

## Science Instructional Guide for Grade 4

1 <sup>st</sup> Nine Weeks	2 <sup>nd</sup> Nine Weeks	3 <sup>rd</sup> Nine Weeks	4 <sup>th</sup> Nine Weeks
<p><b>Scott Foresman</b> <b>Introduction to Scientific Thinking</b> <b>#1</b> pp. xx-xxxii</p> <p><b>Scott Foresman</b> <b>Unit B Earth Science</b> <b>#2</b> <u>Chapter 6</u> Directed Inquiry Lesson 1 Lesson 2 <i>Omit Lesson 3</i> <i>Omit Lesson 4</i> <i>Omit Guided Inquiry</i></p> <p><b>#3</b> <u>Chapter 7</u> Directed Inquiry Lesson 1 Lesson 2 Guided Inquiry Math in Science</p> <p><i><u>Omit Chapter 8</u></i></p> <p><b>#4</b> <u>Chapter 9</u> Directed Inquiry Lesson 1 Lesson 2 Lesson 3 Guided Inquiry</p> <p><b>#5</b> <u>Chapter 10</u> <i>Omit Directed Inquiry</i> Lesson 1 <i>Omit Lesson 2</i> <i>Omit Guided Inquiry</i> Math in Science Full Inquiry</p> <p><b>Unit C Physical Science</b> <b>#6</b> <u>Chapter 11</u> Directed Inquiry Lesson 1 Lesson 2 Lesson 3 Lesson 4 Guided Inquiry Math in Science</p>	<p><b>Scott Foresman</b> <b>Unit C Physical Science</b> <b>#7</b> <u>Chapter 12</u> <i>Omit Directed Inquiry</i> Lesson 1 Lesson 2 Guided Inquiry Math in Science</p> <p><b>#8</b> <u>Chapter 13</u> Directed Inquiry Lesson 1 Lesson 2 Lesson 3 Lesson 4 Lesson 5 Guided Inquiry</p> <p><b>#9</b> <u>Chapter 14</u> Directed Inquiry Lesson 1 Lesson 2 <i>Omit Lesson 3</i> Lesson 4 Guided Inquiry</p>	<p><b>Scott Foresman</b> <b>Unit C Physical Science</b> <b>#10</b> <u>Chapter 15</u> <i>Omit Directed Inquiry</i> Lesson 1 Lesson 2 <i>Omit Lesson 3</i> Guided Inquiry</p> <p><i><u>Omit Chapter 16</u></i></p> <p><b>Scott Foresman</b> <b>Unit D</b> <b>Space and Technology</b> <b>#11</b> <u>Chapter 17</u> <i>Omit Directed Inquiry</i> Lesson 1 Lesson 2 Guided Inquiry Math in Science</p> <p><b>#12</b> <u>Chapter 18</u> Directed Inquiry Lesson 1 Lesson 2 Lesson 3 Lesson 4 Math in Science <i>Omit Guided Inquiry</i> Full Inquiry</p> <p><i><u>Omit Chapter 19</u></i></p>	<p><b>Scott Foresman</b> <b>Unit A Life Science</b> <b>#13</b> <u>Chapter 1</u> Directed Inquiry Lesson 1 Lesson 2 <i>Omit Lesson 3</i> Lesson 4 Lesson 5 <i>Omit Guided Inquiry</i></p> <p><b>#14</b> <u>Chapter 2</u> Directed Inquiry Lesson 1 <i>Omit Lesson 2</i> <i>Omit Lesson 3</i> <i>Omit Lesson 4</i> Guided Inquiry Math in Science</p> <p><b>#15</b> <u>Chapter 3</u> Directed Inquiry Lesson 1 Lesson 2 Lesson 3 Guided Inquiry Math in Science</p> <p><b>#16</b> <u>Chapter 4</u> Directed Inquiry Lesson 1 Lesson 2 Lesson 3 Lesson 4 Guided Inquiry</p> <p><b>#17</b> <u>Chapter 5</u> Directed Inquiry Lesson 1 Lesson 2 Lesson 3 <i>Omit Lesson 4</i> <i>Omit Guided Inquiry</i> Full Inquiry</p>

## FOURTH GRADE #10

### Physical Science

#### Scott Foresman Chapter 15: Objects in Motion

BENCHMARKS AND <i>ITEM CLARIFICATION</i>		AA or CS	Test Item Code
<b>The student...</b>			
SC.C.1.2.1 understands that the motion of an object can be described and measured. <i>Identifies and quantifies the movement of an object and makes predictions based on its movements.</i>		CS	MC
SC.C.2.2.2 knows that an object may move in a straight line at a constant speed, speed up, slow down, or change direction dependent on net force acting on the object. (Assessed as C.2.2.4)		AA	MC, SR,ER
SC.C.2.2.3 knows that the more massive an object is, the less effect a given force has. (Assessed as C.2.2.4)		AA	MC, SR, ER
SC.C.2.2.4 knows that the motion of an object is determined by the overall effect of all of the forces acting on the object. (Also assesses C.2.2.2 and C.2.2.3) <i>Identifies the net force acting on an object and describes the motion of that object.</i>		AA	MC, SR, ER
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			
<b>Scott Foresman Textbook</b>	Lesson 1                      What is motion? pp. 439-441 Lesson 2 <b>How does force affect moving objects? pp. 442-445</b>  Guided Inquiry <b>How does friction affect motion? pp. 450-451</b>		SC.C.1.2.1 SC.C.2.2.2 SC.C.2.2.3 SC.C.2.2.4 SC.C.2.2.2
<b>Scott Foresman Leveled Readers</b>	<i>Objects in Motion</i> (Below-Level) <i>Motion</i> (On-Level) <i>Newton and Gravity</i> (Advanced)		
<b>Scott Foresman Assessment</b>	Chapter Review; ExamView Test (build your own test for lessons 1 and 2 in chapter 15); FCAT Science Test Prep pp. 97-102; Assessment Book pp. 85-88; Workbook pp. 142-143  (Note: Omit all questions relating to lesson 3.)		
<b>Vocabulary</b> Bold = FCAT Underscore = Marzano	<b>force, friction</b>		
OTHER RESOURCES			
<b>CIA</b> <a href="http://www.cs.ocps.net">www.cs.ocps.net</a>	Strand C - Force and Motion: Penny Push; Ramps and Sliders; More Bouncing Balls		
<b>AIMS</b> <a href="http://www.aimsedu.org">www.aimsedu.org</a>	<i>Popping With Power</i> : Fulcrums on the Move; Ball on a Roll		
<b>Literature</b>	<i>Sheep in a Jeep</i> , Shaw		
<b>Other</b>	Ansberry and Morgan, <i>Picture-Perfect Science Lessons</i> : Sheep in a Jeep		
NOTES			

## FOURTH GRADE #11

### Space and Technology

#### Scott Foresman Chapter 17: Earth's Cycles

BENCHMARKS AND ITEM CLARIFICATION	AA or CS	Test Item Code
<b>The student...</b>		
<p>SC.E.1.2.1 knows that the tilt of the Earth on its own axis as it rotates and revolves around the sun causes changes in season, length of day, and energy available. <i>Identifies and describes how the position of Earth in relation to the Sun impacts Earth and knows the effects of energy available to organisms.</i></p>	AA	MC, SR
<p>SC.E.1.2.2 knows that the combination of the Earth's movement and the moon's own orbit around the Earth results in the appearance of cyclical phases of the moon. <i>Identifies factors that change the amount of sunlight reflected from the moon to the Earth.</i></p>	CS	MC
<p>SC.E.2.2.1 knows that, in addition to the sun, there are many other stars that are far away. <i>Identifies the sun as a medium-sized star in a galaxy containing billions of stars.</i></p>	CS	MC
<p><b>Benchmark Codes:</b> AA = Annually Assessed Benchmarks; CS = Content-Sampled Benchmarks  <b>Test Item Codes:</b> MC = Multiple Choice; SR = Short Response; ER = Extended Response</p>		

#### SCOTT FORESMAN SCIENCE

<b>Scott Foresman Textbook</b>	<p><b>Lesson 1</b>      <b>How does Earth move? pp. 495-499</b></p> <p>Lesson 2      What patterns can you see in the sky? pp. 500-505</p> <p>Guided Inquiry      How can you make a star finder? pp. 506-507</p> <p><b>Math in Science</b>      <b>Comparing Hours of Daylight pp. 508-509</b></p>	<p>SC.E.1.2.1</p> <p>SC.E.1.2.2</p> <p>SC.E.2.2.1</p> <p>SC.E.2.2.1</p> <p>SC.E.1.2.1</p>
<b>Scott Foresman Leveled Readers</b>	<p><i>Earth's Cycles</i> (Below-Level)</p> <p><i>Earth in Motion</i> (On-Level)</p> <p><i>Eclipse</i> (Advanced)</p>	
<b>Scott Foresman Assessment</b>	<p>Chapter Review; ExamView Test (build your own test for lessons 1 and 2 in chapter 17); FCAT Science Test Prep pp. 115-120; Assessment Book pp. 107-110; Workbook pp. 160-161</p>	
<b>Vocabulary</b> Bold = FCAT Underscore = Marzano	<p><b>axis, <u>constellation</u>, equator, moon phases, <u>rotation</u>, <u>revolution</u>, star</b></p>	

#### OTHER RESOURCES

<b>CIA</b> <a href="http://www.cs.ocps.net">www.cs.ocps.net</a>	<p>Strand E - The Solar System: Reasons for the Seasons; A Lunar Lap; Sun Shadow Tracers; Star Gazing</p>	
<b>AIMS</b> <a href="http://www.aimsedu.org">www.aimsedu.org</a>	<p><i>Out of This World</i>: Lunar Looking, Dizzy Spells; <i>Summer Institute Curriculum</i>: Physical Features of the Earth and Moon</p>	
<b>Literature</b>	<p><i>Somewhere in the World Right Now</i>, Schuett</p> <p>Newbridge: <i>Earth in Space</i>; <i>Watching the Night Sky</i></p>	
<b>Other</b>	<p>Science Court: <i>Seasons</i>, Tom Snyder Productions</p> <p>Page Keeley, <i>Uncovering Student Ideas in Science, Vol. 1: Going Through a Phase</i></p> <p>Ansberry and Morgan, <i>Picture-Perfect Science Lessons: Day and Night</i></p>	

#### NOTES

**FOURTH GRADE #12**

**Space and Technology**

**Scott Foresman Chapter 18: Inner and Outer Planets**

<b>BENCHMARKS AND ITEM CLARIFICATION</b>			<b>AA or CS</b>	<b>Test Item Code</b>
<b>The student...</b>				
SC.E.1.2.4 knows that the planets differ in size, characteristics, and composition and that they orbit the sun in our Solar System. <i>Compares and contrasts properties of the planets in our solar system (Also assesses E.1.2.5)</i>			CS	MC
SC.E.1.2.5 understands the arrangement of planets in our Solar System.(Assessed as E.1.2.4)			CS	MC
SC.E.2.2.1 knows that, in addition to the sun, there are many other stars that are far away. <i>Identifies the sun as a medium-sized star in a galaxy containing billions of stars.</i>			CS	MC
<b>SC.C.2.2.3 knows that the more massive an object is, the less effect a given force has.</b>			<b>AA</b>	<b>MC, SR, ER</b>
<b>Benchmark Codes: AA = Annually Assessed Benchmarks; CS = Content-Sampled Benchmarks</b> <b>Test Item Codes: MC = Multiple Choice; SR = Short Response; ER = Extended Response</b>				
<b>SCOTT FORESMAN SCIENCE</b>				
<b>Scott Foresman Textbook</b>	Directed Inquiry	How can you compare the sizes of the planets? p. 516		SC.E.1.2.4
	Lesson 1	What makes up the universe? pp. 519-521		SC.E.1.2.5
	Lesson 2	What are the inner planets? pp. 522-527		SC.E.2.2.1
	Lesson 3	What do we know about Jupiter, Saturn, and Uranus? pp. 528-533		SC.E.1.2.4
	Lesson 4	What do we know about Neptune, Pluto, and beyond? pp. 534-537		SC.E.1.2.4
	Math in Science	Using Data about Planets pp. 540-541		SC.E.1.2.4
	<b>Full Inquiry</b>	<b>How does payload affect the distance a model rocket can travel? pp. 572-575</b>		<b>SC.C.2.2.3</b>
<b>Scott Foresman Leveled Readers</b>	<i>Inner and Outer Planets (Below-Level)</i> <i>Planets (On-Level)</i> <i>The Red Planet (Advanced)</i>			
<b>Scott Foresman Assessment</b>	Chapter Review; ExamView Test (build your own test for lessons 1-4 in chapter 18); FCAT Science Test Prep pp. 121-126; Assessment Book pp. 111-114; Workbook pp. 168-171			
<b>Vocabulary</b> Bold = FCAT Underscore = Marzano	<b><u>galaxy</u>, solar system, <u>universe</u></b>			
<b>OTHER RESOURCES</b>				
<b>CIA</b> <a href="http://www.cs.ocps.net">www.cs.ocps.net</a>	Strand E - The Solar System: Solar Stretch; How Do I Look? What a Pull!			
<b>AIMS</b> <a href="http://www.aimsedu.org">www.aimsedu.org</a>	<i>Out of This World: Lining Up the Planets; Can You Planet? Spacing Out the System</i>			
<b>Literature</b>	Newbridge: <i>Mars</i>			
<b>Other</b>				
<b>NOTES</b>				