

Technologies and Disorders — Hearing Loss, Cochlear Implants and Bone Conduction

Use this worksheet after reading the lesson to practise the key ideas and prove you can meet the success criteria.

Name _____
Date _____
Class _____

1. Key Ideas

How do we hear — and what happens when hearing fails? This lesson traces the auditory pathway from sound wave to brain signal, distinguishes two categories of hearing loss, and evaluates three technologies: hearing aids, cochlear implants, and bone-anchored hearing aids (BAHA).

- The pathway of sound from outer ear to auditory cortex: outer ear → middle ear → cochlea → auditory nerve → brain
- Why cochlear implants produce a different signal to natural hearing — and why this matters for outcomes

2. Success Criteria

By the end, you should be able to:

- The pathway of sound from outer ear to auditory cortex: outer ear → middle ear → cochlea → auditory nerve → brain
- The distinction between conductive and sensorineural hearing loss and what structures are damaged in each
- Three hearing technologies: hearing aid, cochlear implant, BAHA — what each does and for whom it is suitable

3. Key Terms

Her parents

told there are technology options that could give her access to sound

What

the difference? Q2 — Factors to consider: how well does it restore hearing? What are the risks? Is it reversible? Ag

loss and what structures

damaged in each

Hearing

the conversion of pressure waves in air (sound) into electrical signals in the nervous system

The cochlea

a fluid-filled, snail-shaped structure coiled approximately 2

This tonotopic organisation

the basis of frequency discrimination (the ability to distinguish pitch)

4. Activity: Build the Lesson Map

Use the lesson to complete the table. Keep answers brief but specific.

Prompt	Your answer
Main concept	
Important example	
Common mistake to avoid	
How this links to the next lesson	

5. Short Answer Questions

1. Explain this lesson goal in your own words: "The pathway of sound from outer ear to auditory cortex: outer ear → middle ear → cochlea → auditory nerve → brain". Use one specific example from the lesson.

BAND 3 **2 MARKS**

2. Apply this idea to a new example: "The distinction between conductive and sensorineural hearing loss and what structures are damaged in each". Show your reasoning clearly.

BAND 4 **3 MARKS**

3. Analyse why this idea matters for understanding Technologies and Disorders — Hearing Loss, Cochlear Implants and Bone Conduction: "Three hearing technologies: hearing aid, cochlear implant, BAHA — what each does and for whom it is suitable".

BAND 5 **4 MARKS**

6. Extend: Apply the Idea

BAND 5/6

5 MARKS

A student gives a memorised answer about Technologies and Disorders — Hearing Loss, Cochlear Implants and Bone Conduction but does not use evidence or reasoning.

Improve the answer by writing a stronger response that uses accurate terminology, a relevant example and a clear explanation.

7. Multiple Choice

1. What is the best first step when answering a question about Technologies and Disorders — Hearing Loss, Cochlear Implants and Bone Conduction?

- A. Identify the key concept being tested
- B. Write every fact from memory
- C. Ignore the command word
- D. Skip examples and evidence

2. Which answer would show stronger understanding of Technologies and Disorders — Hearing Loss, Cochlear Implants and Bone Conduction?

- A. An answer with accurate terms and reasoning
- B. A copied definition only
- C. A single-word response
- D. An answer with no example

3. What should you do if a question asks you to explain?

- A. Link the idea to a reason or cause
- B. List unrelated facts
- C. Only draw a diagram
- D. Write the shortest possible answer

8. Success Criteria Proof

Finish with evidence that you can do each success criterion.

SUCCESS CRITERION 1

Prove that you can: The pathway of sound from outer ear to auditory cortex: outer ear → middle ear → cochlea → auditory nerve → brain

BAND 3 **2 MARKS**

SUCCESS CRITERION 2

Prove that you can: The distinction between conductive and sensorineural hearing loss and what structures are damaged in each

BAND 4 **3 MARKS**

SUCCESS CRITERION 3

Prove that you can: Three hearing technologies: hearing aid, cochlear implant, BAHA — what each does and for whom it is suitable

BAND 5 **4 MARKS**

One thing I still need help with:
