

Standard Course of Study Alignment

Science (2010)



DISCOVER

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

Essential Standard and Clarifying Objectives		Addressed
Forces and Motion		
K.P.1	Understand the positions and motions of objects and organisms observed in the environment.	
	K.P.1.1 Compare the relative position of various objects observed in the classroom and outside using position words such as: in front of, behind, between, on top of, under, above, below and beside.	
	K.P.1.2 Give examples of different ways objects and organisms move (to include falling to the ground when dropped):	
	<ul style="list-style-type: none"> • Straight • Zigzag • Round and round • Back and forth • Fast and slow 	•
Matter: Properties and Change		
K.P.2	Understand how objects are described based on their physical properties and how they are used.	
	K.P.2.1 Classify objects by observable physical properties (including size, color, shape, texture, weight and flexibility).	
	K.P.2.2 Compare the observable physical properties of different kinds of materials (clay, wood, cloth, paper, etc) from which objects are made and how they are used.	•
Earth Systems, Structures and Processes		
K.E.1	Understand change and observable patterns of weather that occur from day to day and throughout the year.	
	K.E.1.1 Infer that change is something that happens to many things in the environment based on observations made using one or more of their senses.	
	K.E.1.2 Summarize daily weather conditions noting changes that occur from day to day and throughout the year.	
	K.E.1.3 Compare weather patterns that occur from season to season.	
Structures and Functions of Living Organisms		
K.L.1	Compare characteristics of animals that make them alike and different from other animals and nonliving things.	
	K.L.1.1 Compare different types of the same animal (i.e. different types of dogs, different types of cats, etc.) to determine individual differences within a particular type of animal.	
	K.L.1.2 Compare characteristics of living and nonliving things in terms of their:	
	<ul style="list-style-type: none"> • Structure • Growth • Changes • Movement • Basic needs 	

Grade 1

Essential Standard and Clarifying Objectives	Addressed
Forces and Motion	
<p>1.P.1 Understand how forces (pushes or pulls) affect the motion of an object.</p> <p>1.P.1.1 Explain the importance of a push or pull to changing the motion of an object.</p> <p>1.P.1.2 Explain how some forces (pushes and pulls) can be used to make things move without touching them, such as magnets.</p> <p>1.P.1.3 Predict the effect of a given force on the motion of an object, including balanced forces.</p>	•
Earth in the Universe	
<p>1.E.1 Recognize the features and patterns of the earth/moon/sun system as observed from Earth.</p> <p>1.E.1.1 Recognize differences in the features of the day and night sky and apparent movement of objects across the sky as observed from Earth.</p> <p>1.E.1.2 Recognize patterns of observable changes in the Moon’s appearance from day to day.</p>	
Earth Systems, Structures and Processes	
<p>1.E.2 Understand the physical properties of Earth materials that make them useful in different ways.</p> <p>1.E.2.1 Summarize the physical properties of earth materials, including rocks, minerals, soils and water that make them useful in different ways.</p> <p>1.E.2.2 Compare the properties of soil samples from different places relating their capacity to retain water, nourish and support the growth of certain plants.</p>	
Ecosystems	
<p>1.L.1 Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive.</p> <p>1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.</p> <p>1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.</p> <p>1.L.1.3 Summarize ways that humans protect their environment and/or improve conditions for the growth of the plants and animals that live there (e.g., reuse or recycle products to avoid littering).</p>	
Molecular Biology	
<p>1.L.2 Summarize the needs of living organisms for energy and growth.</p> <p>1.L.2.1 Summarize the basic needs of a variety of different plants (including air, water, nutrients, and light) for energy and growth.</p> <p>1.L.2.2 Summarize the basic needs of a variety of different animals (including air, water, and food) for energy and growth.</p>	