

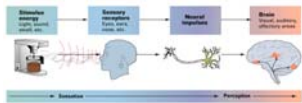
Sensation & Perception

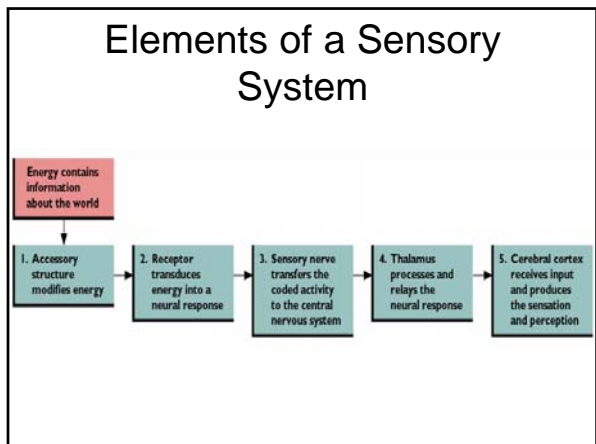
What is sensation & perception?

- _____
 - Detection of _____ emitted or reflected by _____
 - Done by sense organs
- _____
 - Process by which the _____ and _____ sensory information
 - Done by the _____

How does _____ work?

- _____ receptors detect _____
- Cause sensory _____ in _____ nervous system to fire
- Impulses reach the _____, which interprets the signal





Sensory _____ and _____

- _____
 - The _____ of sensory responsiveness when stimulation is _____ or repetitive.
 - Prevents us from having to _____ respond to _____ information.
- _____
 - The absence of normal levels of sensory stimulation.

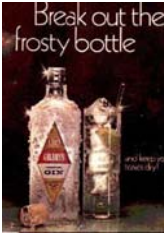
Sensory _____

- _____ of the senses.
- Can use _____ to reduce sensory overload.
 - _____
 - The focusing of attention on selected aspects of the environment and the blocking out of others.


_____ Attention

- This task, called _____, is used to examine _____.
- Most people do not recall many _____ words, even though they were repeated many times.

Subliminal Messages



Break out the frosty bottle




Smooth character.

How you can use Subliminal Power to change your mind AND your body ... WITHOUT EFFORT!

AND THAT'S JUST THE BEGINNING!

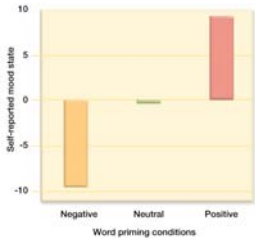
Subliminal Power can also change your inner personality... within minutes!
 How WOULD YOU LIKE A BRAND NEW BODY?
 Subliminal Power can literally change your physical body... without surgery!
 For only \$49.99 + tax & s/h



Attentional Processes
Influence without Awareness
Examples:

- _____ Message
 - A stimulus that is presented below the threshold for awareness.
- _____
- _____
 - Tendency for a recently presented word or concept to facilitate responses in a subsequent situation.
- _____
- _____

Attention in Perception: Messages

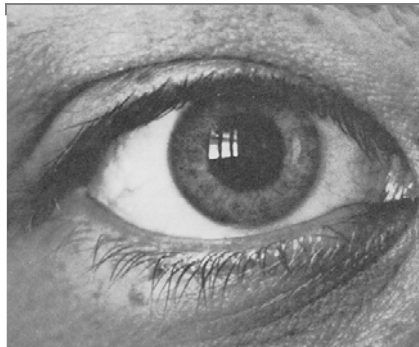


- Despite not being aware of the words that they "saw", those exposed to _____ words were happier and those exposed to _____ words were sadder. This indicates that moods can be influenced without awareness.

_____ versus _____

- Although subliminal priming can influence _____ and _____, research doesn't support its success in major levels of _____.

V
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S
I
O
N

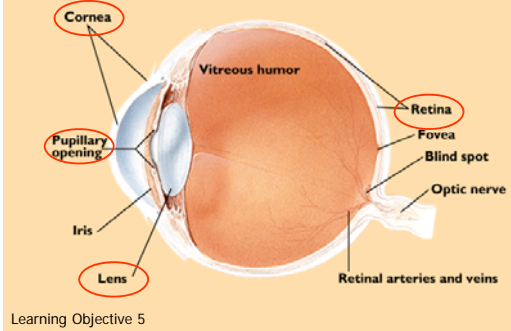


Accessory Structures of the Eye

- Cornea
- Pupil
- Iris
- Lens

A Cross-Section of the Human Eye

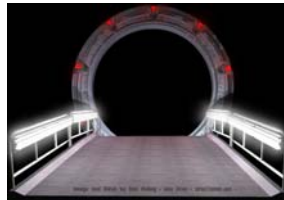
The Major Parts of the Human Eye



-Curved, transparent protective layer



-Where light first enters the eye

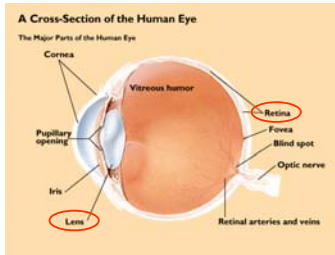


- _____
- Opening right behind the _____
 - Black small circle in the middle of the eye
 - Dilates when light is dark

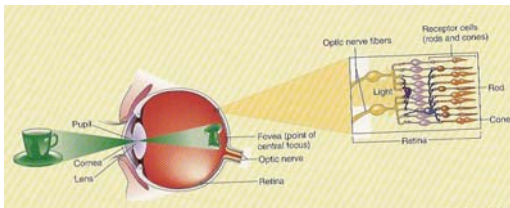


Fig. 1. View of the human eye.

- _____
- Works with the _____ to bend the light rays so that they can be properly focused on the retina



- _____
- Surface on the back of the eye that reads images
 - Images are flipped upside down




_____ in the Eye

- _____
 - Rods
 - Cones
- _____


_____ in the Eye

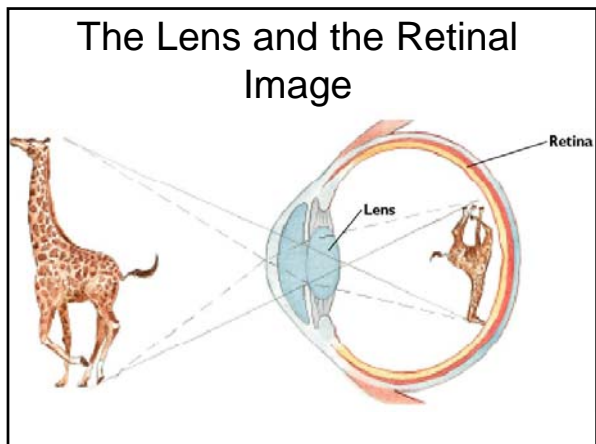
- In the _____, the incoming stimulus is converted to neural activity
 - _____ responsible for this process
 - Rods
 - Cones



Rods and Cones

- _____
 - allow sight when light is dim (light sensitive)
 - Cannot discriminate between _____
- _____
 - Less light sensitive
 - Can discriminate between colors





What is a _____ ?

- The _____ (rods, and cones) are all around the inside of the eye,
- except for the place where the _____ comes in to take signals
- So, the light images that fall on this part of our eye cannot be seen (_____)

DOCTOR FUN presents THE EYES HAVE IT

A G The H

Bobby's blind spot was his Achille's heel.

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Aspects of Color

Visible spectrum 400-700 nm

Visible spectrum 400-700 nm

400 500 600 700

400 500 600 700

- _____

- _____

- _____

-
- **Color**
 - **Determined by the dominant**

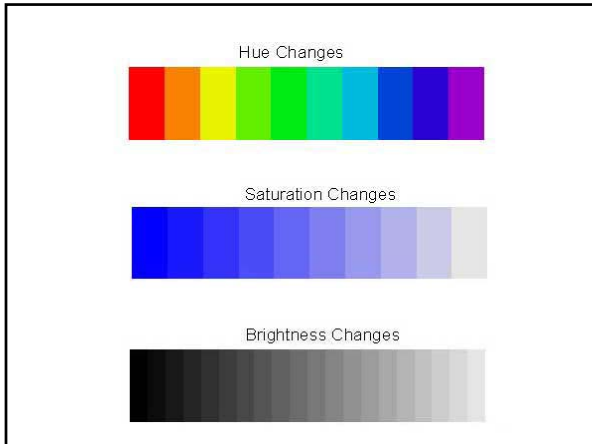


-
- Intensity of the wavelengths that make up the colors you see.



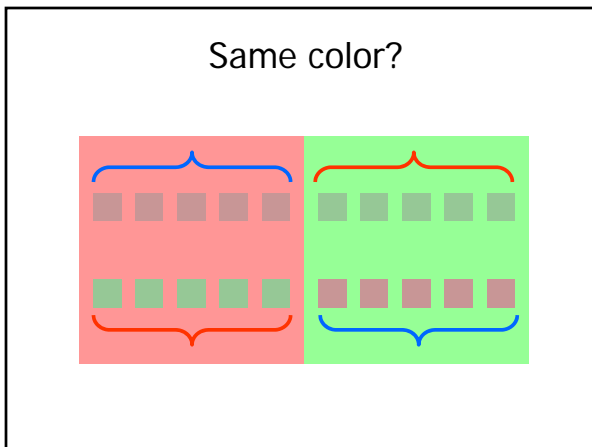
-
- Purity of the color



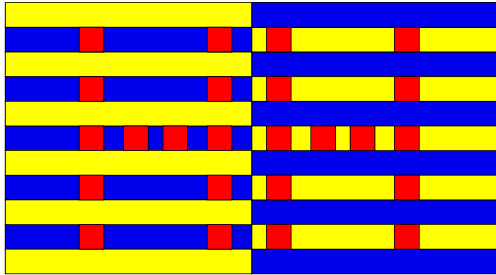


Theories of Color

- _____ theory
 - Blue, Green and Red light can mix to make any other color
 - Doesn't explain afterimages
- _____ Theory
 - Three pairs of opposing sense cells that inhibit its counterpart
 - Red/green, blue/yellow, black/white pairings
- Theories combine to explain color vision



Simultaneous Color Contrast



- Gestalt principles describe the brain's organization of sensory building blocks into meaningful units and patterns.

Perceptual Organization



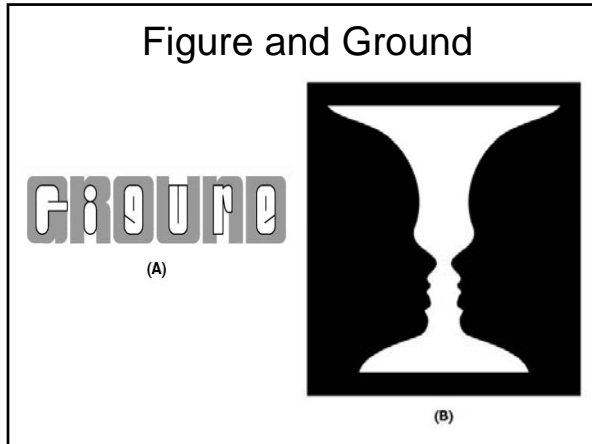
- Drawings that one can perceive in different ways by reversing

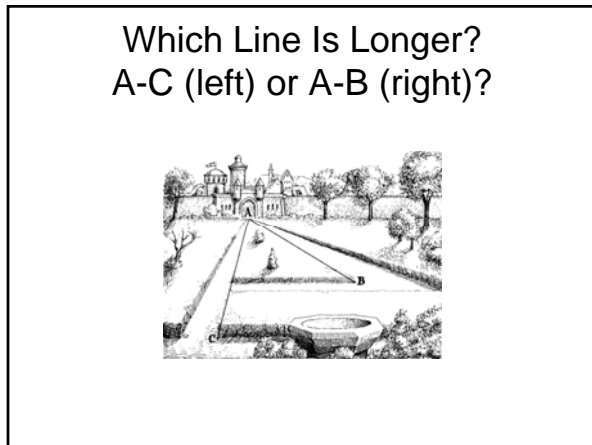


Psychology

- The whole is different from the sum of its parts.








Perceptual Organization


Laws of Grouping

- _____
- Seeing 3 pair of lines in A
- _____
- Seeing columns of orange and red dots in B
- _____
- Seeing lines that connect 1 to 2 and 3 to 4 in C
- _____
- Seeing a horse in D


A. Proximity




B. Similarity



C. Continuity




D. Closure



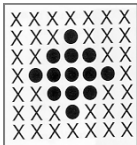
Law of Proximity

The Gestalt Principle of Proximity



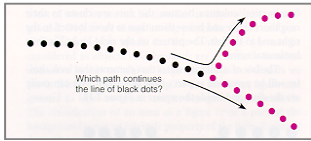
The diagram shows two groups of black dots arranged in a 4x4 grid. The first group is on the left, and the second group is on the right. The dots in each group are close to each other, while there is a significant gap between the two groups, demonstrating how proximity influences perception.

Law of Similarity



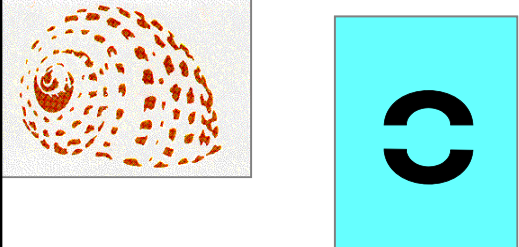
The diagram shows a 5x5 grid of 'x' marks. In the center of the grid, there is a 3x3 cluster of black dots. This illustrates how similarity in shape (dots vs. 'x' marks) affects perception.

Law of Continuity



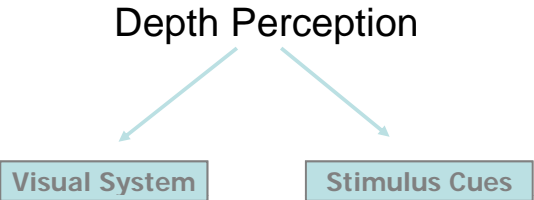
The diagram shows two intersecting lines of dots. One line is black and the other is pink. The text asks: "Which path continues the line of black dots?" This illustrates how the brain perceives continuity based on the direction of the lines.

Law of Closure



The first image shows a spiral shell with a pattern of brown spots, illustrating how the brain perceives a continuous shape despite some missing or irregular parts. The second image shows a cyan square with a black 'C' shape cut out of its center, illustrating how the brain perceives the square as a whole despite the missing section.

Depth Perception




```
graph TD; A[Depth Perception] --> B[Visual System]; A --> C[Stimulus Cues];
```

The diagram shows 'Depth Perception' at the top, with two arrows pointing down to 'Visual System' and 'Stimulus Cues' in separate boxes.

Objective 8

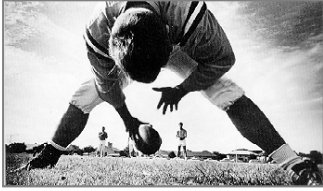
Stimulus Cues for Perception of _____



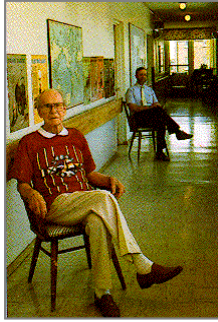
- _____
- Height in the _____
- _____
- _____

perspective

Relative Size

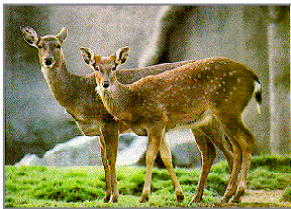


Height in the Visual Field



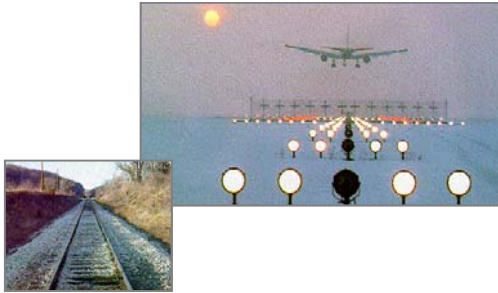
Objective 8

Interposition



Objective 8

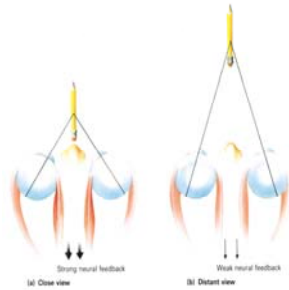
Linear Perspective



Objective 8

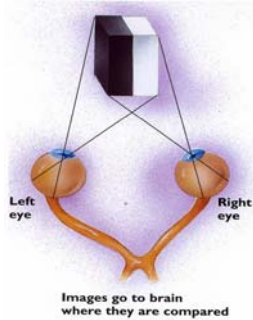
Cues Based on Properties of the Visual System

- _____: - Due to changes in shape of the lens as it focuses
- _____: - Due to rotation of the eyes so the image can be projected on each retina



Cues Based on Properties of the Visual System

- _____: Due to the differences between the retinal images received by each eye

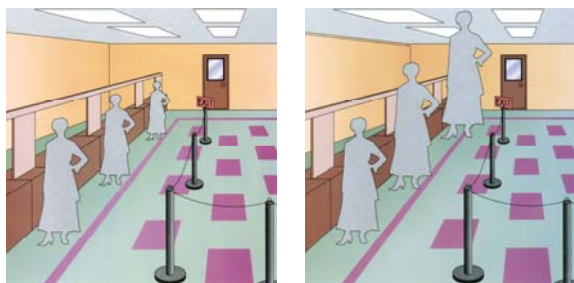


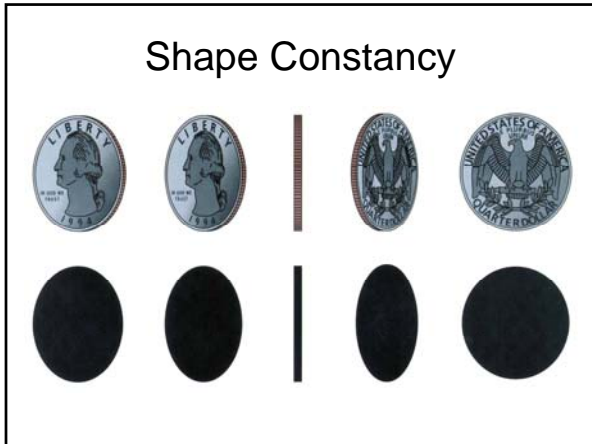
Perception of Motion

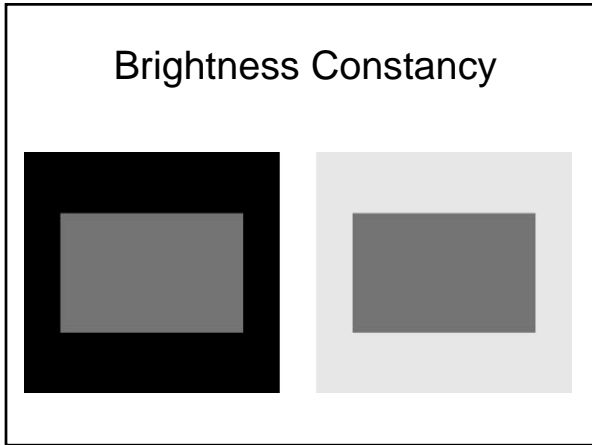
- Movement of the eyes and head.
- _____ : Rapid _____ in the size of an image so that it fills the _____
- _____ : Tendency to perceive movement when a series of still images appear, one at a time, in _____

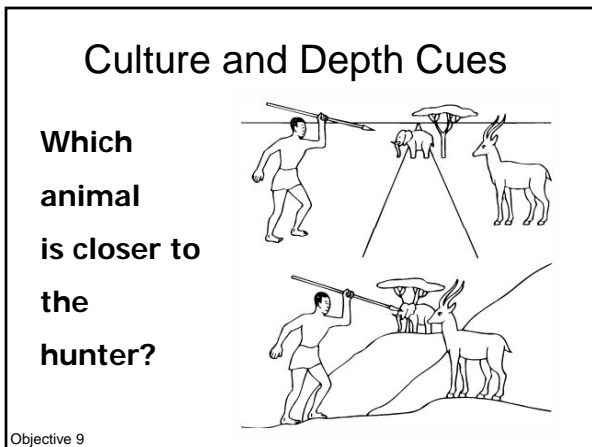
- _____
- The perception that objects maintain their _____ despite changes in their retinal image.
 - _____ constancy
 - _____ constancy
 - _____ constancy

Size Constancy









How do I recognize familiar people?

- The brain analyzes incoming patterns of info and compares that pattern to info stored in memory.
- If a match is found, recognition takes place and the stimulus is put into a perceptual category.

How Does Recognition Occur?

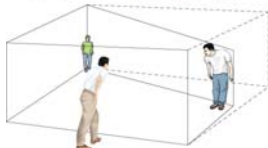
- _____ Processing: _____ of the stimulus are analyzed and recombined to create the perceptual experience
- _____ Processing: Influenced by _____ : schemas, expectations, and motivation

Top Down Processing

- The bank robbers rode away from the scene of the crime in their getaway car [redacted]
- My tree-hugger friend told me to recycle my used soda pop can [redacted]

Perceptual Constancies The Ames Room

- A specially-built room that makes people seem to _____ as they _____ in it
- The room is not a _____, as viewers assume it is.
- A single peephole prevents using _____.



Depth and Dimension

- _____
– The use of visual cues to estimate depth and distance.
- _____
– A _____ cue involving the turning _____ of the eyes as an object gets closer.
- _____ Disparity
– A _____ cue whereby the _____ an object is, the more different the image is in each retina.

Depth and Dimension

- Devised by Eleanor Gibson and Richard Walk to test _____ in _____.
- Provides _____ of a cliff.
- _____ stands across the gap.
- Babies are not afraid until about the age they can _____.



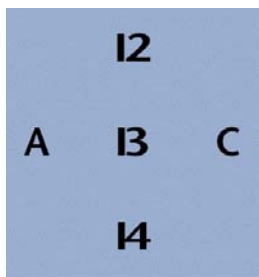
Perceptual Set



- What is seen in the center figures depends on the _____ in which one looks at the figures:
 - If scanned from the _____, a man's face is seen.
 - If scanned from the _____, a woman's figure is seen.

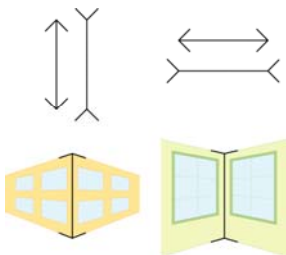
Perceptual Set Context Effects

- The same physical stimulus can be interpreted differently depending on _____, e.g., _____.
- When is the middle character the letter B and when is it the number 13?



The World of Illusions The _____ Illusion

- Illusion in which the perceived length of a line is altered by the position of other lines that enclose it

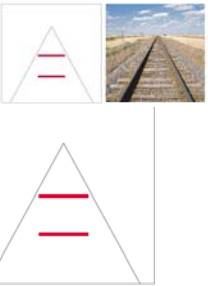


The World of Illusions

The _____
Illusion

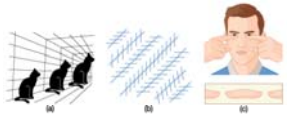
– Illusion in which the perceived line length is affected by _____ cues.

- Side lines seem to _____
- _____ seems farther away
 - But the retinal images of the red lines are equal.

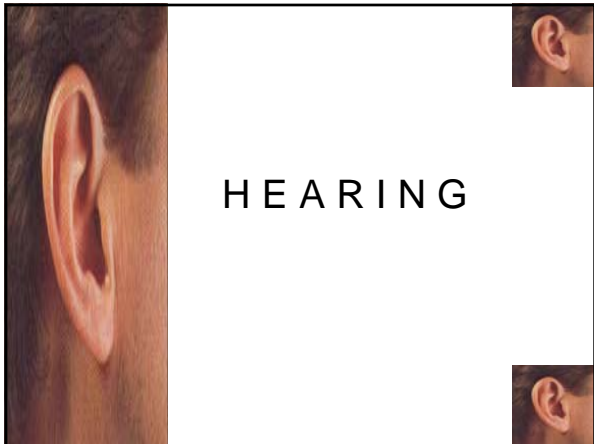


The diagram shows two versions of the Müller-Lyer illusion. The top version has a triangle with two horizontal red lines inside; the top line is closer to the vertex than the bottom line. The bottom version has a larger triangle with two horizontal red lines inside, also with the top line closer to the vertex. To the right is a photograph of a road with converging lines receding into the distance.

Fooling the Eye



The diagram consists of three parts labeled (a), (b), and (c). Part (a) shows a grid of lines with three black arrows pointing towards the center. Part (b) shows a grid of blue lines with a central area where the lines are more densely packed. Part (c) shows a cartoon of a man's face with his hands on his ears, and below it, a diagram of an ear's cross-section.



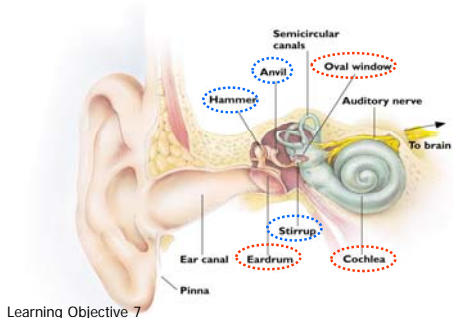
HEARING

The image features a large, detailed photograph of a human ear on the left side. On the right side, there are three smaller, partial photographs of ears, one at the top, one in the middle, and one at the bottom, all partially cut off by the frame.

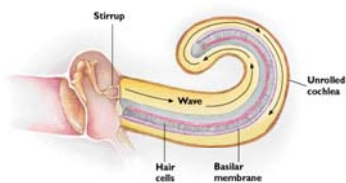
Accessory Structures and Transduction in the Ear

- _____
 - _____ (tympanic membrane)
 - _____, anvil, and stirrup
 - _____ window
- _____
 - _____
 - _____ membrane
 - _____ cells

Structures of the Ear



The Cochlea



Movement of the fluid within the _____ deforms the _____ of the _____, which then converts sound waves into neural activity (_____)

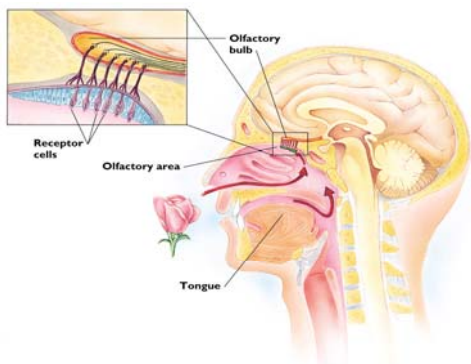
The Chemical Senses: Olfaction and Gustation (Smell and Taste)

The Pathway for Olfactory Information

- Accessory structures
 - _____, opening in the _____ at back of mouth
- Transduction
 - Receptors make a direct connection to the _____ bulb located in the brain
 - Olfactory information does not pass through _____

Objective 11

The Olfactory System



Gustation

- Accessory structures
 - _____, roof of _____,
back of _____
- _____ (a collection of taste buds)

Psychological and Cultural Influences on Perception

- We are more likely to perceive something _____.
- What we _____ can affect what we _____.
- _____, such as _____, can influence perceptions of sensory information.
- _____ based on our previous experiences influence how we _____ the world.
- All are influenced by our _____.
