

GRADE

6

2006-2007 Year at a Glance

FIRST SIX WEEK CYCLE				
WEEK	DAYS	LESSONS	PAGES	ASSESSMENT
1	9/7-9/15	Process Skills		Appendix/Investigation 1
2	9/18-9/22	Landforms	Investigation 1: pp. 16-24	PSSA ✓ point/Constructed Response
3	9/25-9/29	Landforms	Investigation 2: pp. 1-24	
4	10/3-10/6	Landforms	Investigation 2: pp. 16-24	PSSA ✓ point/Constructed Response
5	10/10-10/13	Landforms	Investigation 3 pp. 1-14	
6	10/16-10/20	Landforms	Investigation 3: pp. 1-10	Constructed Response
SECOND SIX WEEK CYCLE		REFER TO THE COORDINATING DOCUMENT		
1	10/23-10/26	Landforms	Investigation 3: pp. 15-19	
2	10/30-11/3	Landforms	Inv 3: pp. 20-24, Inv 4: pp.1-15	PSSA ✓ point/Constructed Response
3	11/6-11/10	Landforms	Investigation 4: pp. 16-24	
4	11/14-11/17	Landforms	Inv 4: pp. 21-24, Inv 5: pp. 1-15	PSSA ✓ point/Constructed Response
5	11/20-11/22	Landforms	Investigation 5: pp. 16-20	
6	11/27-12/1	Landforms	Assessment Folio: pp. 21-32	Constructed Response
THIRD SIX WEEK CYCLE				
1	12/4-12/8	Astronomy	Chapter 1: pp. 2-21	
2	12/11-12/15	Astronomy	Chapter 2: pp. 30-39, 54-55	PSSA ✓ point/Constructed Response
3	12/18-12/22	Astronomy	Chapter 2: pp. 40-53, 56-57	
4	1/2-1/5	Astronomy	Chapter 3: pp. 62-79, 84-85	PSSA ✓ point/Constructed Response
5	1/8-1/12	Astronomy	Chapter 3: pp. 80-83	
6	1/16-1/23	Astronomy	Chapter 3: pp. 86-87	Constructed Response
FOURTH SIX WEEK CYCLE				
1	1/24-2/1	Astronomy	Chapter 4: pp. 92-97, 168-169	
2	2/5-2/9	Astronomy	Chapter 4: pp. 98-103, 124-125	PSSA ✓ point/Constructed Response
3	2/12-2/16	Astronomy	Chapter 4: pp. 104-117, 170	
4	2/20-2/23	Astronomy	Chapter 4: pp. 118-123, 126-127	PSSA ✓ point/Constructed Response
5	2/26-3/2	Astronomy	Chapter 5: pp. 132-143	
6	3/5-3/9	Astronomy	Chapter 5: pp. 144-155	Constructed Response
FIFTH SIX WEEK CYCLE				
1	3/12-3/23	Environments	Investigation 1: pp. 1-20	
2	3/26-3/30	Environments	Investigation 2: pp. 1-21	PSSA ✓ point/Constructed Response
3	4/9-4/13	Environments	Investigation 2: pp. 22-29	
4	4/16-4/20	Environments	Inv 2: pp.30-32,Inv 3: pp.1-13, 23	PSSA ✓ point/Constructed Response
5	4/23-4/27	Environments	pp. 14-17, 18-24	
6	4/30-5/4	Environments	Inv 3: pp. 18-23,Inv 4: pp. 1-24	Constructed Response
SIXTH SIX WEEK CYCLE		REFER TO THE COORDINATING DOCUMENT		
1	5/7-5/11	Environments	Investigation 5: pp. 1-18	
2	5/14-5/18	Environments	Inv 5: pp. 19-22,Inv 6: pp. 1-17	PSSA ✓ point/Constructed Response
3	5/21-5/25	Environments	Investigation 6: p. 16-21	
4	5/29-6/1	Environments	Investigation 6: pp. 14-24	PSSA ✓ point/Constructed Response
5	6/4-6/8	Environments	Investigation 6: pp. 18-21	
6	6/11-6/19	Environments	Investigation 6: pp. 21-22	Constructed Response

FIRST SIX WEEK CYCLE SCIENCE 6 PLANNING AND SCHEDULING TIMELINE

LESSON PLANNING WHAT I WILL TEACH...	CONTENT/PERFORMANCE DESCRIPTOR(S): <small>TEACHING TO PROFICIENCY</small>	PA STANDARD STATEMENT(S)	TEXTUAL REFERENCE STRUCTURED LESSONS
GOOD INSTRUCTION IS THE BEST TEST PREPARATION			
FULL OPTION SCIENCE SYSTEM (FOSS): LANDFORMS	*DENOTES ELIGIBLE CONTENT	REFER TO PAGE(S) IN CORE CURRICULUM	
<ul style="list-style-type: none"> ❖ Related Cultural Perspectives • Use one or more of the five senses to gather information • Gather information about observations and measurements in a systematic way • Develop ideas based on observations • State specific information about an object or phenomena based on experiences with it • Understand how maps can be generated from models • Use scientific thinking processes to conduct investigations and build explanations: observing, communicating, comparing, organizing, and relating 	<ul style="list-style-type: none"> • Inquiry & Design* • Answer "What if" questions based on observations, inference or prior knowledge or experience* • Evaluate the appropriateness of questions • Define all aspects of the problem • Apply models to predict specific results and observations* • Communicate appropriate conclusions from an experiment* • Describe relationships by making inferences and predictions* 	<p>3.2.7B p. 28-34 3.1.7B p. 20</p>	<p>TerraNova Test Prep: "Instructional Strategies & an Item Sampler for: TerraNova Success" (www.phila.k12.pa.us/offices/curriculum)</p> <p>CC = Core Curriculum</p> <p>Appendix: pp. 1-5 Landforms: Investigation 1: Schoolyard Models Introduction: pp. 1-7 Investigation 1: Part 1, Schoolyard Models: pp. 8-15 Safety Note: p. 9*</p>
<ul style="list-style-type: none"> ❖ Related Cultural Perspectives • Observe and compare features on models and corresponding maps • Use scientific thinking processes to conduct investigations and build explanations 	<ul style="list-style-type: none"> • Apply models to predict specific results and observations* • Describe scale as a form of ratio and apply it to a life situation* • Communicate appropriate conclusions from an experiment* 	<p>3.1.7B p. 20 3.1.7D p. 24 3.2.7C p. 32</p>	<p>Landforms</p> <p>Investigation 1: Part 2, View from Above: pp. 16-19 Assessment folio: p. 6, 7 Investigation 1: Part 3, Mapmaking: pp. 20-24</p>
<ul style="list-style-type: none"> ❖ Related Cultural Perspectives • Investigate water flow over earth materials in a stream table • Observe the processes of erosion, deposition, and stream flow • Relate stream table processes to natural processes that shape the earth (e.g., the Grand Canyon, alluvial fans) • Use scientific thinking processes to conduct investigations and build explanations 	<ul style="list-style-type: none"> • Apply models to predict specific results and observations* • Identify patterns that occur in physical systems* • Describe processes involved in the creation of geologic features and that these processes seen today are similar to those in the past* • Describe the positive and negative expected and unexpected effects of specific technological developments* 	<p>3.1.7B p. 20 3.1.7C p. 22 3.5.7A p. 52 3.8.7C p. 80</p>	<p>Landforms</p> <p>Investigation 2: Stream Tables Introduction: pp. 1-7 Investigation 2: Part 1, Erosion: pp. 8-15 Science Stories Folio: pp. 4-5 Investigation 2: Part 2, Deposition: pp. 16-24 Assessment Folio: p. 8</p>
<ul style="list-style-type: none"> ❖ Related Cultural Perspectives • Investigate water flow over earth materials in a stream table • Observe the processes of erosion, deposition, and stream flow • Relate stream table processes to natural processes that shape the earth • Use scientific thinking processes to conduct investigations and build explanations: observing, communicating, comparing, organizing, and relating 	<ul style="list-style-type: none"> • Distinguish between system inputs, system processes and system outputs • Describe processes involved in the creation of geologic features and that these processes seen today are similar to those in the past* • Distinguish between examples of rapid surface changes (e.g., landslides, earthquakes) and slow surface changes (e.g., weathering)* • Explain and apply scientific and technological knowledge* 	<p>3.1.7A p. 18 3.5.7A p. 52 3.2.7C p. 32 3.2.7B p. 30</p>	<p>Landforms</p> <p>Investigation 2: Part 2, Deposition: pp. 16-24 Assessment Folio: p. 8</p>
<ul style="list-style-type: none"> ❖ Related Cultural Perspectives • Investigate how the slope of land affects erosion and deposition • Investigate how rate of flow effects erosion and deposition • Use scientific thinking processes to conduct investigations and build explanations: observing, communicating, comparing, organizing, and relating 	<ul style="list-style-type: none"> • Apply models to predict specific results and observations* • Design controlled experiments, recognize astronomy, and manipulate astronomy* • Describe earth features and processes* • Communicate appropriate conclusions from the experiment* • Identify and explain the principles of force and motion* 	<p>3.1.7B p. 20 3.2.7B p. 30 3.5.7A p. 52 3.2.7C p. 32 3.4.7C p. 48</p>	<p>Investigation 3: Go With the Flow</p> <p>Introduction: pp. 1-7 Investigation 3: Part 1, Slope: pp. 8-14 Science Stories Folio: pp. 6-7, 21</p>
<ul style="list-style-type: none"> ❖ Related Cultural Perspectives • Use scientific thinking processes to conduct investigations and build explanations: observing, communicating, comparing, organizing, and relating 	<ul style="list-style-type: none"> • Design controlled experiments, recognize astronomy, and manipulate astronomy* 	<p>3.2.7B p. 30</p>	<p>Days 1 thru 5: TerraNova Testing</p>

PLANNING AND SCHEDULING TIMELINE SCIENCE 6 FIRST SIX WEEK CYCLE

TIME PACING	OTHER REFERENCES TECHNOLOGY	SAMPLE PSSA ASSESSMENT ITEM ALIGNED TERRANOVA OBJECTIVES	CROSS CURRICULAR PSSA CONNECTION TO "WHAT I WILL TEACH"
GOOD INSTRUCTION IS THE BEST TEST PREPARATION			
<p>Cycle 1 Week 1</p> <p>7 days</p> <p>Sept. 7 to Sept. 15</p>	<p>Process Skills Week</p> <p>Day 1-4: Investigation: Discrepant Event</p> <p>Day 5: Guiding the Investigation: Part 1, pp. 12-13 (#1-6)</p> <p>Day 6: Investigation: Part 1, pp. 13-14 (#7-11)</p> <p>Day 7: Investigation 1: Wrapping Up Part 1, p. 15 (#12-14), Introduce Project Folder.</p>	<p>Multiple Choice</p> <p>A representation of objects or processes is a _____.</p> <p>Aligned TerraNova Objectives</p> <p>19 Science Inquiry 23 Science and Technology 25 History and Nature of Science</p>	<p>Science Notebooks</p> <p>See Appendix page A6 for suggestions for using the Science Notebooks.</p> <p>Use of Models</p> <p>See Core Curriculum page 20 for rationale and descriptors related to using tools in the teaching and learning of science.</p>
<p>Cycle 1 Week 2</p> <p>5 days</p> <p>Sept. 18 to Sept. 22</p> <p>PSSA Checkpoint</p>	<p>Day 1-4: TerraNova Test Prep</p> <p>Day 2: Investigation 1: Part 2: pp. 18-19 (#1-6)</p> <p>Day 3: Investigation 1: Part 2, p. 19 (#7-9) Science Stories pp. 1-8</p> <p>Day 4: Investigation 1: Part 3: pp. 22-23 (#1-5)</p> <p>Day 5: Investigation 1: Part 3: pp. 23-24 (#6-9)</p>	<p>✓ Point Question</p> <p>Constructed Response</p> <p>List and describe three or more pieces of information that can be included on a map.</p> <p>Aligned TerraNova Objectives</p> <p>19 Science Inquiry</p>	<p>Scale</p> <p>See Core Curriculum page 24 for the rationale and the descriptor related to using scale as a way of relating concepts and ideas to one another by some measure.</p> <p>Identify Process Knowledge</p> <p>See Core Curriculum page 32 for the note of interest related to systematic learning of science concepts.</p>
<p>Cycle 1 Week 3</p> <p>5 days</p> <p>Sept. 25 to Sept. 29</p>	<p>Day 1: Investigation 2: Part 1, p. 11-12 (#1-5)</p> <p>Day 2 and 3: Investigation 2: Part 1, p. 13-14 (#6-16)</p> <p>Day 4: Investigation 2: Part 1, Wrapping Up, p. 15 (#17-19) Science Stories pp. 9-14</p> <p>Day 5: Investigation 2: Part 2, pp. 18-20 (#1-10)</p>	<p>Multiple Choice</p> <p>What is a landform that can be created by rivers?</p> <p>Aligned TerraNova Objectives</p> <p>19 Science Inquiry 22 Earth and Space</p>	<p>Use of Scale</p> <p>See Core Curriculum page 80 for the concepts related to applying technology and solutions to address problems.</p> <p>Earth Features</p> <p>See Core Curriculum page 52 for the rationale, concepts, descriptors and misconceptions related to physical factors that shape the earth.</p>
<p>Cycle 1 Week 4</p> <p>4 days</p> <p>Oct. 3 to Oct. 6</p> <p>PSSA Checkpoint</p>	<p>Day 1: TerraNova Test Prep</p> <p>Day 2: Investigation 2: Part 2, pp. 20-21 (#11-16)</p> <p>Day 3 and 4: Investigation 2: Wrapping Up Part 2, p. 22 (#16-18)</p>	<p>✓ Point Question</p> <p>Constructed Response</p> <p>Explain what happens to earth materials that have been eroded by a river.</p> <p>Aligned TerraNova Objectives</p> <p>19 Science Inquiry 22 Earth and Space:</p>	<p>Process Knowledge</p> <p>Core Curriculum page 30 for the rationale, concepts, descriptors and note of interest related to making and interpreting observations.</p> <p>Earth Features</p> <p>Curriculum page 52 for the rationale, concepts, descriptors and misconceptions related to physical factors that shape the earth.</p>
<p>Cycle 1 Week 5</p> <p>4 days</p> <p>Oct. 10 to Oct. 13</p>	<p>Day 1: TerraNova Test Prep</p> <p>Day 2: Investigation 3: Part 1, pp. 11-13 (#1-9)</p> <p>Day 3: Investigation 3: Part 1, p. 13 (#9-14)</p> <p>Day 4: Investigation 3: Part 1, p. 14 (#15-17); Science Stories pp.15-21</p>	<p>Multiple Choice</p> <p>How did slope affect the time it took for landforms to appear?</p> <p>Aligned TerraNova Objectives</p> <p>19 Science Inquiry 22 Earth and Space:</p>	<p>Identify Process Knowledge</p> <p>See Core Curriculum page 32 for the rationale, descriptor and note of interest related to inquiry and design.</p> <p>Earth Features</p> <p>See Core Curriculum page 52 for the rationale, concepts, descriptors and misconceptions related to physical factors that shape the earth.</p>
<p>Cycle 1 Week 6</p> <p>5 days</p> <p>Oct. 16 to Oct. 20</p>	<p>Day 1 through 5: TerraNova Testing Standardized Test Preparation: see Curriculum & Instruction resources.</p>	<p>Constructed Response</p> <p>What differences can you observe in landforms as the slope of the land increases? Explain your answer.</p> <p>Aligned TerraNova Objectives</p> <p>19 Science Inquiry 22 Earth and Space</p>	<p>Earth Features</p> <p>See Core Curriculum page 52 for the rationale, concepts, descriptors and misconceptions related to physical factors that shape the earth.</p> <p>Structure and Properties of Matter</p> <p>See Core Curriculum page 32 for the rationale, descriptor and note of interest related to inquiry and design.</p>