

Pacing & Curriculum Guide

Grade Four Science 5020050



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Revised March, 2021

Grade Four Science Course Description

Instructional Practices

Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies as a basis:

- 1.

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All standards are designed to be learned by the end of the year. This guide represents a recommended sequence to be used by teachers for planning purposes. Specific questions regarding when content will actually be addressed is best answered by the individual teacher.

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Nature of Science	Integrated All Year
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Plants and Animals		Pacing: 4 weeks	
Standards	Learning Goals (I Can...)	Vocabulary	
<u>SC.4.L.16.1</u> Identify processes of sexual reproduction in flowering plants, including pollination, fertilization (seed production), seed dispersal, and germination. <u>SC.4.L.16.2</u> Explain that although characteristics of plants and animals are inherited, some characteristics can be affected by the environment.			
SC.4.L.16.1	9 2 2 9 . 1 2 0 9 / C 2 _ 0 2 (f 9 . 3 7 i (n T 6 3 2 2 5 . < 1 0 7 8 > 2 - / T T 3		

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Learning Progression for Grade Five FSSA					
Kindergarten	1 st Grade	2 nd Grade	3 rd Grade	4 th Grade	5 th Grade



Living Things and the Environment		Pacing: 6 weeks
Standards	Learning Goals (can...)	Vocabulary
SC.4.L.17.2 Explain that animals, including humans, cannot make their own food and that when animals eat plants or other animals, the energy stored in the food source is passed to them. SC.4.L.17.3 Trace the flow of energy from the Sun as it is transferred alongon their environment. SC.4.L.17.4 Compare the seasonal changes in Florida plants and animals to those in other regions of the country. SC.4.L.17.5 Recognize ways plants and animals, including humans, can impact the environment.	x I cantell how living things depend on their environment. x I canexplain how living things depend	

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Earth's Pattern and Space		Pacing: 4 Weeks	
Standards		Learning Goal(s I can...)	Vocabulary

SC.4.E.5.1

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Learning Progression for Grade Five FSSA					
Kindergarten	1 st Grade	2 nd Grade	3 rd Grade	4 th Grade	5 th Grade
SC.K.E.5.2 Recognize the repeating pattern of day and night. SC.K.E.5.3 Recognize that the Sun can only be seen in the daytime. SC.K.E.5.4 Observe that sometimes the Moon can be seen at night and sometimes during the day. SC.K.E.5.5 Observe that things can be big and things can be small as seen from Earth. SC.K.E.5.6 Observe that some objects are far away and some are nearby as seen from Earth.	SC.1.E.5.1 Observe and discuss that there are more stars in the sky than anyone can easily count and that they are not scattered evenly in the sky. SC.1.E.5.4 Identify the beneficial and harmful properties of the Sun.	NA	SC.3.E.5.1 Explain that stars can be different; some are smaller, some are larger, and some appear brighter than others; all except the Sun are so far away that they look like points of light. SC.3.E.5.2 Identify the Sun as a star that emits energy; some of it in the form of light. SC.3.E.5.3 Recognize that the Sun appears large and bright because it is the closest star to Earth.	SC.4.E.5.1 Observe that the patterns of stars in the sky stay the same although they appear to shift across the sky city, and different stars can be seen in different seasons. SC.4.E.5.2 Describe the changes in the observable shape of the moon over the course of about a month. SC.4.E.5.3 Recognize that Earth revolves around the sun in a year and rotates on its axis in a 24 hour day SC.4.E.5.4 Relate that the rotation of Earth and apparent movements of the Sun, Moon, and stars are connected. SC.4.E.5.5 Investigate and report the effects of space research and exploration on the economy and culture of Florida.	SC.5.E.5.1 Recognize that a galaxy consists of gas, dust, and many stars, including any objects orbiting the stars. Identify our home galaxy as the Milky Way.



Earth's Features		Pacing: 4 weeks	
Standard:		Learning Goals (I can...)	Vocabulary
SC.4.E.6.1 Identify the three categories of rocks: igneous, (formed from molten rock) sediment			

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Learning Progression for Grade Five FSSA					
Kindergarten	1 st Grade	2 nd Grade	3 rd Grade	4 th Grade	5 th Grade
SC.K.P.8.1					

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Matter		Pacing: 4 weeks	
Standards	Learning Goals (I can...)	Vocabulary	
<u>SC.4.P.8.1</u> Measure and compare objects and materials based on their physical properties including mass, shape, volume, color, hardness, texture, odor, taste, attraction to magnets.	x I can describe and measure properties of matter.	Matter	organize
<u>SC.4.P.8.2</u> Identify properties and common uses of water in each of its states.	x I can describe ways that	Property	water vapor
<u>SC.4.P.8.3</u> Explore the Law of Conservation of Mass by demonstrating that the mass of a whole object is always the same as the sum of the masses of its parts.	matter changes.	Mass	differentiate
<u>SC.4.P.8.4</u> Investigate and describe that magnets can attract magnetic materials and attract and repel other magnets.		Volume	
<u>SC.4.P.9.1</u> Identify some familiar changes in materials that result in other materials with different characteristics, such as decaying animal or plant matter, burning, rusting, and cooking.		states of matter	
		solid	
		liquid	
		gas	
		property	
		texture	
		magnet	
		hardness	

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Learning Progression for Grade Five FSSA					
Kindergarten	1 st Grade	2 nd Grade	3 rd Grade	4 th Grade	5 th Grade
SC.K.P.8.1 Sort objects by observable properties, such as size, shape, color, temperature (hot or cold), weight (heavy or light) and texture.	SC.1.P.8.1 Sort objects by observable properties, such as size, shape, color, temperature (hot or cold), weight (heavy or light), texture, and whether objects sink or float. SC.1.E.5.3 Investigate how magnifiers make things appear bigger and help people see things they could not see without them.	SC.2.P.8.1 Observe and measure objects in terms of their properties, including size, shape, color, temperature, weight, texture, sinking or floating in water, and attraction and repulsion of magnets. SC.2.P.8.2 Identify objects and materials as solid, liquid, or gas. SC.2.P.8.3 Recognize that solids have a definite shape and that liquids and gases take the shape of their container. SC.2.P.8.4 Observe and describe water in its solid, liquid, and gaseous states. SC.2.P.8.6 Measure and compare the volume of liquids using containers of various shapes and sizes.	SC.3.P.8.1 Measure and compare temperatures of various samples of solids and liquids. SC.3.P.8.2 Measure and compare the mass and volume of solids and liquids. SC.3.P.8.3 Compare materials and objects according to properties such as size, shape, color, texture, and hardness.	SC.4.P.8.1 Measure and compare objects and materials based on their physical properties including: mass, shape, volume, color, hardness, texture, odor, taste, attraction to magnets. SC.4.P.8.2 Identify properties and common uses of water in each of its states.	



Energy and Motion: Motion of Objects		Pacing: 3 Weeks		
Standards		Learning Goals (I can...)		Vocabulary
<u>SC.4.P.12.1</u> Recognize that an object in motion always changes its position and may change its direction. <u>SC.4.P.12.2</u> Investigate and describe that the speed of an object is determined by the distance it travels in a unit of time and that objects can move at different speeds.		x I can describe the motion and speed of an object. x I can describe how an object is in motion.		position motion force direction distance speed collision simulate
Pearson Elevate Science	Suggested Resources		Activity Ideas	Extensions for STEM
Topic 4 Energy and Motion Lesson 1: Energy, Speed, and Moving Objects uConnect Lab uInvestigate Lab Lesson 2: Collisions uInvestigate Lab	AIMS ClassFlow CPalms x Motions of an Object: http://www.cpalms.org/Public/PreviewIdea/Preview/532 Discovery Education Thinking Maps x Make a tree map of different speed trials with variables used USA TestPrep		x A Pumpkin Drop: measure distance you are dropping a pumpkin, weight of pumpkin and speed it fell. x Use hot wheels	x uEngineer It: Toys on the Move (page 166)

Learning Progression for Grade Five FSSA					
Kindergarten	1 st Grade	2 nd Grade	3 rd Grade	4 th Grade	5 th Grade
SC.K.P.13.1 Observe that a push or a pull can change the way an object is moving.	SC.1.P.13.1 Demonstrate that the way to change the motion of an object is by applying a push or a pull.	SC.2.P.13.1 Investigate the effect of applying various pushes and pulls on different objects. SC.2.P.13.4 Demonstrate that the greater the force (push or pull) applied to an			



Energy Transfer and Human Uses of Energy

