

California State Middle & High School Science Content Standards

Chapter 3 (“The Senses”) of *What We See and Don’t See* covers these standards:

Grade 7 = Focus on Life Sciences

Grade 8 = Focus on Physical Sciences

Grades 9-12 = Biology/Life Sciences

Standard Set 5: Structure and Function in Living Systems

5. g. Students know how to relate the structures of the eye and ear to their functions.

Standard Set 6: Physical Principles in Living Systems

6. a. Students know visible light is a small band within a very broad electromagnetic spectrum.

6. b. Students know that for an object to be seen, light emitted by or scattered from it must be detected by the eye.

6. e. Students know that white light is a mixture of many wavelengths (colors) and that retinal cells react differently to different wavelengths.

6. f. Students know light can be reflected, refracted, transmitted, and absorbed by matter.

Standard Set 9: Physiology (Homeostasis) (High School)

9. b. Students know how the nervous system mediates communication between different parts of the body and the body’s interactions with the environment.

9. d. Students know the functions of the nervous system and the role of neurons in transmitting electrochemical impulses.

9. e. Students know the roles of sensory neurons, interneurons, and motor neurons in sensation, thought, and response.

Web Source: <http://www.cde.ca.gov/ci/cr/cf/documents/scienceframework.pdf>