

Critical Thinking Skills

Human Body

Cells, Skeletal System & Muscular System

Senses, Nervous System & Respiratory System

Circulatory, Digestive, Excretory & Reproductive Systems

Human Body - Big Book

Skills For Critical Thinking		Reading Comprehension								Hands-on Activities
		Section 1	Section 2	Section 3	Section 4	Section 5	Section 6	Section 7	Section 8	
LEVEL 1 Knowledge	<ul style="list-style-type: none"> List Details/Facts Recall Information Match Vocabulary to Definitions Define Vocabulary Label Diagrams Recognize Validity (T/F) 	✓	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 2 Comprehension	<ul style="list-style-type: none"> Demonstrate Understanding Explain Scientific Causation Describe Classify into Scientific Groups 	✓	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 3 Application	<ul style="list-style-type: none"> Application to Own Life Organize and Classify Facts 	✓	✓	✓	✓	✓	✓	✓		✓
LEVEL 4 Analysis	<ul style="list-style-type: none"> Make Inferences Draw Conclusions Based on Facts Provided Classify Based on Facts Researched 		✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 5 Synthesis	<ul style="list-style-type: none"> Compile Research Information Design and Application Create and Construct Ask questions Defend Selections and Reasoning 	✓	✓	✓	✓	✓	✓	✓	✓	✓
LEVEL 6 Evaluation	<ul style="list-style-type: none"> State and Defend an Opinion Defend Selections and Reasoning 				✓		✓	✓		

Based on Bloom's Taxonomy

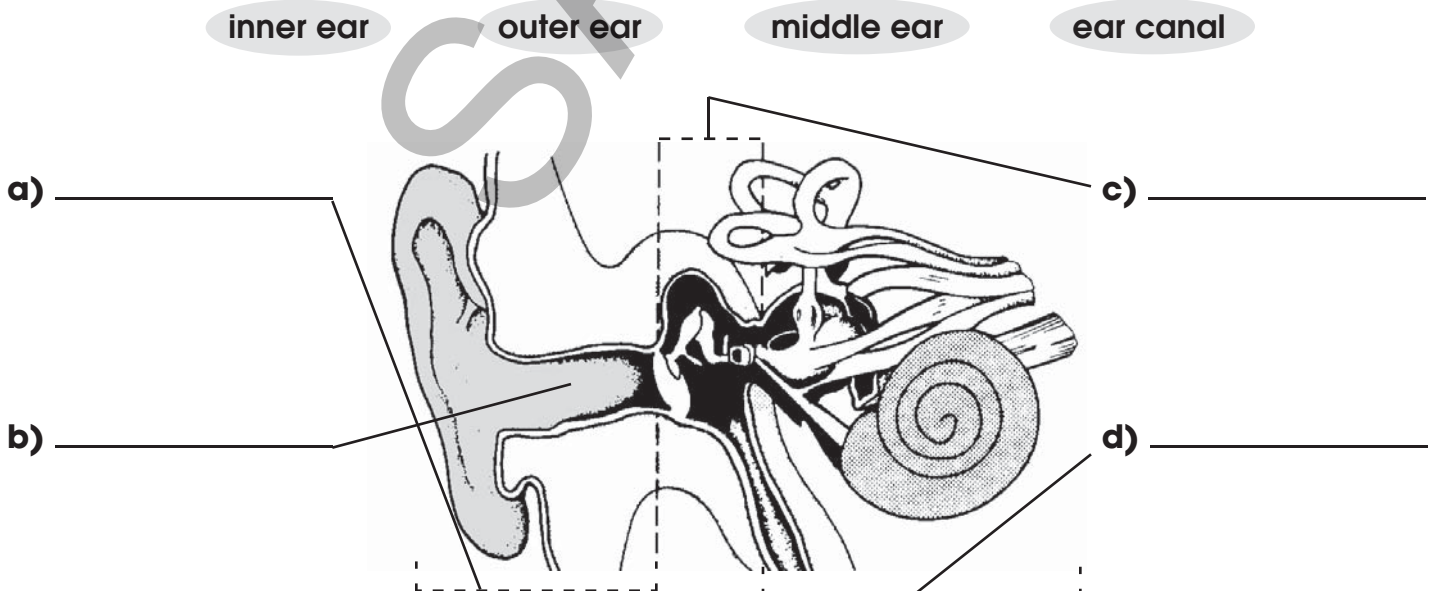


The Sense of Hearing

1. You be the teacher! Someone has matched the word on the left to the definition on the right. Are they correct? If **yes**, mark it correct with a check mark in the box beside each. If **no**, write an X in the box and correct the work by drawing an arrow to the correct definition. You may use a dictionary to help.

<input type="radio"/>	eardrum	→	A	The part of the ear that is outside our head
<input type="radio"/>	middle ear	→	B	Thin layer of skin covering the bottom end of the ear canal
<input type="radio"/>	inner ear	→	C	The location of the smallest bones in the body
<input type="radio"/>	ear canal	→	D	Created in the air when things move
<input type="radio"/>	sound vibrations	→	E	One-inch long tube that leads into the head
<input type="radio"/>	outer ear	→	F	The deepest part of our ear

2. Label the three main parts of the ear. Use the words in the list.

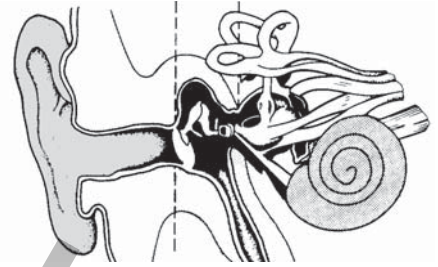




The Sense of Hearing



We hear sound when movement – like a door slamming – stirs the air around us and makes **vibrations** in the air. These vibrations move into our ears. They travel inside our head and are turned into **electrical signals**. These signals are sent to our brain, and a message telling us what the sound means is made. Sound waves travel very fast. This means we understand what we hear as soon as we hear it.



The parts of the ear are divided into three main areas.

Ear Part	Part of Ear	What It Does (Function)
outer ear	<ul style="list-style-type: none"> the part of the ear that we can see on either the side of the head shaped like a big funnel also called the auricle 	<ul style="list-style-type: none"> job is to move as much sound as possible into our head the “funnel” traps sound so that it goes into the ear
ear canal	<ul style="list-style-type: none"> a tube about one inch long that leads into the skull 	<ul style="list-style-type: none"> the sound travels down the ear canal to the eardrum
eardrum	<ul style="list-style-type: none"> at the bottom of the ear canal the beginning of the middle ear 	<ul style="list-style-type: none"> job is to increase the power of the sound, and move it deep into our head vibrates like the top of a drum when sound hits it
stirrup, hammer and anvil	<ul style="list-style-type: none"> all are behind the eardrum three of the smallest bones in the body, each named for the shape of the bone 	<ul style="list-style-type: none"> these bones vibrate when sound passes by
inner ear	<ul style="list-style-type: none"> is deep inside our skull 	<ul style="list-style-type: none"> job is to send the sound vibrations to the brain
cochlea	<ul style="list-style-type: none"> part of the inner ear looks like a snail shell 	<ul style="list-style-type: none"> the sound travels into the cochlea and over the nerve cells
nerve cells	<ul style="list-style-type: none"> located inside the cochlea there are many of these tiny cells 	<ul style="list-style-type: none"> sound is turned into electrical signals these signals are sent along the nerve cells to the brain



Why are sound vibrations important for hearing?



The Sense of Hearing

1. Use the terms in the list to answer each question. **Four** terms will be left over.

very slow
electrical signals
optic nerve

very fast
inner ear

cochlea
middle ear

ear canal
optic tube

- _____ a) Where is the eardrum found?
- _____ b) Deep in the ear, what are sound vibrations turned into?
- _____ c) Sending signals to the brain is the job of which part of the ear?
- _____ d) How fast or slow does sound travel?
- _____ e) What is the name of the tube that leads into our ear?

2. Fill in each blank with a word from the list. **One** word will be left over.

ear canal
inner ear

eardrum
hammer

three
cochlea

auricle
stirrup

skull
seven

anvil
middle ear

The outer ear includes the _____ which we can see on the outside of the head.

The _____ is a one-inch long tube that leads into the ear. The _____

is at the bottom of the ear canal. This is where the _____ begins. Behind

the eardrum are _____ very small bones. They are called the _____,

_____ and _____. The _____ is deep in our skull. It contains the

_____ and nerve cells.