard	internal	impossible	intermediate

\*Hunt, P. Analytic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd.

## Word length in sentences

### Why?

To practise listening to the syllables in words and the rhythm of words in sentences.

### How?

The speaker will say each of the two sentences, pointing to each in turn. Listen to the sentences, paying attention to the number of syllables in the final word for each sentence. The speaker will then say one of the sentences and you will try to identify which sentence it was. You can do this task with lip reading first if you find it difficult, then practise with hearing alone.

- If you are unable to work out which sentence was said, the speaker will then say the two sentences several times, pointing to them. This will help to train you to hear the differences between the words.

Exercise 4*	
1	He owns a car. He owns an automobile.
2	He thought it was fun. He thought it was serious.
3	How tall is your mum? How tall is your grandmother?
4	I walked on the floor. I walked on the carpet.
5	There is not enough time. There is not enough peanut butter.
6	I want to go now. I want to go to work.
7	Have you ever seen an owl? Have you ever seen an elephant?
8	Don't give up hope. Don't give up the ship.
9	Tell her to come home. Tell her to come to the movies.
10	I saw it in the bookshop. I saw it in the supermarket.

\*Hunt, P. Analytic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd.

## Identifying sentence length

### Why?

To practise listening to the syllables in words and the rhythm of words in sentences.

### How?

The speaker will say each of the following sentences, pointing to each in turn. Listen to the sentences, paying attention to the pattern and number of words in each sentence. The speaker will then say one of the sentences and you will try to identify which sentence it was. You can do this task with lip reading first if you find it difficult, then practise with hearing alone.

- If you are unable to choose the correct sentence, the speaker will then say the two sentences (the correct and incorrect sentences) several times, pointing to each. This will help to train you to hear the differences between the sentences.

Exercise 5*	
List A	
1	I couldn't believe it was you.
2	Goodbye now.
3	It's my birthday on Monday.
4	Tell me again.
List B	
1	Take it easy.
2	Can you figure it out?
3	The Earth revolves around the sun.
4	Oh, no.
List C	
1	It's Greek to me.
2	He waited for the bus.
3	Try to relax.
4	What did you get for Christmas?
List D	
1	Cartoons are funny pictures.
2	The pilot flew the plane.
3	Let's take a break.
4	Where is Jeff?

\*Hunt, P. Analytic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd.

## How?

The speaker will say the sentence with each of the three ending phrases, pointing to each in turn. The speaker will then choose one ending phrase and will repeat the sentence. Without lip reading, listen to the sentence and try to identify what the ending phrase was. As you gain confidence, try it without rehearsing each ending phrase first.

- If you are unable to work out which sentence was said, the speaker will then say the three sentences several times, pointing to them. This will help to train you to hear the differences between the sentences.

Exercise 6*		
1	The game is...	here. tomorrow. in the afternoon.
2	Did you see the...?	baby. Christmas tree. new teacher at school.
3	The woman...	stayed home. went for a walk. moved to another country.
4	The glass was...	empty. completely broken. filled with fresh strawberries.
5	We baked...	bread. muffins. chocolate chip biscuits.
6	Where is the...?	door. kitchen. new computer.
7	I like to...	read. sky dive. watch TV.
8	Why can't you...?	smile. sit down. stay outside.
9	I enjoy...	resting at home. taking a long drive in the country. sunshine and playing tennis.
10	In the winter...	the skiing resorts are open. days are very cold. many children throw snowballs and build snowmen.

\*Hunt, P. Analytic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd.

## Module 4: Identifying speech sounds (vowels and consonants)

### Why?

Using your cochlear implant throughout the day gives you lots of practice and helps you learn to identify some of the speech sounds. However, some speech sounds may still be difficult to tell apart and identify. Doing listening exercises can help you to tell apart and identify speech sounds. For these exercises you will listen to pairs of words that differ in one speech sound (for example, the vowel “**a**r” in “**b**arn” vs “**i**” in “**b**in”) and practise telling the sounds apart. Some types of vowels and consonants are harder to hear with a cochlear implant than others. The exercises start with easier sounds to tell apart and then become more challenging.

### Vowel identification – words which differ by vowel length and pitch

#### Why?

To practise listening to the length and pitch of vowel sounds.

#### How?

The speaker will say each of the two words on each line, pointing to each in turn. Listen to the words. The speaker will then choose one word to say and you will try to identify the word.

- If you are unable to work out which word was said, the speaker will then say the pair of words several times, pointing to the word as they say it. This will help to train you to hear the differences between the sounds.

Exercise 1*		
1	sharp	ship
2	teach	touch
3	barn	bin
4	leak	luck
5	card	kid
6	neat	nut
7	sheet	shut
8	parch	pitch
9	lark	lick
10	heart	hit
11	bean	bun
12	part	pit
13	keep	cup
14	park	pick
15	beat	but

\*Adapted from Plant, G. (1984). *Commtram: A communication training program for profoundly deaf adults*. Sydney: National Acoustics Laboratories.

## Vowel identification – words which differ by vowel length but the pitch is more similar

### Why?

To practise listening to the length and pitch of vowel sounds.

### How?

The speaker will say each of the two words on each line, pointing to each in turn. Listen to the words. The speaker will then choose one word to say and you will try to identify which word it was.

- If you are unable to work out which word was said, the speaker will then say the pair of words several times, pointing to the word as they say it. This will help to train you to hear the differences between the sounds.

Exercise 2*		
1	carp	cup
2	peep	pip
3	mast	must
4	sleek	slick
5	lark	luck
6	hawk	hook
7	leap	lip
8	cart	cut
9	peat	pit
10	cord	could
11	fort	foot
12	dark	duck

\*Adapted from Plant, G. (1984). *Commtram: A communication training program for profoundly deaf adults*. Sydney: National Acoustics Laboratories.

## How?

Now try this task in the context of sentences – you are doing really well as these activities are becoming more challenging. The speaker will say each sentence using only one of the underlined words. Point to the word that was used in the sentence.

- If you are unable to work out which word was said, the speaker will then say the sentence with each ending several times, pointing to the word as they say it. This will help to train you to hear the differences between the sounds.

Exercise 3*	
1	Mary and Sue looked at the <u>sheep/ship</u> .
2	They were talking about the <u>fawn/fun</u> they had.
3	There were many <u>coats/cots</u> in the room.
4	John began to <u>paint/pant</u> .
5	Do you have the <u>bait/bat</u> in your car?
6	He bought some <u>cheap/chip</u> board at the hardware store.
7	Roger <u>caught/cut</u> the fish.

\*Adapted from Plant, G. (1984). Commtram: A communication training program for profoundly deaf adults. Sydney: National Acoustics Laboratories.

## Vowel identification – words which differ by vowel pitch only

### Why?

If you have not heard high pitched sounds for some time before receiving your cochlear implant, you may have forgotten the differences between low pitched and high pitched vowels, or you may not have heard the high pitch in sounds like “ee” and “i” before.

### How?

The speaker will say each of the two words on each line, pointing to each in turn. Listen to the words. The speaker will then choose one word to say and you will try to identify which word it was.

- If you are unable to work out which word was said, the speaker will then say the pair of words several times, pointing to the word as they say it. This will help to train you to hear the differences between the sounds.

Exercise 4*		
1	spark	speak
2	tar	too
3	parch	peach
4	tart	toot
5	fast	feast
6	barn	bean
7	park	peak
8	car	key
9	grass	grease
10	lark	leak

Exercise 5*		
1	tar	tea
2	spark	spook
3	pit	pet
4	beat	boot
5	kid	could
6	bid	bed
7	feed	food
8	bad	bud
9	kicks	cooks
10	miss	mess

\*Adapted from Plant, G. (1984). *Commtram: A communication training program for profoundly deaf adults*. Sydney: National Acoustics Laboratories.

## Consonant identification – words which differ by the position of the high pitched consonant

### Why?

To become more aware of high pitched sounds in words.

### How?

The speaker will say each of the two words on each line, pointing to each in turn. Listen to the words noticing if the high pitched sound, for example, "s" or "ch", is at the beginning or the end of the word. The speaker will then choose one word to say and you will try to identify which word it was.

- If you are unable to work out which word was said, the speaker will then say the pair of words several times, pointing to the word as they say it. This will help to train you to hear the differences between the sounds.

Exercise 6*		
1	mass	Sam
2	shun	nuts
3	cheap	match
4	show	nose
5	charm	march
6	zoo	bruise
7	reach	chair
8	chap	patch
9	rice	sign
10	shine	mesh
11	shore	wash
12	chum	much
13	boss	some
14	chill	lease

\*Adapted from Plant, G. (1984). *Commtram: A communication training program for profoundly deaf adults*. Sydney: National Acoustics Laboratories.

## Consonant identification – Level 1

### Why?

To practise listening to whether the consonant is voiced or unvoiced.

### How?

The speaker will say each of the two words on each line, pointing to each in turn. Say the two words yourself first, noticing if you use your voice (such as “b”) or no voice (such as “p”) to say the letter at the start of the word. Listen to your speaker saying the two words. The speaker will then choose one word to say and you will try to identify which word it was.

- If you are unable to work out which word was said, the speaker will then say the pair of words several times, pointing to the word as they say it. This will help to train you to hear the differences between the sounds.

Exercise 7*		
1	park	bark
2	pet	bet
3	pie	bye
4	toe	dough
5	tale	dale
6	tie	die
7	too	do
8	coat	goat
9	came	game
10	cot	got
11	card	guard
12	fail	vale
13	fan	van
14	Sue	zoo
15	sewn	zone

\*Adapted from Plant, G. (1984). *Commtram: A communication training program for profoundly deaf adults*. Sydney: National Acoustics Laboratories.

## How?

Now try that again, but this time, listen to the consonant at the end of the word. The speaker will say each of the two words on each line, pointing to each in turn. Say the two words yourself first, noticing if you use your voice to say the letter at the end of the word. Listen to your speaker saying the two words. The speaker will then choose one word to say and you will try to identify which word it was.

- If you are unable to work out which word was said, the speaker will then say the pair of words several times, pointing to the word as they say it. This will help to train you to hear the differences between the sounds.

Exercise 8*		
1	mop	mob
2	pup	pub
3	pick	pig
4	duck	dug
5	frock	frog
6	back	bag
7	beat	bead
8	bus	buzz
9	leaf	leave
10	safe	save

\*Adapted from Plant, G. (1984). *Commtram: A communication training program for profoundly deaf adults*. Sydney: National Acoustics Laboratories.

## Consonant identification – Level 2

### Why?

To practise listening to different-sounding consonants. Consonants sound different because of the way we make the sounds with our lips, teeth and mouth.

### How?

The speaker will say each of the two words on each line, pointing to each in turn. Say the two words yourself first, noticing how you say the letter at the start of the word. The speaker will then choose one word to say and you will try to identify which word it was.

- If you are unable to work out which word was said, the speaker will then say the pair of words several times, pointing to the word as they say it. This will help to train you to hear the differences between the sounds.

Exercise 9*		
1	pea	me
2	pop	mop
3	peel	meal
4	park	mark
5	pen	men
6	bone	boat
7	seen	seat
8	bean	beat
9	ban	bat
10	bin	bit

Exercise 10*		
1	match	batch
2	man	ban
3	mail	bail
4	me	be
5	nice	dice
6	come	cub
7	dam	dab
8	moon	mood
9	pan	pad
10	corn	cord

Exercise 11*		
1	sea	knee
2	sit	knit
3	seed	need
4	sag	nag
5	kiss	keen
6	nice	nine
7	fuss	fun
8	horse	horn
9	case	cane
10	dice	dine

\*Adapted from Plant, G. (1984). *Commtram: A communication training program for profoundly deaf adults*. Sydney: National Acoustics Laboratories.

## Consonant identification – Level 3

### Why?

Well done on reaching Level 3. Now it's becoming quite challenging. Many recipients who were born deaf have not heard the high pitched sounds at the beginnings and endings of words for a very long time or, in some cases, not at all. In this exercise you will practise the skills you have learned in the previous pages to discriminate between words with different high pitched consonants.

### How?

The speaker will say each of the words on each line, pointing to each in turn. The speaker will then choose one word to say and you will try to identify which word it was.

- If you are unable to work out which word was said, the speaker will then say the four words several times, pointing to the word as they say it. This will help to train you to hear the differences between the sounds.

Exercise 12				
1	fail	shale	sail	tail
2	zeal	feel	peel	seal
3	zoo	too	shoe	sue
4	fat	sat	chat	pat
5	sign	fine	pine	shine
6	trill	shrill	thrill	still
7	tin	sin	fin	chin

**Basic Module – Vowel Recognition and Consonant Recognition****Why?**

In these exercises, you can practise telling the difference between and identifying both vowels and consonants. With your cochlear implant you may be able to hear the vowels and consonants, but some of them may be difficult to identify or tell apart.

**How?**

- On the main module screen, click on **"Basic Module"**, and then on the left hand side of the screen click on **"Vowel Recognition"** or **"Consonant Recognition"**. Refer to Appendix 2 (Tips for using the Angel Sound™ program) if needed.
- Click on the **"Preview"** button to practise listening to the words with different vowels and consonants.
- Click on the **"Training"** button to do the training.
- There are three levels ranging from easier to more difficult. Within each level there are also a number of steps which get more difficult as you work through them.
  - **Level 1:** Listening for differences between the speech sounds. There are three buttons on the screen, one for each of the three words you will hear. Two words are the same, one is different. Choose which word is different.
  - **Level 2:** Listening for differences between the speech sounds and identifying what the speech sounds are. There are two words on the screen. You will hear the two words, and then one of the words again (spoken by a different speaker). Choose the word you heard.
  - **Level 3:** Identifying what the speech sounds are. There are two words on the screen initially. You will hear one word, and you choose the word you heard. The number of choices increases (from two to nine for vowels and from two to six for consonants) as you go through the steps.
- Your clinician will guide you on which levels to practise.
- When your answer is incorrect, the words will be played so you can listen for the differences.
- Run a test (click on the **"Test"** button) every now and then so the program can adjust the difficulty of the exercise.
- You can click on the **"Result"** button to see the previous test results, the amount of training time, and the training progress.

## Module 5: Identifying the stressed word

### Why?

To practise recognising which word has been stressed (emphasised). The stressed word changes the meaning of the sentence and the answer the speaker expects from you.

### How?

The speaker will say the sentence putting more stress on the word with a number "1" underneath it. The sentence is then repeated stressing a different word with either a "2" or "3" underneath it. Try to identify which word was stressed.

- If you are having trouble working out which was the stressed word, the speaker will then repeat the sentence, stressing each word – 1, 2 or 3 – in turn. This will help to train you to hear these differences.

Exercise 1*	
1	How did <b>you</b> know the answer? 1      2      3
2	Did <b>you</b> listen to <b>me</b> ? 1      2      3
3	I <b>want</b> to go to the <b>movies</b> . 1    2                      3
4	<b>Springtime</b> is <b>my</b> favourite season. 1                      2      3
5	Have <b>you</b> ever had iced <b>coffee</b> ? 1    2                      3
6	<b>When</b> are <b>you</b> leaving for the <b>meeting</b> ? 1      2                      3
7	Is <b>he</b> going to the <b>cinema</b> in the <b>city</b> ? 1                      2                      3
8	<b>Why</b> are <b>you</b> going to the <b>shops</b> ? 1      2                      3
9	I never <b>dreamed</b> I would <b>win</b> the competition. 1      2                      3
10	<b>Wait</b> for <b>me</b> at the <b>end</b> of the road. 1      2                      3

\*Adapted from Hunt, P. Analytic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd.

## Module 6: Identifying low and high pitch in sentences

### A. Sentence pitch – Level 1

#### Why?

To practise listening to the pitch of sounds in a sentence.

#### How?

The speaker will say each sentence, pointing to each in turn. Listen to the sentence noticing if there are more low pitched sounds like “w” or “m”, or more high pitched sounds like “s” or “sh”. The speaker will then choose one sentence to say and you will try to identify which sentence it was.

- If you are unable to work out which sentence was said, the speaker will then say the two sentences several times, pointing to them. This will help to train you to hear these differences.

Exercise 1*	
1	Paul brought all the wood home. She drinks really sweet tea.
2	It's easy to see. My brother liked blue.
3	She is his sister. The door blew open.
4	Mike has milk each day. He sits in his seat.
5	Bob brought the ball. Sis uses the scissors.
6	Knock on the door. She eats the cheese.
7	Catch the keys! Mow the lawn!
8	His feet itch. Move over.
9	It's easy. Oh, no.
10	She's sick! No more!

\*Adapted from Hunt, P. Analytic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd.

## B. Sentence pitch – Level 2

### Why?

To practise listening to the pitch of sounds in a sentence.

### How?

The speaker will say each sentence, pointing to each in turn. Listen to the sentence noticing where the high pitched sounds like “s” and “f” occur. The speaker will then choose one sentence to say and you will try to identify which sentence it was.

- If you are unable to work out the sentence, the speaker will then say the two sentences several times, pointing to them. This will help to train you to hear these differences.

Exercise 2*	
1	Sheep don't live in a barn. Bob had sixteen sheep.
2	Sit here on the floor. You should get six of these.
3	Move over till he sees it. Each street gets a new pavement.
4	The neighbour is eager to see Sydney. Six seats are available for us.
5	Paul bruised his leg. His sheets are soft.
6	This chick wants a worm. The boat docks with ease.
7	Sweep the floor with a broom. Don't walk in the street.
8	Sit still and don't move. Turn over the chicken, please.
9	Joan wants tea and cheese. See me tomorrow afternoon.
10	We often see ice in the winter. It's easy to grow tomatoes.
11	His seat is too low. Robert runs with ease.
12	The tide came in at six. This string should make a bow.

\*Adapted from Hunt, P. Analytic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd.

## C. Sentence pitch – Level 3

### Why?

To practise listening to the pitch of sounds in a sentence.

### How?

This exercise is more challenging because all the sentences are about the same length. Use all the skills you have practised so far, such as listening for the pitch of the vowel, the length of the word, and the position of the high pitched sounds. The speaker will say each sentence, pointing to each in turn. The speaker will then choose one sentence to say and you will try to identify which sentence it was.

- If you are unable to work out which sentence was said, the speaker will then say the sentences several times, pointing to them. This will help to train you to hear these differences.

Exercise 3*	
Set A	
1	John Smith broke his left arm.
2	Turn left at the next street.
3	The king was a great man.
4	What time does your watch say?
Set B	
1	Keep watching the road.
2	I can't stay awake.
3	Tell him to come here.
4	Stop causing trouble.
5	Turn on the heater.
Set C	
1	Why don't you buy some new clothes?
2	Did you see that old movie?
3	The rain fell all through the day.
4	It's your turn to wash the car.
5	I can't understand that man.

\*Adapted from Hunt, P. Analytic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd.

## Module 7: Identifying common phrases

### Why?

To practise identifying commonly heard sentences.

### How?

In this exercise the sentences are things people say every day. The speaker will say each sentence, pointing to each in turn. The speaker will then choose one sentence to say and you will try to identify which sentence it was. Work with one set at a time, then from all three sets. To make the task a little more difficult try it without having the sentences in front of you.

Exercise	
Set A	
1	What time is it?
2	See you later!
3	Would you like a cup of coffee?
4	How was your day?
5	Do you need a lift or will you catch the bus?
Set B	
1	What's the weather like?
2	How do you spell your name?
3	Happy Birthday!
4	You are looking well today.
5	Wait a minute.
6	Would you like some help?
Set C	
1	Close the door.
2	Are you warm enough?
3	What would you like for breakfast?
4	When shall we have dinner?
5	Let's go to the movies.
6	Pass the bread and butter please.

## Module 8: Identifying the emotion in speech\*

### Why?

To practise recognising the emotion of the speaker. Recognising how the speaker feels helps us to respond in an understanding way.

### How?

The speaker will say the sentence using first a neutral tone of voice. The sentence is then repeated in an angry voice, then a sad voice. Notice that the feelings of the speaker change how fast the sentence is spoken and the loudness of some words as well as the overall tone. Try to identify which of the three emotions – neutral, angry or sad – the speaker used.

#### Exercise

- 1 There are too many commercials on television these days.
- 2 Don't forget to phone me when you get home.
- 3 He was so busy at work he forgot his wife's birthday.
- 4 Please don't eat all the biscuits.
- 5 Wait for me outside the post office.
- 6 She was late for school.
- 7 Why do you have to go so early?
- 8 Who told you about my accident?

\*Based on the concept of Plant, G. (1984). *Commtram: A communication training program for profoundly deaf adults*. Sydney: National Acoustics Laboratories.

## Module 9: Identifying words (known topics and options)

### Why?

To practise identifying familiar words on a known topic.

### How?

Think up some words on a topic that is familiar or meaningful to you so that practising these will be helpful in your daily life. Topics may include, for example, names of family members or friends, words that you use when you go shopping or at work, items of clothing, food you eat, or places you go. Write these words in the tables provided below.

- Start with a small number of words (three or four) in this exercise and with words that are very different (have different lengths/syllables and different speech sounds), and as you become more practised, use more similar words.
- The speaker will say each of these words without lip reading, then say just one of the words. You will try to identify which word it was.
- You can do this task with lip reading first if you find it difficult, then practise with hearing alone.
- If you are unable to work out which word was said, the speaker will then say the words several times, pointing to them. This will help to train you to hear the differences between them.

Example Exercise	
Topic: Names of family members	
1	Anne
2	Rebecca
3	Mary
4	Christopher

Now write your topics and words in the tables below.

Exercise	
Topic:	
1	
2	
3	
4	
5	

Exercise	
Topic:	
1	
2	
3	
4	
5	

## How?

Now try some more topics and words and make it more challenging. In the tables below is a range of topics and words. After these you will find some blank tables.

- Choose a topic from the lists and write some of the words in a blank table.
- Start with a small number of words and with words that are very different (have different lengths/syllables and different speech sounds). For example, for the Animals topic you could choose cat, snake and hippopotamus.
- The speaker will say each of these words without lip reading, and then say one of the words. You will try to identify which word it was.
- You can do this task with lip reading first if you find it difficult, then practise with hearing alone.
- As you improve with more practice, you can use more words and words that are more similar, as well as adding your own words if you like, for example, from your own hobby.

Exercise				
	Topic: Animals	Topic: Fruits	Topic: Months	Topic: Body parts
1	tiger	banana	September	elbow
2	snake	apple	March	knees
3	kangaroo	kiwifruit	July	face
4	dog	pear	February	eyebrows
5	chimpanzee	mandarin	October	fingernails
6	bear	strawberry	April	hair
7	elephant	lemon	August	leg
8	spider	pineapple	June	forehead
9	cat	orange	December	arm
10	hippopotamus	pomegranate	May	head

Exercise				
	Topic: Colours	Topic: Vehicles	Topic: Bicycle	Topic: Breakfast foods
1	yellow	car	handlebars	eggs and bacon
2	green	train	wheel	toast and jam
3	purple	aeroplane	bell	cornflakes
4	brown	bicycle	tyre	fruit salad
5	orange	helicopter	spokes	orange juice
6	red	bus	chain	cereal
7	grey	motorbike	basket	pancakes
8	blue	ferry	gears	waffles
9	silver			
10	turquoise			

Exercise	
Topic:	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Exercise	
Topic:	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

There are more blank tables at the end of the manual (Appendix 1).

You can also make up your own sets of topics and words.

Angel Sound™ Exercise

**Basic Module – Word Discrimination**

**Why?**

This exercise helps you to listen to common words used in everyday speech, such as words for animals, foods and colours. In this module you will listen to whole words, as opposed to training to hear small differences between words in the vowel and consonant recognition modules. This training may help you to recognise some of the commonly used words in everyday life.

**How?**

- On the main module screen, click on **“Basic Module”**, and then on the left hand side of the screen click on **“Word Discrimination”**. Refer to Appendix 2 (Tips for using the Angel Sound™ program) if needed.
- There are six different topics (Animal, Food, Colour, Family, Number, Time).
- Click on the **“Preview”** button to practise listening to words in each topic. A number of words are shown on each page and you can go to the next group of words by clicking on the **“Forward”** button.
- Click on the **“Training”** button to do the training. Then select a topic. There are four buttons on the screen, each for a different word. You will hear one word and you choose the word you heard.
- When your answer is incorrect, the words will be played so you can listen for the differences.
- Run a test (click on the **“Test”** button) every now and then so the program can track the training progress for you.
- You can click on the **“Result”** button to see the previous test results, the amount of training time, and the training progress.

## Module 10: Identifying sentences (known topics and options)

### Why?

To gain practice in identifying sentences which you might hear in a particular situation.

### How?

You and the speaker have the list of sentences in front of you. The speaker randomly chooses a sentence to say. You repeat the sentence or any words you think you heard. The speaker confirms which words you got right. If you have not been able to repeat the sentence after three attempts, the speaker will provide a key word in the sentence using lip reading cues, then repeat the entire sentence using hearing alone. If needed, to make it easier you can reduce the number of items in the list.

#### Exercise 1\*

##### Topic: At the bank

- |   |  |
|---|--|
| 1 | Do you have an account at this branch?         |
| 2 | Would you like to open a new account?          |
| 3 | The teller at window number one will help you. |
| 4 | Is this a deposit or a withdrawal?             |
| 5 | You forgot to sign this cheque.                |
| 6 | This cheque has not been cleared.              |
| 7 | Would you like to order a statement?           |
| 8 | Your account is overdrawn.                     |

#### Exercise 2\*

##### Topic: Going to the beach

- |    |                                  |
|----|----------------------------------|
| 1  | This sand is hot.                |
| 2  | The sun is bright.               |
| 3  | Do you want to swim now?         |
| 4  | Here is your beach towel.        |
| 5  | I think I am sunburnt.           |
| 6  | Who is thirsty?                  |
| 7  | The waves are very big today.    |
| 8  | My swimsuit is wet.              |
| 9  | The beach is packed with people. |
| 10 | Please pass me my beach bag.     |

\*Pedley, K. Synthetic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd. Based on concept of Plant, G. (1984). Commtram: A communication training program for profoundly deaf adults. Sydney: National Acoustics Laboratories.

You can also make up your own topics and sentences. Some ideas for topics are: at the post office, your last holiday, your favourite hobby etc. Fill in the topics and sentences in the table below (there are also extra blank tables in Appendix 1).

Exercise	
Topic:	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Exercise	
Topic:	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

## Module 11: Identifying link sentences\*

### Why?

To practise identifying words in sentences using familiar words when you know what the possible options are.

### How?

You can look at the table during this exercise. The speaker starts by saying one of the sentences in the rows. You should try to identify which sentence the speaker said. If the whole sentence was not correct, the speaker confirms which words you got correct then says the sentence again. If the response is still incorrect, the speaker says the sentence again, pointing to the words as they are spoken. When the recipient can do this easily from the whole table without lip reading, create new sentences selecting one word from each column, for example, Tuesday 30th June at half past 11.

Exercise 1			
Saturday	8th	March	3 o'clock
Tuesday	14th	September	9:30
Sunday	21st	June	7:15
Wednesday	30th	August	noon
Monday	11th	December	half past 11
Thursday	2nd	February	twenty to 10
Friday	17th	April	quarter past 8

### How?

Now try this one, which is a bit more challenging. You can look at the table during this exercise. Start by saying one of the sentences in the rows. You should try to identify the sentence. If the whole sentence was not correct, the speaker confirms which words you got correct then says the sentence again. If the response is still incorrect, the speaker says the sentence again, pointing to the words as they are spoken. When the recipient can do this easily from the whole table without lip reading, create new sentences selecting one word from each column, for example, Bill bought eight yellow jackets.

Exercise 2*				
Peter	owns	ten	old	jackets
Bill	sends	two	red	boxes
John	sees	seven	good	roses
Gary	bought	three	new	birds
Steven	won	six	green	windows
Nicole	gets	twenty	lovely	cars
Rachel	sold	eight	pretty	shirts
Barbara	gives	thirteen	big	dogs
Michelle	chose	twelve	yellow	gifts
Cathy	made	eleven	funny	balls

\*Based on concept of Hagerman, B. (1982). "Sentences for speech intelligibility testing in noise," *Scandinavian Audiology*, 11: 79-87.

You can also make up your own link sentences. Follow the format in the table above and write the words into the table below.

Exercise				
Name	Verb	Number	Adjective	Noun

 Angel Sound™ Exercise

**Openset Module – Concatenated Sentences**

**Why?**  
 To practise identifying sentences when the topic is not known but the possible words that make up the sentence are known. Each sentence includes five words, one from each column in the table. This is the same type of training as the link sentence task above.

**How?**

- In the main module screen, click on "**Openset Module**", and then on the left hand side of the screen click on "**Concatenated Sentences**". Refer to Appendix 2 (Tips for using the Angel Sound™ program) if needed.
- Click on the "**Preview**" button to practise listening to all the words.
- Click on the "**Training**" button to do the training. Choose "**Quiet**".
- You will see all the words in a table on the screen. You will hear one sentence, made up from words in the table (one from each column). You select each of the words you heard to make up the complete sentence.
- When your answer is incorrect, the correct and incorrect sentences will be played so you can listen for the differences.
- Run a test (click on the "**Test**" button) every now and then so the program can adjust the difficulty of the exercise.
- You can click on the "**Result**" button to see the previous test results, the amount of training time, and the training progress.

## Module 12: Text following – passages read aloud

### Why?

To practise listening to the syllables in words and the rhythm of words.

### How?

The speaker will read the following passage. Follow the passage by pointing to each word. The speaker will stop from time to time. When the speaker stops, repeat the last word. At first the speaker will stop at natural breaks in the text, and as you gain confidence the speaker will stop in unpredictable places – can you still stop on the correct word? You can do the same exercise using items at home such as cookery books, a favourite novel, a community newsletter, a newspaper or a hobby book.

### Some handy tips:

- When you start this task, practise in a quiet room using materials that are easy to follow (for example, reading from children's books, or a familiar book or magazine). The speaker should start by speaking slowly and stopping in places that are predictable, such as at the end of sentences or phrases. Passages can be read several times for practise.
- As you gain more experience with this task, you can use more difficult materials with longer sentences and where you are not familiar with the topic.
- When you start to find the task easier, listen in a room with background noise. To do this you can turn on a fan, or turn on the radio "off station" with static noise in the background, or to a station with music or talking, increasing the volume of the noise as you progress.
- You can also practise listening by reading aloud to yourself.

### Exercise\*

#### The Saint Bernard

A large, strong dog was specially raised in the Swiss Alps in Europe. It grew to have a thick brown and white coat. The dog was called a Saint Bernard. It was first trained by monks. They lived in a mountain shelter called The Lodge of Saint Bernard. The shelter was for hikers and skiers.

The dogs were trained to help patrol the snow-covered trails. They were trained to search for people lost in the mountains. They would drag or lead them back to the shelter. There they could be taken care of by the monks.

The monks soon learned that walking or lying cold in the snow caused people to become very thirsty. So they tied small kegs of water or alcohol around the necks of the Saint Bernard. In the case of the person being able to walk, a sip could be taken to restore energy. If the lost person was not awake, the Saint Bernard would drag them to the lodge. If the person woke up during the journey, he or she could take a sip from the keg while being taken to the lodge.

\*Hunt, P. Analytic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd.

# Section B

**Making it more challenging**

Practice repeating and understanding speech

## Module 13: Recognising sentences (fill in the missing word)

### Why?

During conversations we can often predict what the person is going to say next or how they will finish the sentence. The further we get into the conversation, the easier this becomes. This "**anticipation skill**" helps us to "**fill in the gaps**" if it is noisy or the speaker turns away and the word is only "**half heard**". This skill can become rusty when hearing deteriorates.

### How?

The speaker will say the sentence below. The speaker will think of a word to fill the gap and will say the whole sentence. Without lip reading, listen to the sentence and try to identify what the missing word was. The speaker should start by using words which are familiar to the recipient and predictable. As you find this easier, the speaker can use less familiar words and phrases.

Exercise	
1	My favourite hobby is...
2	The room I like most at home is the...
3	Last year I spent my summer holiday in...
4	Today the weather forecast is for...
5	For breakfast this morning I ate...
6	In my garden there are lots of...
7	For the party I am going to bake...
8	I usually start work at...
9	The last thing I do when I leave the house is...
10	At the grocery store I am going to buy...

## Module 14: Recognising sentences (complete the sentence)

### Why?

To practise using context to help you fill in missing words. Words can be lost because the speaker turns away, covers their mouth or noise drowns out a word or phrase. Once part of a sentence is understood, you can often fill in the gaps using the words you have heard and the rhythm of speech.

### How?

The speaker will say the underlined part of the sentence with lip reading. The speaker will then say the whole sentence. Without lip reading, try to repeat the whole sentence. Remember to try to identify if you are not sure. The speaker can tell you any words that are correct. Try again until you have understood the whole sentence. If you find this too difficult for the longer sentences, the speaker can give you additional words.

Exercise	
1	The <u>secretary</u> typed the letters.
2	The <u>ship sailed</u> into the harbour.
3	The <u>gardener</u> mowed the grass.
4	I <u>went to the post office</u> to buy some stamps.
5	<u>Go into the bank</u> to get a new credit card.
6	<u>Take your glasses</u> to the optician to get new lenses.
7	<u>If you go walking</u> in the rain you'll need an umbrella.
8	The <u>baby drank</u> all the milk from the bottle.
9	The <u>language spoken</u> in Mexico is Spanish.
10	<u>My brother's birthday</u> is on the 21st of July.
11	The <u>traffic</u> was busy because it was rush hour.
12	<u>At the hospital</u> the injured man waited for two hours to see the doctor.
13	<u>Tomorrow</u> I start work at 9 o'clock.
14	<u>Please return</u> the book to the library before the end of the week.
15	<u>In my family</u> we have two boys and three girls but no pets.
16	<u>I need</u> a pen to write down your telephone number.
17	<u>It's been a year</u> since I went for a check-up at the dentist.
18	<u>Do you</u> take milk and sugar in your coffee?
19	<u>To plant</u> that tree you will need to dig a deep hole.

## Module 15: Recognising sentences (with clue phrases)

### Why?

To practise recognising sentences when you know the context from a key phrase in the sentence.

### How?

The speaker will say the phrase clue with lip reading. Check that you have understood this correctly by repeating it back. The speaker will then choose one ending phrase and will say the whole sentence. Without lip reading, listen to the sentence and try to identify what the ending phrase was. The sentences below have the clue phrase at the start, in the middle and at the end of the sentence.

#### Exercise 1\*

Phrase clue: During the summer...

- |   |   |
|---|---|
| 1 | During the summer, many people take a holiday.              |
| 2 | During the summer, children play sports outdoors.           |
| 3 | During the summer, beaches are usually crowded.             |
| 4 | During the summer, the weather is very warm.                |
| 5 | During the summer, it's important to drink plenty of water. |

#### Exercise 2\*

Phrase clue: At the weekend...

- |   |   |
|---|---|
| 1 | At the weekend, people go shopping.                         |
| 2 | At the weekend, children take part in sports.               |
| 3 | At the weekend, there is time to relax.                     |
| 4 | At the weekend, many people spend time with their families. |
| 5 | At the weekend, people meet friends and go to the movies.   |

#### Exercise 3\*

Phrase clue: ...is my favourite...

- |   |  |
|---|--|
| 1 | Blue is my favourite colour.             |
| 2 | Chocolate cake is my favourite dessert.  |
| 3 | Strawberry is my favourite ice cream.    |
| 4 | Morning is my favourite time of the day. |
| 5 | Basketball is my favourite sport.        |
| 6 | Poodles are my favourite dogs.           |

\*Pedley, K. Synthetic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd.

### Exercise 4\*

Phrase clue: ...before you go home.

- 1 Finish your work before you go home.
- 2 Call me before you go home.
- 3 Stop at the store before you go home.
- 4 Put this in your car before you go home.
- 5 I need to see you before you go home.

### Exercise 5\*

Phrase clue: ...in the summertime.

- 1 The weather is hottest in the summertime.
- 2 I like swimming in the summertime.
- 3 Children are out of school in the summertime.
- 4 A variety of flowers bloom in the summertime.
- 5 Rain is refreshing in the summertime.

\*Pedley, K. Synthetic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd.

## Module 16: Recognising sentences (known topics)

### Why?

To practise using the topic of conversation to help you try to identify the sentence.

### How?

You do not see the sentences. The speaker will say the topic of conversation with lip reading. The speaker will then say one of the sentences below. Without lip reading, try to repeat the sentence. Have a guess if you are not sure. The speaker can tell you any words that are correct. Try again until you have understood the whole sentence. If you cannot identify any words after two repeats, the speaker can give you the underlined word as a clue. If you are unable to repeat the sentence, the speaker will say the sentence with lip reading cues and then hearing alone once more.

#### Exercise 1\*

##### Topic: Health

- |   |  |
|---|--|
| 1 | You are looking <u>well</u> .            |
| 2 | How are you <u>feeling</u> ?             |
| 3 | I <u>caught</u> a cold.                  |
| 4 | I've had a <u>sore</u> throat.           |
| 5 | Did you see the <u>doctor</u> ?          |
| 6 | I have been <u>taking</u> some medicine. |
| 7 | Are you <u>feeling</u> sick today?       |
| 8 | You should eat more <u>vegetables</u> .  |

\*Pedley, K. Synthetic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd. Based on concept of Plant, G. (1984). Commtram: A communication training program for profoundly deaf adults. Sydney: National Acoustics Laboratories.

## Exercise 2\*

### Topic: Clothing

- 1 Where is my red shirt?
- 2 I bought a new pair of socks yesterday.
- 3 It's very cold, so bring a jacket.
- 4 I took off my hat and gloves.
- 5 I have some new shoes.
- 6 There is a hole in my jacket because it's so old.
- 7 I like old clothes.
- 8 Did you see what she was wearing?
- 9 Have you seen the latest fashion?
- 10 I'm going shopping to buy some jeans.
- 11 Do you think my shoes match my dress?
- 12 I bought some wool to knit a scarf.

\*Pedley, K. Synthetic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd. Based on concept of Plant, G. (1984).  
Commtram: A communication training program for profoundly deaf adults. Sydney: National Acoustics Laboratories.

## Module 17: Recognising sentences (with situation clues)

### Why?

To practise using topic of conversation to help you to identify the sentence.

### How?

The speaker will say the topic of conversation with lip reading. The rest of the exercise is done without lip reading. The speaker will then say one of the sentences below. Try to repeat the sentence. Make a guess if you are not sure. The speaker can tell you any words that are correct. Try again until you have understood the whole sentence.

Exercise 1*	
Clue: At the bank	
1	Do you have an account at this branch?
2	Would you like to open a new account?
3	The teller at window number one will help you.
4	Is this a deposit or a withdrawal?
5	You forgot to sign this cheque.
6	This cheque has not been cleared.
7	Would you like to order a statement?
8	Your account is overdrawn.

## Exercise 2\*

Clue: At a restaurant

- |    |  |
|----|--|
| 1  | How would you like your steak cooked?              |
| 2  | You have a choice of soup or salad.                |
| 3  | Good evening. May I take your order?               |
| 4  | Would you care to dine at this restaurant again?   |
| 5  | Would you like to use a credit card or pay cash?   |
| 6  | Thank you. Do come again.                          |
| 7  | Would you like a table for two?                    |
| 8  | Is there anything else I can get for you?          |
| 9  | You have potatoes on your chin.                    |
| 10 | Would you like pie, cake or ice cream for dessert? |

## Exercise 3\*

Clue: At the doctor's office

- |    |   |
|----|---|
| 1  | Well, what seems to be the problem?           |
| 2  | Let me look at your tongue.                   |
| 3  | I'll give you some medicine.                  |
| 4  | How long have you been sick?                  |
| 5  | Does that hurt?                               |
| 6  | The doctor will see you now.                  |
| 7  | How's your family?                            |
| 8  | Take a deep breath.                           |
| 9  | See the receptionist for another appointment. |
| 10 | Take two capsules before each meal.           |

\*Pedley, K. Synthetic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) Adult Aural Rehabilitation: A guide for cochlear implant professionals. Sydney: Cochlear Ltd. Based on concept of Plant, G. (1984). Commtram: A communication training program for profoundly deaf adults. Sydney: National Acoustics Laboratories.

You can also make up your own topics and sentences. Fill in the clues and sentences in the table below and at the end of the manual (Appendix 1). Some ideas are: at the dentist, at the post office, at the market, at the swimming pool, at the hospital, at the place where I work etc.

Exercise	
Clue:	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Exercise	
Clue:	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

## Module 18: Recognising words (known topics)

### Why?

To practise recognising words when you know what the topic is but you don't know what the possible words are.

### How?

Choose a topic from the Exercises in Module 9 (or choose your own topic), and the speaker will choose some words for that topic and write them in the table below. This time you do not see the list of words. The speaker then says each of the words and you repeat them. If you cannot repeat the word after three attempts, the speaker will say the word with lip reading and then with hearing alone.

Exercise	
Topic:	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

There are more blank tables in Appendix 1.

You can also make up your own sets of topics and words.

## Module 19: Recognising common phrases

### Why?

To build confidence in understanding speech without lip reading, beginning with very familiar sentences.

### How?

You do not see the list of sentences. The speaker will say the sentence without lip reading. Try to repeat as many words as you can. If you are not sure, fill in the missing words with your best guess. Remember, these are sentences that you hear every day. The speaker confirms which words you got right and encourages you to use strategies to clarify the sentence, such as **“repeat”** or **“did you say...?”** or **“can you say it a different way?”** If you have not been able to repeat the sentence after three attempts, the speaker will provide a key word in the sentence using lip reading cues, then repeat the entire sentence using hearing alone. If you are unable to repeat the sentence, the speaker will say the sentence with lip reading cues and then hearing alone once more.

Exercise	
1	What time is it?
2	I'll see you later!
3	How was your day?
4	Would you like a cup of coffee?
5	Wait just a minute.
6	What's the weather like?
7	Have a nice day.
8	What are we having for dinner?
9	You are looking well today.
10	Do you need a lift?
11	Would you like some help?
12	Please close the door.
13	Are you warm enough?
14	What would you like for breakfast?
15	Happy Birthday!
16	Let's go to the movies.
17	Pass the bread and butter please.

## Module 20: Information transfer\*

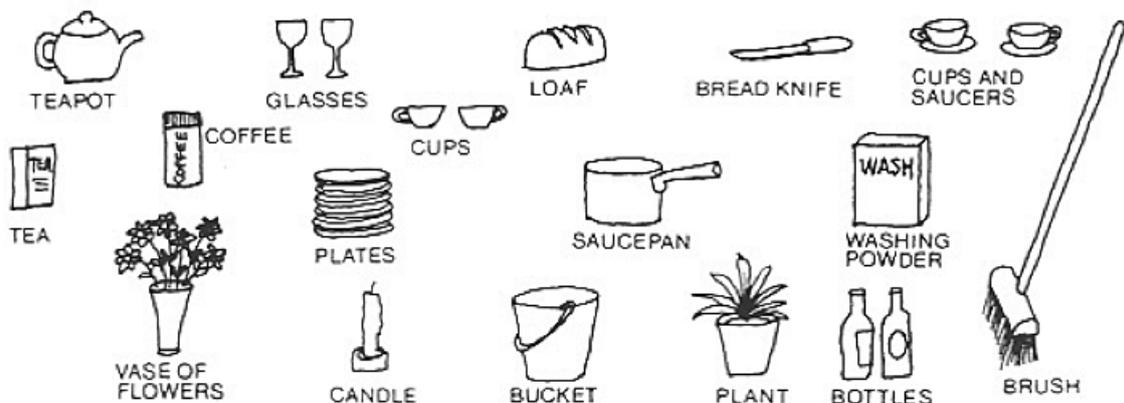
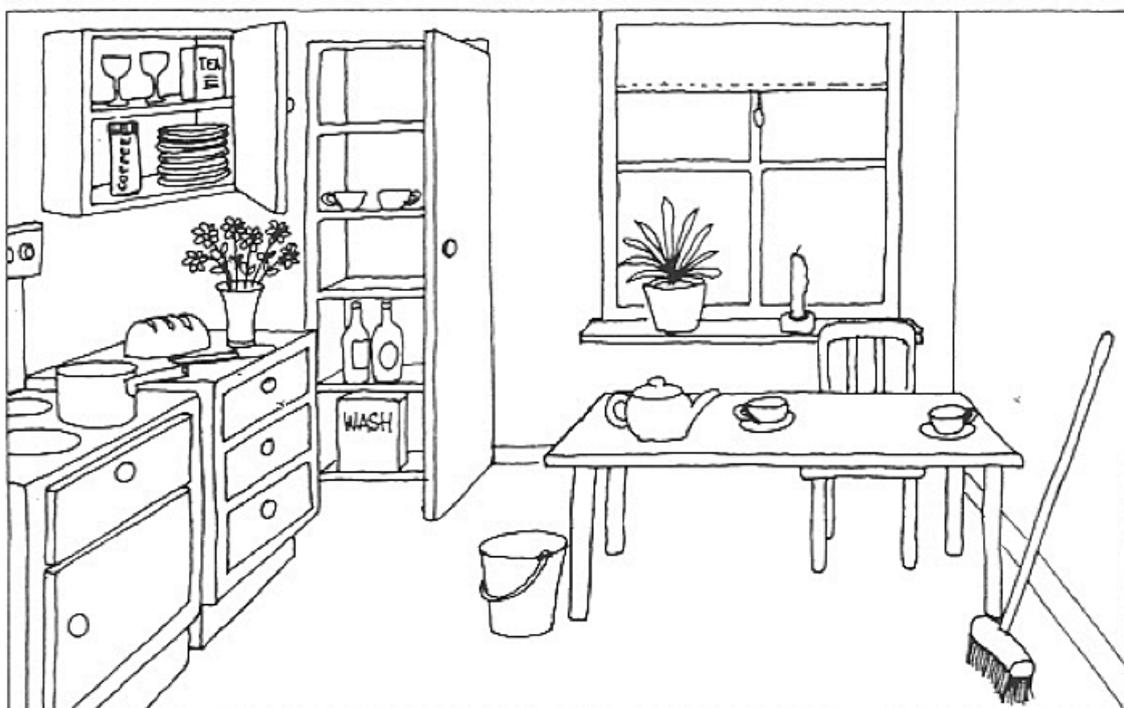
### Why?

To gain practice in using the information in the message rather than just repeating what is heard. To practise asking only for the information you missed.

### How?

The speaker has the kitchen drawing below in front of them. You have the kitchen drawing in Appendix 1 in front of you. The speaker will ask you to draw a number of items on the picture by telling you what to draw and where to draw it. The items to be drawn are shown below the picture. For example, the speaker could say: "**Draw the teapot on the left hand side of the table.**" Listen carefully and then draw the item on the picture. If you are unsure, ask for more information, but do not look at your speaker's drawing. For example, you could:

- Ask your speaker to repeat the whole instruction.
- Repeat back what you think the instruction was, for example: "**Did you say...?**" Your speaker will provide feedback as to which parts you heard correctly.
- Ask your speaker to clarify any parts you are not sure of, for example: "**I heard you say 'saucepan', but I am not sure where to draw it.**"



\*Wacyn-Jones, P. (1997). Pair Work 2. London: Penguin. Reproduced by permission of Penguin Books Ltd.

## Module 21: Scripted conversation

### Why?

To practise using prediction and topic cues to anticipate what your speaking partner is saying.

### How?

You will start the conversation about the preparation for an imaginary trip you will both take for a picnic. Below are the sentences and questions that you will say. Your speaking partner will make the appropriate responses – try to repeat back what your partner says before moving on to the next sentence.

- Tips for your speaker: Encourage the recipient to try to guess what you said. If the recipient cannot correctly repeat the information, provide assistance as follows:
  - Repeat the whole answer.
  - Repeat the answer emphasising the incorrect part.
  - Repeat only the incorrect part.
  - Confirm the parts correctly repeated.

Adjust how predictable and complex your replies are to suit the ability of the recipient so the exercise remains challenging but manageable.

Exercise	
Topic: Organising a picnic	
1	Let's go for a picnic. Where shall we go?
2	Who should we invite along?
3	Which day will we go?
4	Whose car shall we take?
5	How long do you think it will take to get there?
6	What food should we take?
7	What other activities shall we do at the picnic site?
8	What shall we do if it rains?
9	How long shall we stay there?
10	Do you want to take anything else with you?

# Appendix I:

Extra exercise copies

# 1. Extra exercise tables

Exercise	
Topic:	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Exercise	
Topic:	
1	
2	
3	
4	
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6	
7	
8	
9	
10	

## 2. Recipient copy of Module 12: Text following – passages read aloud

### Exercise\*

#### **The Saint Bernard**

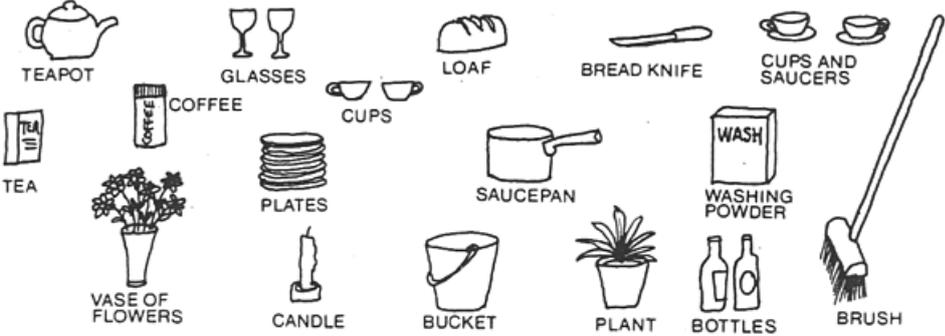
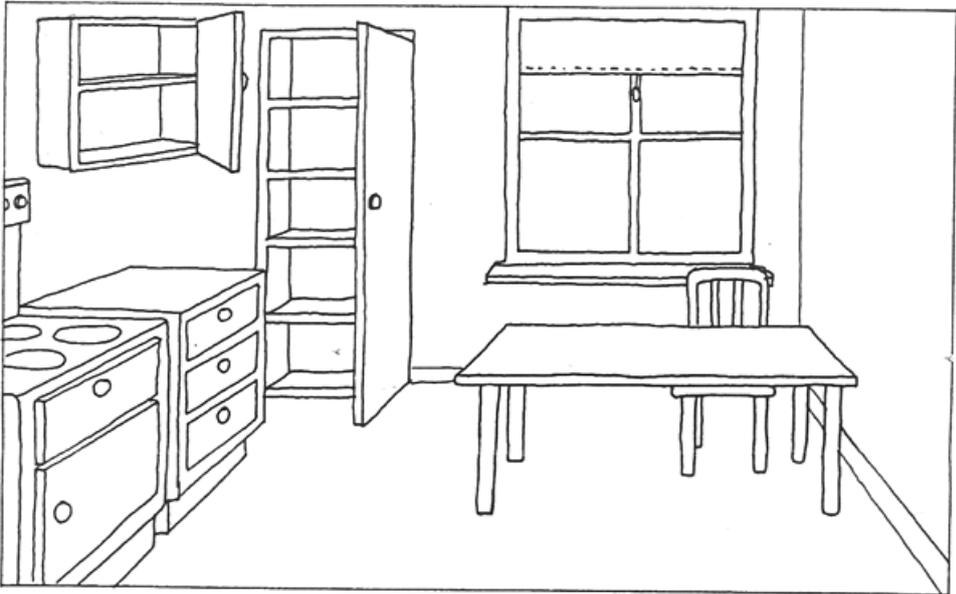
A large, strong dog was specially raised in the Swiss Alps in Europe. It grew to have a thick brown and white coat. The dog was called a Saint Bernard. It was first trained by monks. They lived in a mountain shelter called The Lodge of Saint Bernard. The shelter was for hikers and skiers.

The dogs were trained to help patrol the snow-covered trails. They were trained to search for people lost in the mountains. They would drag or lead them back to the shelter. There they could be taken care of by the monks.

The monks soon learned that walking or lying cold in the snow caused people to become very thirsty. So they tied small kegs of water or alcohol around the necks of the Saint Bernard. In the case of the person being able to walk, a sip could be taken to restore energy. If the lost person was not awake, the Saint Bernard would drag them to the lodge. If the person woke up during the journey, he or she could take a sip from the keg while being taken to the lodge.

Hunt, P. Analytic training. In: Pedley, K., Lind, C., & Hunt, P. (2005) *Adult Aural Rehabilitation: A guide for cochlear implant professionals*. Sydney: Cochlear Ltd.

3. Recipient copy of Module 20: Information transfer\*



\*Wacyn-Jones, P. (1997). Pair Work 2. London: Penguin. Reproduced by permission of Penguin Books Ltd.

# Appendix 2:

## Tips for using the Angel Sound™ program

Once you have installed Angel Sound, there will be an Angel Sound icon on your computer desktop. Follow these instructions and further instructions throughout the manual to use Angel Sound.

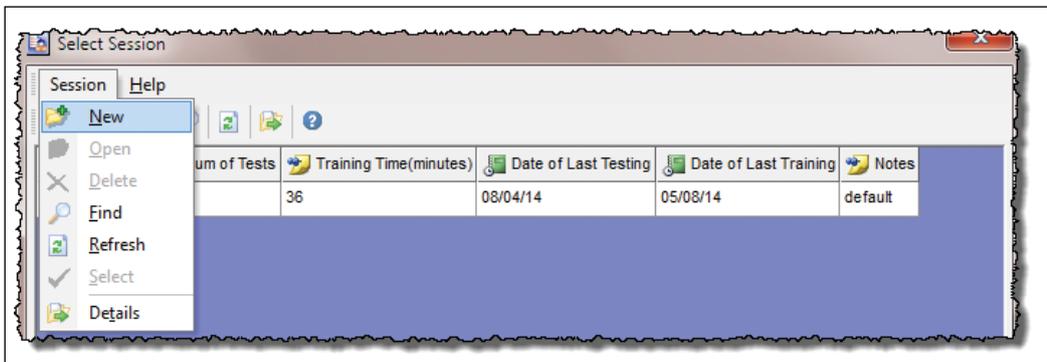
### Step 1: Start the program

Click on the Angel Sound icon, then click on the following banner on the screen.



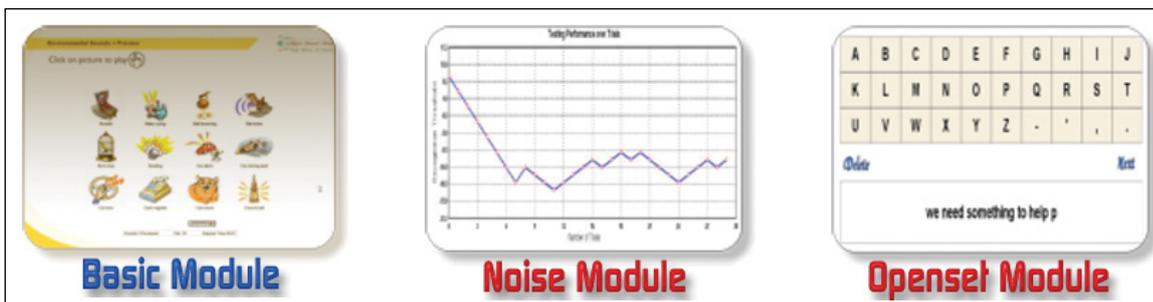
### Step 2: Select session

A "Select Session" box appears – if this is your first time using Angel Sound, at the top left of the box select "Session" then "New" and create a new session (note that you can use any text as your session name). Click "Save" and you will then enter the program. If you have created a session previously, simply double click the session name you want to use.



### Step 3: Select module

There are a number of modules to choose from. Click on the module you want to use (as instructed in this manual). The modules used in conjunction with this manual include Basic, Noise and Openset.



## Step 4: Select training group

The Introduction screen tells you a bit about the module. Each module has several different training groups (or training types); these are listed on the left side of the screen. Click on the training group you want to do (as instructed throughout this manual).



## Step 5: Select preview, training, test or result

Across the top of the screen it says:

### INTRODUCTION PREVIEW TRAINING TEST RESULT

Select one of these, as instructed in this manual. Further instructions are given in the manual for each particular exercise.

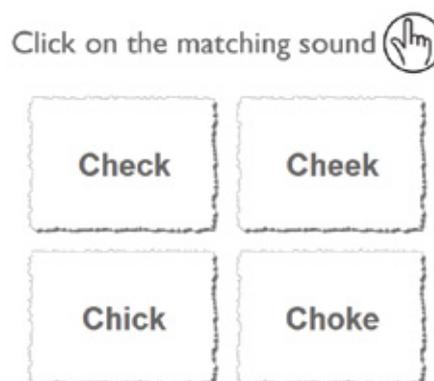
- Introduction: Gives brief information about the exercise. If you would like more detailed information about the exercise, please click the **"Learn More"** button in the top right corner of the screen.

- Preview: Gives you some listening practise to familiarise yourself with the materials that are used in the exercise. Click on any item and the sound will play.
- Training: This is where you do the training exercises. There are several training tasks in each group. The difficulty of these training tasks varies. In general, the task in Level 1 is easiest, and the higher the level, the more difficult the training task.

Example: Basic Module, Environment Sound training. You will hear one of these four sounds and you choose the sound you heard.



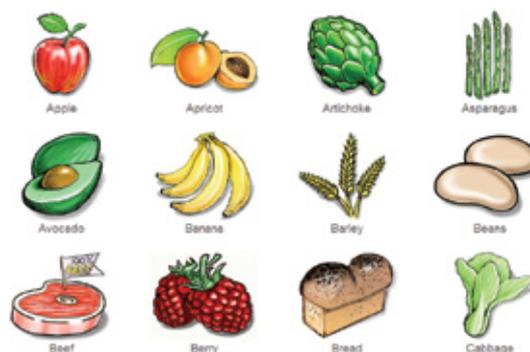
Example: Basic Module, Vowel Recognition training. You will hear one of these four words and you choose the word you heard.



Example: Basic Module, Consonant Recognition training. You will hear one of these two words and you choose the word you heard.



Example: Basic Module, Word Discrimination training. You will hear one of these 12 words and you choose the word you heard.



- Test: Monitors your progress and adjusts the difficulty of the training task. You should run a test every now and then. You will hear a word or sentence and you respond. No feedback is given during the test session. You will see the results at the end of the test. According to your score, the program will then automatically recommend the appropriate training level (indicated in green).
- Result: Contains all the training and test results.

- If you are interested in reading more detailed information about the program, click the **"Help"** button in the top menu of the screen. The program will load the Quick Start section of the Angel Sound website ([http://angelsound.emilyfufoundation.org/angelsound\\_help.html](http://angelsound.emilyfufoundation.org/angelsound_help.html)).
- Volume: Click on the **"Preview"** button and then click on any item on the screen to play sounds. Adjust the volume of your computer or external speakers to be comfortably loud.

Notes:

A large rectangular area with a dashed border, intended for taking notes. It contains 20 horizontal dashed lines for writing.

# Hear now. And always

As the global leader in implantable hearing solutions, Cochlear is dedicated to bringing the gift of sound to people with moderate to profound hearing loss. We have helped over 400,000 people of all ages live full and active lives by reconnecting them with family, friends and community.

We give our recipients the best lifelong hearing experience and access to innovative future technologies. For our professional partners, we offer the industry's largest clinical, research and support networks.

That's why more people choose Cochlear than any other hearing implant company.

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