

***AP Psychology – Learning Goals
Myers’ Psychology for AP: Unit IV
Sensation & Perception***

Contrast between sensation and perception , and explain the difference between bottom-up and top-down processing .
Discuss how much information we can consciously attend to at once, noting the phenomenon of selective attention .
Identify the three steps that are basic to all our sensory systems.
Distinguish between absolute and difference thresholds , and discuss whether we can sense and be affected by stimuli below the absolute threshold.
Explain the function of sensory adaptation .
Explain how our expectations, contexts, emotions, and motivation influence our perceptions, and how this impacts the work of Human Factors Psychologists . Particularly, note how signal detection theory explains when a person will be likely to notice a stimulus.
List the claims of ESP, and discuss the conclusions of most research psychologists after putting these claims to the test.
Describe the characteristics of visible light, and explain the process by which the eye transforms light energy into neural messages.
Describe how the eye and the brain process visual information.
Discuss the theories that help us understand color vision (e.g., Young-Helmholtz, Opponent-Process).
Describe Gestalt psychologists’ understanding of perceptual organization, and explain how figure-ground and <i>grouping principles</i> (5) contribute to our perceptions.
Explain how we use binocular cues (2) and monocular cues (8) to perceive the world in three dimensions and perceive motion.
Explain how perceptual constancies help us organize our sensations into meaningful perceptions.
Describe what research on restored vision, sensory restriction, and perceptual adaptation reveals about the effects of experience on perception.
Describe the characteristics of air pressure waves, and explain the process by which the ear transforms sound energy into neural messages.
Discuss the theories that help us understand pitch perception (place theory & frequency theory)
Describe how we locate sounds (i.e., sound localization).

	Describe the sense of touch.
	Describe how we best understand and control pain.
	Describe the senses of taste and smell.
	Explain how we sense our body's position and movement.
	Describe how our senses interact.

Key People (be able to describe their contributions):

- David Hubel & Torsten Wiesel
- Gustav Fechner
- Ernst Weber
- Wolfgang Kohler