

## 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 Station
MS-PS4-3	Integrate qualitative science 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?

## 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	Water Cycle in a Jar
MS-ESS2-5	Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.	Weather Scope Real
MS-ESS3-5	Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.	Climate Change Inquiry

## Chemistry

Standard	Description	Common Assessment
MS-PS1-1	Develop models to describe the atomic composition of simple molecules and extended structures.	
MS-PS1-2	Analyze and interpret data on the properties of substances before and after the	

	substances interact to determine if a chemical reaction has occurred.	
MS-PS1-3	Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.	
MS-PS1-4	Develop a model that predicts and describes changes in particle motion, temperatures, and state of a pure substance when thermal energy is added or removed.	
MS-PS1-5	Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.	
MS-PS1-6	Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.	

#### Diversity of Life

Standard	Description	Common Assessment
MS- LS1-4	Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.	Flower seeking Pollinators Lab
MS- LS1-5	Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.	Environmental vs. Genetic factors claim-Evidence Reasoning Prompts
MS- LS2-1	Analyze and interpret data to provide evidence for the effects of resources availability on organisms and populations of organisms in an ecosystem.	Won't you be my urchin? Activity
MS- LS2-4	Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.	Won't you be my urchin? Activity