

Connect to Curriculum

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Information/Activity	Core Idea	National Standard
p.8 Video: How Experience Shapes Your Brain p.10 Video: Journey of Sound to the Brain	Different sense receptors are specialized for particular kinds of information, which may be then processed by the animal’s brain. Animals are able to use their perceptions and memories to guide their actions.	LS1.D (4-LS1-2)
p.3, 4, 5 Videos Brain Anatomy (reading) 3D Brain (online interactive tour) Color the Brain	In multicellular organisms, the body is a system of multiple interacting subsystems. These subsystems are groups of cells that work together to form tissues and organs that are specialized for particular body functions.	LS1.A (MS-LS1-3)
p.7 Visualize Neurons Bendy Neuron	Develop and use a model to describe the function of a cell as a whole and ways the parts of cells contribute to the function.	LS1.A MS-LS1-2
p.10 Video: Journey of Sound to the Brain	Each sense receptor responds to different inputs (electromagnetic, mechanical, chemical), transmitting them as signals that travel along nerve cells to the brain. The signals are then processed in the brain, resulting in immediate behaviors or memories.	LS1.D (MS-LS1-8)
p.9 Magnetic resonance imaging (MRI) is a medical imaging technique to form pictures of the anatomy and the physiological processes of the body. MRI scanners use magnetic fields and radio waves to generate images of the organs (like the brain) inside the body. Magnetoencephalography (MEG) is a functional neuroimaging technique for mapping brain activity by recording magnetic fields produced by electrical currents occurring naturally in the brain, using very sensitive magnetometers. MEG can characterize rapidly changing patterns of neural activity, down to millisecond.	Multiple technologies based on the understanding of waves and their interactions with matter are part of everyday experiences in the modern world (e.g., medical imaging, communications, scanners) and in scientific research. They are essential tools for producing, transmitting, and capturing signals and for storing and interpreting the information contained in them.	PS4.C (HS-PS4-5)
p.6, 7 Neurons and Glia (reading)	Systems of specialized cells within organisms help them perform the essential functions of life.	LS1.A (HS-LS1-1)