

Unit 4: Sensation and Perception

Content Area: **Template**
Course(s):
Time Period: **Marking Period 2**
Length: **6 Classes**
Status: **Published**

State Mandated Topics Addressed in this Unit

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N/A	N/A

Unit IV: Sensation and Perception [SC4 & SC5]

- A. Thresholds*
- B. Sensory Mechanisms*
- C. Sensory Adaptation*
- D. Attention*
- E. Perceptual Processes*

Learning Objectives

- Objective 1 - Contrast the processes of sensation and perception.
- Objective 2 - Distinguish between absolute and difference thresholds.
- Objective 3 - Label a diagram of the parts of the eye and ear.
- Objective 4 - Describe the operation of the sensory systems (five senses).
- Objective 5 - Explain the Young-Helmholtz and opponent-process theories of color vision.
- Objective 6 - Explain the place and frequency theories of pitch perception.
- Objective 7 - Discuss Gestalt psychology's contribution to our understanding of perception.
- Objective 8 - Discuss research on depth perception and cues.

Essential Skills

- Essential Skill 1 - Copy and paste
- Essential Skill 10 - Copy and paste
- Essential Skill 2 - Copy and paste
- Essential Skill 3 - Copy and paste
- Essential Skill 4 - Copy and paste
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- Essential Skill 6 - Copy and paste
- Essential Skill 7 - Copy and paste
- Essential Skill 8 - Copy and paste
- Essential Skill 9 - Copy and paste

Standards

SOC.9-12.3	Sensation and Perception
SOC.9-12.3.1	Principles of Sensation
SOC.9-12.3.A	Describe general principles of organizing and integrating sensation to promote stable awareness of the external world.
SOC.9-12.3.A.1	Gestalt principles
SOC.9-12.3.A.2	Depth perception
SOC.9-12.3.A.3	Top-down processing
SOC.9-12.3.A.4	Bottom-up processing
SOC.9-12.3.B	Discuss basic principles of sensory transduction, including absolute threshold, difference threshold, signal detection, and sensory adaptation.
SOC.9-12.3.C	Identify the research contributions of major historical figures in sensation and perception.
SOC.9-12.3.C.1	Contributions of Gustav Fechner
SOC.9-12.3.C.2	Contributions of David Hubel
SOC.9-12.3.C.3	Contributions of Ernst Weber
SOC.9-12.3.C.4	Contributions of Torsten Wiesel
SOC.9-12.3.2	Principles of Perception
SOC.9-12.3.D	Discuss how experience and culture can influence perceptual processes.
SOC.9-12.3.D.1	Perceptual set
SOC.9-12.3.D.2	Context effects
SOC.9-12.3.D.3	Schema
SOC.9-12.3.E	Discuss the role of attention in behavior.
SOC.9-12.3.3	Visual Anatomy
SOC.9-12.3.F	Describe the vision process, including the specific nature of energy transduction, relevant anatomical structures, and specialized pathways in the brain for each of the senses.
SOC.9-12.3.F.1	Vision process
SOC.9-12.3.F.2	Concepts related to visual perception
SOC.9-12.3.F.3	Theories of color vision
SOC.9-12.3.G	Explain common sensory conditions.
SOC.9-12.3.G.1	Visual and hearing impairments
SOC.9-12.3.G.2	Synesthesia
SOC.9-12.3.4	Visual Perception
SOC.9-12.3.H	Explain the role of top-down processing in producing vulnerability to illusion.
SOC.9-12.3.5	Auditory Sensation and Perception

SOC.9-12.3.I	Describe the hearing process, including the specific nature of energy transduction, relevant anatomical structures, and specialized pathways in the brain for each of the senses.
SOC.9-12.3.I.1	Hearing process
SOC.9-12.3.6	Chemical Senses
SOC.9-12.3.J	Describe taste and smell processes, including the specific nature of energy transduction, relevant anatomical structures, and specialized pathways in the brain for each of the senses.
SOC.9-12.3.J.1	Taste
SOC.9-12.3.J.2	Smell
SOC.9-12.3.7	Body Senses
SOC.9-12.3.K	Describe sensory processes, including the specific nature of energy transduction, relevant anatomical structures, and specialized pathways in the brain for each of the body senses.
SOC.9-12.3.K.1	Body sense: touch
SOC.9-12.3.K.2	Body sense: pain
SOC.9-12.3.K.3	Body sense: vestibular
SOC.9-12.3.K.4	Body sense: kinesthesia

Instructional Tasks/Activities

- Activity 1
- Activity 10
- Activity 2
- Activity 3
- Activity 4
- Activity 5
- Activity 6
- Activity 7
- Activity 8
- Activity 9

Assessment Procedure

- Classroom Total Participation Technique
- Classwork
- DBQ
- Essay
- Exit Ticket/Entrance Ticket/Do Now
- Journal / Student Reflection
- Kahoot
- Other named in lesson

- Peer Review
- Performance
- Problem Correction
- Project
- Quiz
- Rubric
- Teacher Collected Data
- Test
- Worksheet

Recommended Technology Activities

- Appropriate Content Specific Online Resource
- Chromebook
- Copy/Paste Content Specific Link Here
- Copy/Paste Content Specific Link Here
- Copy/Paste Content Specific Link Here
- Gimkit
- GoGuardian
- Google Classroom
- Google Docs
- Google Forms
- Google Slides
- Kahoot
- MagicSchool AI
- Other- Specified in Lesson
- Quiziz
- Screencastify

Accommodations & Modifications & Differentiation

Accommodations and Modifications should be used to meet individual needs. Their IEP and 504 plans should be used in addition to the following suggestions.

Gifted and Talented

- Compare & Contrast
- Conferencing

- Debates
- Jigsaw
- Peer Partner Learning
- Problem Solving
- Structured Controversy
- Think, Pair, Share
- Tutorial Groups

Instruction/Materials

- alter format of materials (type/highlight, etc.)
- color code materials
- eliminate answers
- extended time
- extended time
- large print
- modified quiz
- modified test
- Modify Assignments as Needed
- Modify/Repeat/Model directions
- necessary assignments only
- Other (specify in plans)
- other- named in lesson
- provide assistance and cues for transitions
- provide daily assignment list
- read class materials orally
- reduce work load
- shorten assignments
- study guide/outline
- utilize multi-sensory modes to reinforce instruction

Environment

- alter physical room environment
- assign peer tutors/work buddies/note takers
- assign preferential seating
- individualized instruction/small group
- modify student schedule (Describe)
- other- please specify in plans

- provide desktop list/formula

Honors Modifications

Resources

- Resource 1
- Resource 2
- Resource 3
- Resource 4
- Resource 5