

Science Instructional Guide for Grade 5

1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
<p>Scott Foresman Introduction to Scientific Thinking #1 pp. xx-xxxii</p> <p>Scott Foresman Unit B Earth Science #2 Chapter 7 <i>Omit Directed Inquiry</i> Lesson 1 Lesson 2 Lesson 3 Lesson 4 Guided Inquiry</p> <p><i>Omit Chapter 8</i></p> <p>#3 Chapter 9 <i>Omit Directed Inquiry</i> <i>Omit Lesson 1</i> Lesson 2 Lesson 3 Lesson 4 <i>Omit Lesson 5</i> Lesson 6 Guided Inquiry</p> <p>#4 Chapter 10 <i>Omit Directed Inquiry</i> Lesson 1 Lesson 2 Lesson 3 Lesson 4 Guided Inquiry <i>Omit Full Inquiry</i></p>	<p>Scott Foresman Unit C Physical Science #5 Chapter 11 Directed Inquiry Lesson 1 Lesson 2 Lesson 3 Lesson 4 Guided Inquiry Math in Science</p> <p>#6 Chapter 12 Directed Inquiry Lesson 1 <i>Omit Lesson 2</i> <i>Omit Lesson 3</i> <i>Omit Lesson 4</i> Guided Inquiry</p> <p>#7 Chapter 13 Directed Inquiry Lesson 1 Lesson 2 Lesson 3 Lesson 4 Guided Inquiry</p> <p>#8 Chapter 14 Directed Inquiry Lesson 1 Lesson 2 <i>Omit Lesson 3</i> Lesson 4 <i>Omit Guided Inquiry</i></p> <p>#9 Chapter 15 Directed Inquiry Lesson 1 Lesson 2 <i>Omit Lesson 3</i> <i>Omit Guided Inquiry</i> Full Inquiry</p>	<p>Scott Foresman Unit D Space and Technology #10 Chapter 16 <i>Omit Directed Inquiry</i> <i>Omit Lesson 1</i> Lesson 2 Lesson 3 Guided Inquiry</p> <p>#11 Chapter 17 <i>Omit Directed Inquiry</i> Lesson 1 Lesson 2 Lesson 3 Lesson 4 Guided Inquiry</p> <p><i>Omit Chapter 18</i></p> <p>FCAT Review of Annually Assessed Benchmarks</p>	<p>Scott Foresman Unit A Life Science #12 Chapter 1 Directed Inquiry Lesson 1 Lesson 2 Lesson 3 Lesson 4 Guided Inquiry</p> <p>#13 Chapter 2 Directed Inquiry Lesson 1 Lesson 2 <i>Omit Lesson 3</i> <i>Omit Guided Inquiry</i></p> <p>#14 Chapter 3 Directed Inquiry Lesson 1 Lesson 2 Lesson 3 Guided Inquiry</p> <p>#15 Chapter 4 Directed Inquiry Lesson 1 Lesson 2 <i>Omit Lesson 3</i> <i>Omit Lesson 4</i> Guided Inquiry Math in Science</p> <p>#16 Chapter 5 Directed Inquiry Lesson 1 Lesson 2 Lesson 3 Lesson 4 Lesson 5 Lesson 6 Guided Inquiry Math in Science</p> <p>#17 Chapter 6 Directed Inquiry Lesson 1 Lesson 2 Lesson 3 Guided Inquiry <i>Omit Full Inquiry</i></p>

FIFTH GRADE: #1

Scott Foresman Introduction to Scientific Thinking

BENCHMARKS AND <i>ITEM CLARIFICATION</i>	AA or CS	Test Item Code
The student...		
<p>SC.H.1.2.1 knows that it is important to keep accurate records and descriptions to provide information and clues on causes of discrepancies in repeated experiments. <i>Identifies and explains the reasons for documenting scientific activities.</i></p>	AA	MC
<p>SC.H.1.2.2 knows that a successful method to explore the natural world is to observe and record, and then analyze and communicate the results. (Also assesses H.1.2.4 and H.3.2.2) <i>Identifies, explains, and describes, or applies the scientific process (i.e., accurately reporting and analyzing data, reaching logical conclusions that reflect the data, repeating investigations for validity, asking new questions, and communicating results).</i></p>	AA	MC, SR, ER
<p>SC.H.1.2.3 knows that to work collaboratively, all team members should be free to reach, explain, and justify their own individual conclusions. (Not assessed)</p>		Not assessed
<p>SC.H.1.2.4 knows that to compare and contrast observations and results is an essential skill in science. (Assessed as H.1.2.2)</p>	AA	MC, SR, ER
<p>SC.H.1.2.5 knows that a model of something is different from the real thing, but can be used to learn something about the real thing. <i>Identifies and analyzes models that are used to interpret real-world situations.</i></p>	CS	MC
<p>SC.H.2.2.1 Knows that natural events are often predictable and logical. <i>Uses information about nature to forecast events and reach conclusions.</i></p>	CS	MC
<p>SC.H. 3.2.1 Understands that people, alone or in groups, invent new tools to solve problems and do work that affects aspects of life outside of science. (Also assesses H.3.2.3) <i>Identifies ways in which people impact others, including inventions and discoveries.</i></p>	AA	MC, SR
<p>SC.H.3.2.2 Knows that data are collected and interpreted in order to explain an event or concept. (Assessed as H.1.2.2)</p>	AA	MC, SR, ER
<p>S.C.H.3.2.3 knows that before a group of people build something or try something new, they should determine how it may affect other people. (Assessed as H.3.2.1)</p>	AA	MC, SR
<p>SC.H.3.2.4 knows that through the use of science processes and knowledge, people can solve problems, make decisions, and form new ideas.</p>	AA	MC, SR

Benchmark Codes: AA = Annually Assessed Benchmarks; CS = Content-Sampled Benchmarks
Test Item Codes: MC = Multiple Choice; SR = Short Response; ER = Extended Response

SCOTT FORESMAN SCIENCE

Scott Foresman Textbook	<p>The following pages are a good introduction to Strand H:</p> <ul style="list-style-type: none"> • How to Read Science pp. xx-xxi • Science Process Skills pp. xxii-xxv • Using Scientific Methods for Science Inquiry pp. xxvi-xxvii • Science Tools pp. xxviii-xxix • Safety in Science pp. xxxii
Vocabulary Bold = FCAT Underscore = Marzano	<p>experiment, <u>hypothesis</u>, investigation, <u>scientific method</u>, variable, <u>topographical map (topography)</u></p>

OTHER RESOURCES

CIA www.cs.ocps.net	
AIMS www.aimsedu.org	<p><i>Off the Wall Science: The Egg in Water, Food Coloring in Oil and Water; Weather Sense and Moisture: Going, Going, Gone; Jaw Breakers and Heart Thumpers: Now That's Using Your Head! By Golly, By Gum</i></p>
Literature	
Other	<p>Science Court: <i>Statistics</i>, Tom Snyder Productions</p>

NOTES

Strand H should be integrated throughout the year as students engage in inquiry.

FIFTH GRADE #2		
Earth Science		
Scott Foresman Chapter 7: Water on Earth		
BENCHMARKS AND ITEM CLARIFICATION		AA or CS
The student...		Test Item Code
SC.D.1.2.2 knows that 75 percent of the surface of the Earth is covered by water.		AA
SC.D.1.2.3 knows that the water cycle is influenced by temperature, pressure, and the topography of the land. <i>Identifies the effect of different variables on the water cycle.</i>		CS
Benchmark Codes: AA = Annually Assessed Benchmarks ; CS = Content-Sampled Benchmarks Test Item Codes: MC = Multiple Choice ; SR = Short Response ; ER = Extended Response		
SCOTT FORESMAN SCIENCE		
Scott Foresman Textbook	Lesson 1 How can the oceans be described? pp. 199-201 Lesson 2 Where is fresh water found? pp. 202-207 Lesson 3 What is the water cycle? pp. 208-211 Lesson 4 How do clouds form? pp. 212-215 Guided Inquiry What is a cloud? pp. 216-217	SC.D.1.2.2 SC.D.1.2.2 SC.D.1.2.3 SC.D.1.2.3 SC.D.1.2.3
Scott Foresman Leveled Readers	<i>Water on Earth</i> (Below-Level) <i>Earth's Water</i> (On-Level) <i>Underwater Explorers</i> (Advanced)	
Scott Foresman Assessment	Chapter Review; ExamView Test (build your own test for lessons 1-4 in chapter 7); FCAT Science Test Prep pp. 43-48; Assessment Book pp. 39-42	
Vocabulary Bold = FCAT Underscore = Marzano	condensation, evaporation , precipitation	
OTHER RESOURCES		
CIA www.cs.ocps.net	<u>Strand D - Oceans</u> : Water, Water Everywhere; Did You Ever Wonder about Water? <u>Strand D - The Water Cycle</u> : The Teacher...the Rainmaker; Rainmakers; Save Me! Save Me! Wise Use of Water	
AIMS www.aimsedu.org	<i>Weather Sense and Moisture</i> : A Cloud Is Born, Make Dew; <i>Off the Wall Science</i> : Ice Water in a Tin Can; <i>Finding Your Bearings</i> : Surf 'n' Sand activities	
Literature	Newbridge: <i>Mighty Ocean</i>	
Other	Carolina Biological Program, <i>Science, Technology and Children</i> : Land and Water Kit Page Keeley, <i>Uncovering Student Ideas in Science, Vol. 1</i> : Wet Jeans, pp. 155-161	
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FIFTH GRADE #3		
Earth Science		
Scott Foresman Chapter 9: Earth's Changing Surface		
BENCHMARKS AND ITEM CLARIFICATION		AA or CS
The student...		Test Item Code
SC.D.1.2.1 knows that larger rocks can be broken down into smaller rocks, which in turn can be broken down to combine with organic material to form soil. (Assessed as SC.D.1.2.4)		AA
SC.D.1.2.4 knows that the surface of the Earth is in a continuous state of change as waves, weather, and shifts of the land constantly change and produce many new features. <i>Identifies the factors that alter the surface of Earth over short and long periods of time.</i>		AA
SC.D.1.2.5 knows that some changes in the Earth's surface are due to slow processes and some changes are due to rapid processes. (Assessed as SC.D.1.2.4)		AA
Benchmark Codes: AA = Annually Assessed Benchmarks; CS = Content-Sampled Benchmarks Test Item Codes: MC = Multiple Choice; SR = Short Response; ER = Extended Response		
SCOTT FORESMAN SCIENCE		
Scott Foresman Textbook	Lesson 2	What causes earthquakes and volcanoes? pp. 266-271
	Lesson 3	What is weathering? pp. 272-275
	Lesson 4	What is erosion? pp. 276-281
	Lesson 6	How are rocks classified? pp. 286-289
	Guided Inquiry	What buildings are less damaged by an earthquake? pp. 290-291
Scott Foresman Leveled Readers	<i>Earth's Changing Surface</i> (Below-Level) <i>Our Changing Earth</i> (On-Level) <i>Mountains of the World</i> (Advanced)	
Scott Foresman Assessment	Chapter Review; ExamView Test (build your own test for lessons 2, 3, 4, and 6 in chapter 9); FCAT Science Test Prep pp. 55-60; Assessment Book pp. 47-50 (Note: Omit all questions relating to lessons 1 and 5.)	
Vocabulary Bold = FCAT Underscore = Marzano	<u>deposition</u> , <u>earthquake</u> , <u>erosion</u> , <u>igneous rock</u> , <u>metamorphic rock</u> , plate, <u>sedimentary rock</u> , volcano, <u>weathering</u>	
OTHER RESOURCES		
CIA www.cs.ocps.net	Strand D - Weathering Earth: Wild Water; A Rocky Start; Ice Flows; Super Seeds	
AIMS www.aimsedu.org	<i>Water Precious Water</i> : Don't Rain Away; <i>Primarily Earth</i> : Shakes and Quakes, Agent Erosion	
Literature	Newbridge: <i>Remarkable Rocks</i>	
Other	<i>Rock Odyssey: A Rocks and Minerals Revue</i> video; order online at www.mii.org/RockOdyssey.html from the Mineral Information Institute. Page Keeley, <i>Uncovering Student Ideas in Science, Vol.1</i> : Beach Sand pp. 163-168, Mountain Age pp. 169-175	
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FIFTH GRADE #4			
Earth Science			
Scott Foresman Chapter 10: Protecting Earth's Resources			
BENCHMARKS AND ITEM CLARIFICATION		AA or CS	Test Item Code
The student...			
SC.B.2.2.2 recognizes the costs and risks to society and the environment posed by the use of nonrenewable energy. (Assessed as D.2.2.1)		CS	MC
SC.B.2.2.3 knows that the limited supply of usable energy sources (e.g., fuels such as coal or oil) places great significance on the development of renewable energy sources. (Assessed as D.2.2.1)		CS	MC
SC.D.2.2.1 knows that using, recycling, and reducing the use of natural resources improve and protect the quality of life. (Also assesses B.2.2.2 and B.2.2.3)		CS	MC
Benchmark Codes: AA = Annually Assessed Benchmarks; CS = Content-Sampled Benchmarks Test Item Codes: MC = Multiple Choice; SR = Short Response; ER = Extended Response			
SCOTT FORESMAN SCIENCE			
Scott Foresman Textbook	Lesson 1	What are nonrenewable energy resources? pp. 303-305	SC.B.2.2.2
	Lesson 2	What are other energy resources? pp. 306-313	SC.B.2.2.3
	Lesson 3	What are other resources? pp. 314-317	SC.D.2.2.1
	Lesson 4	Can resources be conserved? pp. 318-321	SC.D.2.2.1
	Guided Inquiry	How can paper be recycled? pp. 322-323	SC.D.2.2.1
	Scott Foresman Leveled Readers	<i>Protecting Earth's Resources</i> (Below-Level) <i>Earth's Natural Resource</i> (On -Level) <i>Green Gardening</i> (Advanced)	
Scott Foresman Assessment	Chapter Review; ExamView Test (build your own test for lessons 1-4 in chapter 10); FCAT Science Test Prep pp. 61-66; Assessment Book pp. 51-54		
Vocabulary Bold = FCAT Underscore = Marzano	conservation, <u>nonrenewable resource</u>, <u>renewable resource</u>, resource , solar energy		
OTHER RESOURCES			
CIA www.cs.ocps.net	Strand B – Energy: Water Turbine; Solar Power; Home Energy Audit		
AIMS www.aimsedu.org	<i>Popping with Power:</i> Windmills; <i>Overhead and Underfoot:</i> Let's Recycle; <i>Cycles of Knowing and Growing:</i> After Lunch		
Literature	Newbridge: <i>Oil: A Natural Resource</i>		
Other	Robert Krampf's <i>Basic Concepts in Science: Processes That Shape the Earth DVD</i> , www.krampf.com .		
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