

8th Grade
Science
Common Assessment

Waves and Electromagnetic Radiation

Standard	Description	Common Assessment
MS-PS4-1	Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave.	Slinky Lab
MS-PS4-2	Develop and use a model to describe how waves are reflected, absorbed transmitted through various materials.	Interactive Wave Stations
MS-PS4-3	Integrate qualitative scientific and technical information to support the claim that digitized signals are a more reliable way to encode and transmit information than analog signals.	How Do Cell Phones Work

Cells and Heredity- Life Science

Standard	Description	Common Assessment
MS-LS1-1	Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers or types of cells.	<i>Plant, Animal, Bacteria Lab</i>
MS-LS1-2	Develop and use a model to describe the function of a cell as a whole and the ways parts of cells contribute to the function of a whole cell.	<i>Cell Organelle Project</i>
MS-LS3-1	Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial or neutral effects to the structure and function of the organism.	<i>DNA Paper Model Lab</i>
MS-LS4-5	Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.	<i>Stem Cell Station Activities</i>
MS-LS4-1	Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past.	<i>Geological Timeline Project</i>
MS-LS4-3	Analyze displays of pictorial data to compare patterns of similarities in the embryological development across multiple species to identify relationships not evident in the fully formed anatomy.	<i>Comparative Embryology</i>

Weather and Climate

Standard	Description	Common Assessment
MS-ESS2-4	Develop a model to describe the cycling of water through Earth's system driven by energy from the sun and the force of gravity.	<i>Water Cycle in a Jar</i>
MS-ESS2-5	Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.	<i>Weather Scope Real Time Data</i>
MS- ESS3-5	Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.	<i>Climate Change Inquiry</i>