

## Sensation Review

1. Contrast the processes of sensation and perception.
2. Distinguish between absolute and difference thresholds and discuss research findings on subliminal stimulation.
3. Describe the phenomenon of sensory adaptation and explain its functional value.

**Vocabulary:**

Sensation	Top-down processing	Bottom-up processing	Psychophysics
Perception	Absolute threshold	Signal detection theory	Subliminal
Difference thresholds	Weber's Law	Sensory adaptation	

4. Explain the visual process, including the stimulus input, the structure of the eye, and the transduction of light energy.
5. Discuss the different levels of visual information processing and the value of parallel processing.
6. Explain the Young-Helmholtz and opponent-process theories of color vision and describe the nature of color constancy.

**Vocabulary:**

Transduction	Wavelength	Hue	Intensity
Pupil	Iris	Lens	Accommodation
Retina	Acuity	Nearsightedness	Farsightedness
Rods	Cones	Optic nerve	Blind spot
Fovea	Parallel processing	Young-Helmholtz Trichromatic Theory	Opponent-process theory
Color constancy			

7. Explain the auditory process, including the stimulus input and the structure and function of the ear.
8. Explain the place and frequency theories of pitch perception and describe how we locate sounds.
9. Discuss the nature and causes of hearing loss and describe the effects of noise on hearing and behavior.

**Vocabulary:**

Audition	Frequency	Pitch	Middle ear
Inner ear	Cochlea	Place theory	Frequency theory
Conduction deafness	Nerve deafness		

10. Describe the sense of touch and explain the basis of pain.
11. Describe the senses of taste and smell, and comment on the nature of sensory interaction.
12. Distinguish between kinesthesia and the vestibular sense.
13. Discuss the effects of sensory restriction.

**Vocabulary:**

Gate-control theory	Sensory interaction	Kinesthesia	Vestibular sense
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## Perception Review

- The moon appears larger on the horizon than when it is directly overhead. However, the moon does not change its size or distance from the Earth.
  - How can this illusion be explained?
  - Use this illusion to explain the difference between sensation and perception.
- Johnny's parents always complain that he doesn't listen to them. They say that when he is watching TV or listening to music, he acts like he just doesn't hear them. Johnny claims that he doesn't even remember them trying to talk to him. Johnny's ability to choose what sensory information he perceives demonstrates \_\_\_\_\_.
- When you are watching an IMAX movie, you often feel like you are moving. The fact that your eyes are dominating your perception, despite counter information from your vestibular sense is an example of \_\_\_\_\_.
- What is Gestalt? Give three examples of Gestalt principles as they relate to perception.
- When I am standing in front of the class talking and you are focused on me, \_\_\_\_\_ is the figure and \_\_\_\_\_ is the ground. However, when I begin to write on the overhead and you are focused on that, \_\_\_\_\_ becomes the figure, and \_\_\_\_\_ becomes the ground.
- What is a visual cliff? When do babies acquire depth perception?
- Why is it so hard to catch a ball with one eye closed? Name and describe two binocular cues help with depth perception.
- You have been asked to paint a picture that includes buildings, fields, a river, and a mountain. Describe how you would use at least five monocular cues to give your painting a sense of depth.
- What is the phi phenomenon? Give an example.
- Objects that are further away appear to move more slowly than those that are close by. Give an example of this.
- What is perceptual constancy? What are three forms of perceptual constancy that we have? How would your perception be altered if you lacked one or more form of constancy?
- Name one piece of evidence to support the theory that animals (including humans) seem to have a critical period for perceptual development.
- What is perceptual set? Give a specific example of how a perceptual set can alter one's experience.
- Name and describe the four types of ESP described in your book.
- Last night, one of your mother's best friends had a car accident. Your mother feels guilty because three days ago she dreamt of such an accident but failed to warn her friend. How would you explain your mother's experience? What advice would you give her?