

Next Generation Science Standards Alignment

Performance Expectations



Legend

•	The standard is clearly addressed by program activities.
-	This standard potentially could be addressed as part of FIRST® LEGO® League Discover either by actions that the coach or teacher takes when working with the students or by conditions established by the program.

Kindergarten

Cluster	Indicator	Indicator Statement	Addressed
Motion and Stability: Forces and Interactions	K-PS2-1	Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	•
	K-PS2-2	Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.	•
Energy	K-PS3-1	Make observations to determine the effect of sunlight on Earth's surface.	
	K-PS3-2	Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.	
From Molecules to Organisms: Structures and Processes	K-LS1-1	Use observations to describe patterns of what plants and animals (including humans) need to survive.	
Earth's Systems	K-ESS2-1	Use and share observations of local weather conditions to describe patterns over time.	
	K-ESS2-2	Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	
Earth and Human Activity	K-ESS3-1	Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.	
	K-ESS3-2	Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.	
	K-ESS3-3	Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	

Grade 1

Cluster	Indicator	Indicator Statement	Addressed
Waves and Their Applications in Technologies for Information Transfer	1-PS4-1	Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	
	1-PS4-2	Make observations to construct an evidence-based account that objects in darkness can be seen only when illuminated.	
	1-PS4-3	Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light.	
	1-PS4-4	Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.	
From Molecules to Organisms: Structures and Processes	1-LS1-1	Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	
	1-LS1-2	Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	

Heredity: Inheritance and Variation of Traits	1-LS3-1	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	
Earth's Place in the Universe	1-ESS1-1	Use observations of the sun, moon, and stars to describe patterns that can be predicted.	
	1-ESS1-2	Make observations at different times of year to relate the amount of daylight to the time of year.	

Grades K-2

Cluster	Indicator	Indicator Statement	Addressed
Engineering Design	K-2-ETS1-1	Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	●
	K-2-ETS1-2	Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	●
	K-2-ETS1-3	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	