

<b>Essential Understandings</b>	<ul style="list-style-type: none"> <li>▪ Psychophysics explains the relationship between sensory experiences and physical stimuli that cause them.</li> <li>▪ Sensory thresholds determine the amount of stimulus and the changes in stimulus that can be detected.</li> <li>▪ Perception is the way we interpret sensation and organize them into meaningful experiences.</li> </ul>
<b>Essential Questions</b>	<ul style="list-style-type: none"> <li>▪ What are the sense organs and how do sensations occur?</li> <li>▪ What are the principles involved in perception?</li> <li>▪ How do we learn to perceive and what are illusions?</li> </ul>
<b>Essential Knowledge</b>	<ul style="list-style-type: none"> <li>▪ Absolute threshold is the weakest amount of a stimulus that a person can detect half the time.</li> <li>▪ Weber's Law is the principle that the larger or stronger a stimulus, the larger the change required for an observer to notice a difference.</li> <li>▪ The sense organs---the eyes, ears, tongue, nose, and skin---are the receptors of sensation. In addition to the five basic senses, we also have the sense of balance and the sense of movement and body position.</li> <li>▪ The Gestalt principles of perceptual organization are proximity, continuity, similarity, simplicity, and closure.</li> <li>▪ An illusions is created when our brain misinterprets sensory stimuli.</li> </ul>
<b>Vocabulary</b>	<ul style="list-style-type: none"> <li>▪ <u>Terms:</u> <ul style="list-style-type: none"> <li>○ selective attention, absolute threshold, difference threshold, sensory adaptation, pupil, lens, retina, optic nerve, binocular fusion, retinal disparity, auditory nerve, vestibular system, olfactory nerve, kinesthesia, Gestalt, subliminal messages, motion parallax, constancy, ESP</li> </ul> </li> </ul>
<b>Essential Skills</b>	<ul style="list-style-type: none"> <li>▪ Describe how the receptors work.</li> <li>▪ Analyze signal-detection theory.</li> <li>▪ Explain the Gestalt principles of organization.</li> <li>▪ Describe how monocular and binocular depth cues help us judge reality.</li> <li>▪ Explain how illusions demonstrate the difference between sensations and perceptions.</li> <li>▪ Reflect: Journal entries which include personal observations and experiences.</li> </ul>

<p style="text-align: center;"><b>Related Maine Learning Results</b></p>	<p><u>Social Studies</u>  A. Applications of Social Studies Processes, Knowledge, and Skills  A2. Making Decisions Using Social Studies Knowledge and Skills  Students make individual and collaborative decisions on matters related to social studies using relevant information and research, discussion, and ethical reasoning skills.</p> <ol style="list-style-type: none"> <li>a. Develop individual and collaborative decisions/plans by considering multiple points of view, weighing pros and cons, building on the ideas of others, and sharing information in an attempt to sway the opinions of others.</li> <li>b. Make a real or simulated decision related to the classroom, school, community, civic organization, Maine, United States, or international entity by applying appropriate and relevant social studies knowledge and skills, including research skills, ethical reasoning skills, and other relevant information.</li> </ol>
<p style="text-align: center;"><b>Sample Lessons And Activities</b></p>	<ul style="list-style-type: none"> <li>▪ Skin sensations: Students are given 15 seconds to identify 6-8 small items of different textures placed in a paper bag. Each student then explains the process they went through and why they could recognize some items and not others.</li> <li>▪ Selective attention: Students fail to perceive the number of fingers shown because they only pay attention to the number of lines drawn on the board.</li> <li>▪ Case Study: Perfect Pitch.</li> </ul>
<p style="text-align: center;"><b>Sample Classroom Assessment Methods</b></p>	<ul style="list-style-type: none"> <li>▪ Exams: Sensation and Perception</li> </ul>
<p style="text-align: center;"><b>Sample Resources</b></p>	<ul style="list-style-type: none"> <li>▪ <u>Publications:</u> <ul style="list-style-type: none"> <li>○ <u>Understanding Psychology</u> - Glencoe/McGraw-Hill</li> <li>○ "Weightlessness and Perception" – <u>Scientific American</u></li> </ul> </li> <li>▪ <u>Videos:</u> <ul style="list-style-type: none"> <li>○ <u>Discovering Psychology: Sensation and Perception (7)</u></li> </ul> </li> </ul>