

Unit 1—Maps and Measurements

The Physical Setting

Chapter 1: Introduction to Earth Science

Chapter 2: Earth as a System

Chapter 3: Models of the Earth

New York Physical Settings/Earth Science Core Curriculum

- 1.MA.2 Deductive and inductive reasoning are used to reach mathematical conclusions.
- 1.MA.3 Critical thinking skills are used in the solution of mathematical problems.
- 1.SI.1 The central purpose of scientific inquiry is to develop explanations of natural phenomena in a continuing, creative process.
- 1.SI.3 The observations made while testing proposed explanations, when analyzed using conventional and invented methods, provide new insights into phenomena.
- 2.IS.1 Information technology is used to retrieve, process, and communicate information as a tool to enhance learning.
- 6.M.2 Models are simplified representations of objects, structures, or systems used in analysis, explanation, interpretation, or design.
- 6.MS.3 The grouping of magnitudes of sizes, time, frequency, and pressures or other units of measurement into a series of relative order provides a useful way to deal with the immense range and the changes in scale that affect the behavior and design of systems.
- 6.O.6 In order to arrive at the best solution that meets criteria within constraints, it is often necessary to make trade-offs.
- 6.ST.1 Through systems thinking, people can recognize the commonalities that exist among all systems and how parts of a system interrelate and combine to perform specific functions.
- LE1.1.1 Elaborate on basic scientific and personal explanations of natural phenomena, and develop extended visual models and mathematical formulations to represent one's thinking.
- LE1.1.2a Inquiry involves asking questions and locating, interpreting, and processing information from a variety of sources.
- LE1.1.3a Scientific explanations are accepted when they are consistent with experimental and observational evidence and when they lead to accurate predictions.
- LE1.1.3b All scientific explanations are tentative and subject to change or improvement. Each new bit of evidence can create more questions than it answers. This leads to increasingly better understanding of how things work in the living world.
- LE1.1.4a Well-accepted theories are ones that are supported by different kinds of scientific investigations often involving the contributions of individuals from different disciplines.
- LE1.2.3a Hypotheses are predictions based upon both research and observation.
- LE1.2.3c Development of a research plan for testing a hypothesis requires planning to avoid bias.
- LE 3.2 Apply statistical analysis techniques when appropriate to test if chance alone explains the results.
- LE1.3.4a Hypotheses are valuable, even if they turn out not to be true, because they may lead to further investigation.

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- LE1.3.5b Scientists use peer review to evaluate the results of scientific investigations and the explanations proposed by other scientists. They analyze the experimental procedures, examine the evidence, identify faulty reasoning, point out statements that go beyond the evidence, and suggest alternative explanations for the same observations.
- LE4.6.1b The atoms and molecules on the Earth cycle among the living and nonliving components of the biosphere.
- LE4.7.1b Natural ecosystems provide an array of basic processes that affect humans. Those processes include but are not limited to: maintenance of the quality of the atmosphere, generation of soils, control of the water cycle, removal of wastes, energy flow, and recycling of nutrients. Humans are changing many of these basic processes and the changes may be detrimental.
- LE4.7.1c Human beings are part of the Earth’s ecosystems. Human activities can, deliberately or inadvertently, alter the equilibrium in ecosystems. Humans modify ecosystems as a result of population growth, consumption, and technology. Human destruction of habitats through direct harvesting, pollution, atmospheric changes, and other factors is threatening current global stability, and if not addressed, ecosystems may be irreversibly affected.
- PSE4.1.1a Most objects in the solar system are in regular and predictable motion.
- PSE4.1.1c Earth’s coordinate system of a latitude and longitude, with the equator and prime meridian as reference lines, is based upon Earth’s rotation and our observation of the Sun and stars.
- PSE4.1.1d Earth rotates on an imaginary axis at a rate of 15 degrees per hour. To people on Earth, this turning of the planet makes it seem as though the Sun, the moon, and the stars are moving around Earth once a day. Rotation provides a basis for our system of local time; meridians of longitude are the basis for time zones.
- PSE4.1.1i Approximately 70 percent of Earth’s surface is covered by a relatively thin layer of water, which responds to the gravitational attraction of the moon and the Sun with a daily cycle of high and low tides.
- PSE4.1.2a The universe is vast and estimated to be over ten billion years old. The current theory is that the universe was created from an explosion called the Big Bang.
- PSE4.1.2d Asteroids, comets, and meteors are components of our solar system.
- PSE4.1.2g Earth has continuously been recycling water since the outgassing of water early in its history. This constant recirculation of water at and near Earth’s surface is described by the hydrologic cycle.
- PSE4.1.2j Geologic history can be reconstructed by observing sequences of rock types and fossils to correlate bedrock at various locations.
- PSE 4.2.1a Earth systems have internal and external sources of energy, both of which create heat.
- PSE 4.2.1b The transfer of heat energy within the atmosphere, the hydrosphere, and Earth’s interior results in the formation of regions of different densities. These density differences result in motion.
- PSE4.2.1c Weather patterns become evident when weather variables are observed, measured, and recorded. These variables include air temperature, air pressure, moisture, precipitation, wind speed and direction, and cloud cover.
- PSE 4.2.1g Weather variables can be represented in a variety of formats including radar and satellite images, weather maps, atmospheric cross-sections, and computer models.
- PSE 4.2.1j Properties of Earth’s internal structure can be inferred from the analysis of the behavior of seismic waves.
- PSE 4.2.1i The lithosphere consists of separate plates that ride on the more fluid asthenosphere and move slowly in relationship to one another, creating convergent, divergent, and transform plate boundaries. These motions indicate Earth is a dynamic geologic system.
- PSE 4.2.1q Topographic maps represent landforms through the use of contour lines that are isolines connecting points of equal elevation. Gradients and profiles can be determined from changes in elevation over a given distance.

DAY*	CHAPTER/ SECTION	KEY IDEAS	NYS CORE CURRICULUM	LABS & ACTIVITIES	HOMEWORK SUGGESTIONS
1	Chapter 1 Opener and Section 1, pp. 2-8	<ol style="list-style-type: none"> Describe two cultures that contributed to modern scientific study. Name the four main branches of Earth science. Discuss how Earth scientists help us understand the world around us. 	1.SI.1 1.SI.3 LE1.1.3b LE4.7.1c PSE 4.1.2j PSE 4.2.1c PSE4.1.2a	Pre-Reading Activity, Foldnotes, p. 4	Read Chapter 1, Section 1, pp. 2-8. Answer questions 1-5 of Section 1 Review, p. 8. Read Section 2, pp. 9-16.
2	Chapter 1, Section 2, pp. 9-16	<ol style="list-style-type: none"> Explain how science is different from other forms of human endeavor. Identify the steps that make up scientific methods. Analyze how scientific thought changes as new information is collected. Explain how science affects society. 	1.MA.2 1.SI.1 1.SI.3 6.M.2 LE1.1.1 LE1.1.2a LE1.1.3a LE1.1.4a LE1.2.3a LE1.2.3c LE1.3.2 Performance Indicator LE 3.2 LE1.3.4a LE1.3.5b LE4.7.1c PSE 4.1.2j PSE 4.2.1c PSE4.1.2a PSE4.1.2d	QuickLab, p. 11, “Making Observations”	Section 2 Review, questions 1-8.
3	Chapter 1 Section 2 (con’t)			QuickLab, p. 12, “Sample Size and Accuracy”	Section 2 Review, questions 9-12.

* A Day equals a 45-minute period.

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4	Chapter 1 Lab Experiments			Inquiry Lab, p. 22, “Scientific Methods”	Chapter 1 Review, questions 1-19.
5	Chapter 1 Chapter Review and Assessment, pp. 17-25				Chapter 1 Review, questions 20-26, 35-38.
6	Chapter 1 Chapter Review and Assessment (cont.)				Per teacher Assessment
7	Chapter 2 Opener and Section 1, pp. 26-30	<ol style="list-style-type: none"> Describe the size and shape of Earth. Describe the compositional and structural layers of Earth’s interior. Identify the possible source of Earth’s magnetic field. Summarize Newton’s law of gravitation. 	PSE 4.2.1j PSE 4.2.1l PSE4.1.1a PSE4.1.1i	Pre-Reading Activity, p. 26, Table Fold	Read Chapter 2, Section 1, pp. 27-30.
8	Chapter 2 Section 2, pp. 31-38	<ol style="list-style-type: none"> Compare an open system with a closed system. List the characteristics of Earth’s four major spheres. Identify the two main sources of energy in the Earth system. Identify four processes in which matter and energy cycle on Earth. 	6.ST.1 LE4.6.1b LE4.7.1b PSE 4.2.1a PSE 4.2.1b PSE4.1.1i PSE4.1.2g	MathPractice, p. 28	Section 1 Review, questions 1-7, 10. Read Chapter 2, Section 2, pp. 31-36.
9	Chapter 2 Section 2 (cont.)			Demonstration, p. 31, “Open and Closed Systems” QuickLab, p. 35, “Effects of Solar Energy”	Section 2 Review, p. 38, questions 1-9.

DAY*	CHAPTER/ SECTION	KEY IDEAS	NYS CORE CURRICULUM	LABS & ACTIVITIES	HOMEWORK SUGGESTIONS
10	Chapter 2 Chapter Review and Assessment, pp. 43-51			Skills Practice Lab, p. 48, “Testing the Conservation of Mass”	Chapter Two Review, questions 1, 3, 5-7, 9-13, 15-18, 20, 22, 32.
11	Chapter 2 Chapter Review and Assessment (cont.)				Regents Exam Prep, p. 46, questions 1-9. Read Chapter 3, Section 1, pp. 53-56.
12	Chapter 3 Opener and Section 1, pp. 52-56	<ol style="list-style-type: none"> Distinguish between latitude and longitude. Explain how latitude and longitude can be used to locate places on Earth’s surface. Explain how a magnetic compass can be used to find directions on Earth’s surface. 	PSE4.1.1c PSE4.1.1d	Pre-Reading Activity, p. 52, Three-Panel Flip Chart	Section 1 Review, questions 1-8. Read Chapter 3, Section 3.
13	Chapter 3, Section 3, pp. 63-68	<ol style="list-style-type: none"> Explain how elevation and topography are shown on a map. Describe three types of information shown in geologic maps. Identify two uses of soil maps. 	1.MA.3 2.IS.1 2.IS.3 6.M.2 6.MS.3 6.O.6 PSE 4.2.1g PSE 4.2.1q PSE4.1.1c PSE4.1.1d	QuickLab, p. 64, “Topographic Maps”	Section 3 Review, questions 1-11.
14	Chapter 3 Lab Experiments			Making Models Lab, p. 74, “Contour Maps: Island Construction”	Chapter Review, questions 3-5, 7-12, 14-18, 22-27, 29, 31, 34-36.

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15	Chapter 3 Chapter Review and Assessment, pp. 69-79				Regents Exam Prep, Questions 1-6.
16	Chapter 3 Chapter Review and Assessment (cont.)				Regents Exam Prep, Questions 7-12.
17	Reteaching/ Remediation				Read Chapter 10, Section 1, pp. 239-246.

Unit 2—Dynamic Earth**The Physical Setting****Chapter 10: Plate Tectonics****Chapter 11: Deformation of the Crust****Chapter 12: Earthquakes****Chapter 13: Volcanoes****New York Physical Settings/Earth Science Core Curriculum**

- 1.ED.1 Engineering design is an iterative process involving modeling and optimization, this process is used to develop technological solutions to problems within given constraints.
- 1.MA.2 Deductive and inductive reasoning are used to reach mathematical conclusions.
- 1.SI.1 The central purpose of scientific inquiry is to develop explanations of natural phenomena in a continuing, creative process.
- 2.IS.3 Information technology can have positive and negative impacts on society, depending upon how it is used.
- 6.ES.4 Equilibrium is a state of stability due either to a lack of change or a balance between opposing forces.
- 6.PC.5 Identifying patterns of change is necessary for making predictions about future behavior and conditions.
- 7.C.1 The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
- PSE 4.1.2j Geologic history can be reconstructed by observing sequences of rock types and fossils to correlate bedrock at various locations.
- PSE 4.2.1a Earth systems have internal and external sources of energy, both of which create heat.
- PSE 4.2.1b The transfer of heat energy within the atmosphere, the hydrosphere, and Earth's interior results in the formation of regions of different densities. These density differences result in motion.
- PSE 4.2.1k The outward transfer of Earth's internal heat drives convective circulation in the mantle that moves the lithospheric plates comprising Earth's surface.
- PSE 4.2.1l The lithosphere consists of separate plates that ride on the more fluid asthenosphere and move slowly in relationship to one another, creating convergent, divergent, and transform plate boundaries. These motions indicate Earth is a dynamic geologic system.
- PSE4.2.1m Many processes of the rock cycle are consequences of plate dynamics. These include the production of magma at both subduction and rifting regions, regional metamorphism within subduction zones, and the creation of major depositional basins through down-warping of the crust.
- PSE 4.2.1n Many of Earth's surface features such as mid-ocean ridges/rifts, trenches/subduction zones/island arcs, mountain ranges, hot spots, and the magnetic and age patterns in surface bedrock are a consequence of forces associated with plate motion and interaction.
- PSE 4.2.1o Plate motions have resulted in global changes in geography, climate, and the patterns of organic evolution.
- PSE 4.2.1p Landforms are the result of the interaction of tectonic forces and the processes of weathering, erosion and deposition.
- PSE 4.3.1a Minerals have physical properties determined by their chemical composition and crystal structure.
- PSE 4.3.1b Minerals are formed inorganically by the process of crystallization as a result of specific environmental conditions.
- PSE 4.3.1c Rocks are usually composed of one or more minerals.

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18	Chapter 10 Opener and Section 1, pp. 238-46	<ol style="list-style-type: none"> Summarize Wegener’s hypothesis of continental drift. Describe the process of sea-floor spreading. Identify how paleomagnetism provides support for the idea of sea-floor spreading. Explain how sea-floor spreading provides a mechanism for continental drift. 	1.SI.1 PSE 4.1.2j PSE 4.2.1l PSE 4.2.1n	<p>Pre-Reading activity, p. 238, Trifold</p> <p>Activity, p. 242 (Teachers Edition) “Sea-Floor Sediments”</p> <p>QuickLab, p. 245, “Making Magnets”</p>	<p>Section 1 Review, p. 246, questions 1-9.</p> <p>Read Chapter 10, Section 2, pp. 247-254.</p>
19	Chapter 10 Section 1 (cont.)			QuickLab, p. 253, “Tectonic Plate Boundaries”	<p>Section 2 Review, p. 254, questions 1-9.</p> <p>Read Chapter 10, Section 3, pp. 255-260.</p>
20	Chapter 10 Section 2, pp. 247-54	<ol style="list-style-type: none"> Summarize the theory of plate tectonics. Identify and describe the three types of plate boundaries. List and describe three causes of plate movement. 	2.IS.3 7.C.1 PSE 4.2.1a PSE 4.2.1b PSE 4.2.1k PSE 4.2.1l PSE 4.2.1n	Activity, p. 255 (Teachers Edition), “Modeling Rifting”	Section 3 Review, p. 260, questions 1-10.
21	Chapter 10 Section 2 (cont.)			Making Models Lab, p. 266, “Sea-Floor Spreading”	Chapter Review, pp. 262-263, questions 1, 9-12, 20-21, 24, 30, 32-35.

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22	Chapter 10 Section 3, pp. 255-60	<ol style="list-style-type: none"> Identify how movements of tectonic plates change Earth’s surface. Summarize how movements of tectonic plates have influenced climates and life on Earth. Describe the supercontinent cycle. 	6.PC.5 PSE 4.1.2j PSE 4.2.11 PSE 4.2.1o		Regents Exam Prep, pp. 264-265, questions 1-12.
23	Chapter 10 Chapter Review and Assessment, pp. 261-69				Read Chapter 11, Section 1, pp. 271-278.
24	Chapter 11 Section 1, pp. 270-78	<ol style="list-style-type: none"> Summarize the principle of isostasy. Identify the three main types of stress. Compare folds and faults. 	6.ES.4 PSE 4.1.2j PSE 4.2.11 PSE 4.2.1m PSE 4.2.1n PSE 4.2.1p	Pre-Reading Activity, p. 270, Key-Term Fold QuickLab, p. 272, “Modeling Isostasy”	Section 1 Review, p. 278, questions 1-9. Chapter 11 Review, pp. 286-287, questions 18-19, 22, 24-26, 33-35.
25	Chapter 11 Section 1 (cont.)			QuickLab, p. 274, “Modeling Stress and Strain”	Chapter 11 Regents Exam Prep, pp. 288-289, questions 1-10.
26	Chapter 11 Chapter Review and Assessment, pp. 285-93				Read Chapter 12, Section 1, pp. 295-300.

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27	Chapter 12 Opener and Section 1, pp. 294-300	<ol style="list-style-type: none"> Describe elastic rebound. Compare body waves and surface waves. Explain how the structure of Earth’s interior affects seismic waves. Explain why earthquakes generally occur at plate boundaries. 	2.IS.3 7.C.1 PSE 4.2.1j PSE 4.2.11	Pre-Reading Activity, p. 294, Pyramid Graphic Organizer, p. 299, Spider Map	Section 1 Review, p. 300, questions 1-9, 11. Read Chapter 12, Section 2, pp. 301-304.
28	Chapter 12 Section 2, pp. 301-04	<ol style="list-style-type: none"> Describe the instrument used to measure and record earthquakes. Summarize the method scientists use to locate an epicenter. Describe the scales used to measure the magnitude and intensity of earthquakes. 	1.ED.1 1.MA.2 PSE 4.2.1j PSE 4.2.11	QuickLab, p. 302, “Seismographic Record”	Section 2 Review, p. 300, questions 1-8. Read Chapter 12, Section 3, pp. 305-308.
29	Chapter 12 Section 3, pp. 305-08	<ol style="list-style-type: none"> Discuss the relationship between tsunamis and earthquakes. Describe two possible effects of a major earthquake on buildings. List three safety techniques to prevent injury caused by earthquake activity. Identify four methods scientists use to forecast earthquake risks. 	1.ED.1 PSE 4.2.11	QuickLab, p. 306, “Earthquake-Safe Buildings”	Section 3 Review, p. 308, questions 1-8.
30	Chapter 12 Chapter Review and Assessment, pp. 309-17			Skills Practice Lab, pp. 314, “Finding an Epicenter”	Chapter 12 Review, pp. 310-311, questions 1-30, 33-36.

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31	Chapter 12 Chapter Review and Assessment (cont.)				Regents Exam Prep, pp. 312-313, questions 1-12. Read Chapter 13, Section 1, pp. 319-324.
32	Chapter 13 Opener and Section 1, pp. 318-24	<ol style="list-style-type: none"> Describe the three ways magma can form. Define volcanism. Identify three major volcanic zones. Describe how magma can form plutons. 	6.PC.5 PSE 4.2.1b PSE 4.2.1l PSE 4.2.1m PSE 4.2.1n	QuickLab, p. 321, “Changing Melting Point”	Section 1 Review, p. 324, questions 1-10. Read Chapter 13, Section 2, pp. 325-330.
33	Chapter 13 Section 2, pp. 325-30	<ol style="list-style-type: none"> Explain how the composition of magma affects volcanic eruptions and lava flow. Describe the five major types of pyroclastic material. Identify the three main types of volcanic cones. Describe how a caldera forms. List three events that may signal a volcanic eruption. 	6.PC.5 PSE 4.2.1l PSE 4.2.1m PSE 4.2.1n PSE 4.2.1p PSE 4.3.1a PSE 4.3.1b PSE 4.3.1c	QuickLab, p. 329, “Volcanic Cones”	Section 2 Review, p. 330, questions 1-10.
34	Chapter 13 Chapter Review and Assessment, pp. 331-39			Making Models Lab, p. 336, “Volcano Verdict”	Chapter 13 Review, pp. 332-333, questions 1-27, 30-32, 34-36.
35	Chapter 13 Chapter Review and Assessment (cont.)				Regents Exam Prep, pp. 334-335, questions 1-11. Read Chapter 5, Section 1, pp. 103-108.

Unit 3—Rocks and Minerals

The Physical Setting

Chapter 5: Minerals of the Earth's Crust

Chapter 6: Rocks

Chapter 7: Resources and Energy

New York Physical Settings/Earth Science Core Curriculum

- 1.ED.1 Engineering design is an iterative process involving modeling and optimization, this process is used to develop technological solutions to problems within given constraints.
- 1.MA.2 Deductive and inductive reasoning are used to reach mathematical conclusions.
- 1.SI.2 Beyond the use of reasoning and consensus, scientific inquiry involves the testing of proposed explanations involving the use of conventional techniques and procedures and usually requiring considerable ingenuity.
- 1.SI.3 The observations made while testing proposed explanations, when analyzed using conventional and invented methods, provide new insights into phenomena.
- 2.IS.1 Information technology is used to retrieve, process, and communicate information as a tool to enhance learning.
- 6.M.2 Models are simplified representations of objects, structures, or systems used in analysis, explanation, interpretation, or design.
- 7.C.1 The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
- LE4.7.1a The Earth has finite resources; increasing human consumption of resources places stress on the natural processes that renew some resources and deplete those resources that cannot be renewed.
- LE4.7.1c Human beings are part of the Earth's ecosystems. Human activities can, deliberately or inadvertently, alter the equilibrium in ecosystems. Humans modify ecosystems as a result of population growth, consumption, and technology. Human destruction of habitats through direct harvesting, pollution, atmospheric changes, and other factors is threatening current global stability, and if not addressed, ecosystems may be irreversibly affected.
- LE4.7.2c Industrialization brings an increased demand for and use of energy and other resources.
- LE4.7.3a Societies must decide on proposals which involve the introduction of new technologies. Individuals need to make decisions which will assess risks, costs, benefits, and trade-offs.
- PSC4.3.1w Elements can be differentiated by physical properties. Physical properties of substances, such as density, conductivity, malleability, solubility, and hardness, differ among elements.
- PSC4.3.1cc A compound is a substance composed of two or more different elements that are chemically combined in a fixed proportion. A chemical compound can be broken down by chemical means. A chemical compound can be represented by a specific chemical formula and assigned a name based on the IUPAC system.

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- PSC4.3.1dd Compounds can be differentiated by their physical and chemical properties.
- PSC4.5.2a Chemical bonds are formed when valence electrons.
- PSC4.5.2b Atoms attain a stable valence electron configuration by bonding with other atoms. Noble gases have stable valence configurations and tend not to bond.
- PSC4.5.2g Two major categories of compounds are ionic and molecular compounds.
- PSE 4.1.2j Geologic history can be reconstructed by observing sequences of rock types and fossils to correlate bedrock at various locations.
- PSE4.2.1m Many processes of the rock cycle are consequences of plate dynamics. These include the production of magma at both subduction and rifting regions, regional metamorphism within subduction zones, and the creation of major depositional basins through down-warping of the crust.
- PSE 4.2.1u The natural agents of erosion.
- PSE 4.2.1v Patterns of deposition result from a loss of energy within the transporting system and are influenced by the size, shape, and density of the transported particles. Sediment deposits may be sorted or unsorted.
- PSE 4.2.1w Sediments of inorganic and organic origin often accumulate in depositional environments. Sedimentary rocks form when sediments are compacted and/or cemented after burial or as the result of chemical precipitation from seawater.
- PSE4.3.1a Minerals have physical properties determined by their chemical composition and crystal structure.
- PSE4.3.1b Minerals are formed inorganically by the process of crystallization as a result of specific environmental conditions.
- PSE4.3.1c Rocks are usually composed of one or more minerals.

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36	Chapter 5 Opener and Section 1, pp. 102-08	<ol style="list-style-type: none"> Define <i>mineral</i>. Compare the two main groups of minerals. Identify the six types of silicate crystalline structures. Describe three common nonsilicate crystalline structures. 	6.M.2 PSC4.3.1cc PSC4.3.1dd PSC4.5.2b PSC4.5.2g PSE4.3.1a PSE4.3.1b PSE4.3.1c	Pre-Reading Activity, p. 102, Double Door	Section 1 Review, p. 108, questions 1-9. Read Chapter 5, Section 2, pp. 109-114.
37	Chapter 5 Section 2, pp. 109-14	<ol style="list-style-type: none"> Describe seven physical properties that help distinguish one mineral from another. List five special properties that may help identify certain minerals. 	1.MA.2 2.IS.1 6.M.2 7.C.1 PSC4.3.1w PSC4.3.1cc PSC4.5.2a PSC4.5.2b PSE4.2.1m PSE4.3.1a PSE4.3.1b PSE4.3.1c	QuickLab, p. 113, “Determining Density” Graphic Organizer, p. 111	Section 2 Review, p. 108, questions 1-9.
38	Chapter 5 Chapter Review and Assessment, pp. 115-23			Skills Practice Lab, p. 120, “Mineral Identification”	Chapter 5 Review, pp. 116-117, questions 1-25, 35-37.
39	Chapter 5 Chapter Review and Assessment (cont.)				Regents Exam Prep, pp. 118-119, questions 1-13. Read Chapter 6, Section 2, pp. 129-134.

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40	Chapter 6 Opener and Section 2, pp. 124; 129-34	<ol style="list-style-type: none"> Summarize three factors that affect whether rock melts. Describe how the cooling rate of magma and lava affects the texture of igneous rocks. Classify igneous rocks according to their composition and texture. Describe intrusive and extrusive igneous rock structures. 	1.SI.3 PSE 4.1.2j PSE4.3.1a PSE4.3.1b PSE4.3.1c	QuickLab, p. 130, “Crystal Formation”	Section 2 Review, p. 134, questions 9-9. Read Chapter 6, Section 3, pp. 135-140.
41	Chapter 6 Section 3, pp. 135-40	<ol style="list-style-type: none"> Explain the processes of compaction and cementation. Describe how chemical and organic sedimentary rocks form. Describe how clastic sedimentary rock forms. Identify seven sedimentary rock features. 	1.SI.3 PSE 4.1.2j PSE 4.2.1u PSE 4.2.1v PSE 4.2.1w PSE4.3.1b PSE4.3.1c	MathPractice, p. 137, “Sedimentation Rates” QuickLab, p. 139, “Graded Procedure”	Section 3 Review, p. 140, questions 1-8. Read Chapter 6, Section 4, pp. 141-144.
42	Chapter 6 Section 4, pp. 141-44	<ol style="list-style-type: none"> Describe the process of metamorphism. Explain the difference between regional and contact metamorphism. Distinguish between foliated and nonfoliated metamorphic rocks, and give an example of each. 	PSE 4.1.2j PSE4.2.1m PSE4.3.1b PSE4.3.1c	Demonstration, p. 141, “Metamorphism”	Section 4 Review, p. 144, questions 1-8.
43	Chapter 6 Chapter Review and Assessment, pp. 145-153			Skills Practice Lab, p. 150, “Classification of Rocks”	Chapter 6 Review, questions 4-16, 18, 21-27.

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44	Chapter 6 Chapter Review and Assessment (cont.)				Regents Exam Prep, pp. 148-149, questions 1-5, 8-11. Read Chapter 7, Section 1, pp. 155-158.
45	Chapter 7 Opener and Section 1, pp. 154-58	<ol style="list-style-type: none"> Explain what ores are and how they form. Identify four uses for mineral resources. Summarize two ways humans obtain mineral resources. 	7.C.1 PSE4.2.1m PSE4.3.1a PSE4.3.1b	Pre-Reading Activity, Four-Corner Fold	Section 1 Review, p. 158, questions 1-8. Read Chapter 7, Section 2, pp. 159-164.
46	Chapter 7 Section 2, pp. 159-64	<ol style="list-style-type: none"> Explain why coal is a fossil fuel. Describe how petroleum and natural gas form and how they are removed from Earth. Summarize the processes of nuclear fission and nuclear fusion. Explain how nuclear fission generates electricity. 	1.MA.2 LE4.7.1a LE4.7.2c	MathPractice, p. 160, "Coal reserves" Graphic Organizer, p. 163, "Chain-of-Events Chart"	Section 2 Review, p. 164, questions 1-7, 9-10. Read Chapter 7, Section 3, pp. 165-168.
47	Chapter 7 Section 3, pp. 165-68	<ol style="list-style-type: none"> Explain how geothermal energy may be used as a substitute for fossil fuels. Compare passive and active methods of harnessing energy from the sun. Explain how water and wind can be harnessed to generate electricity. 	1.ED.1 1.SI.2 LE4.7.1a LE4.7.2c	QuickLab, p. 166, "Solar Collector"	Section 3 Review, p. 168, questions 1-9. Read Chapter 7, Section 4, pp. 169-172.

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DAY*	CHAPTER/ SECTION	KEY IDEAS	NYS CORE CURRICULUM	LABS & ACTIVITIES	HOMEWORK SUGGESTIONS
48	Chapter 7 Section 4, pp. 169-72	<ol style="list-style-type: none"> Describe two environmental impacts of mining and the use of fossil fuels. Explain two ways the environmental impacts of mining can be reduced. Identify three ways that you can conserve natural resources. 	LE4.7.1a LE4.7.1c LE4.7.3a	QuickLab, p. 170, “Reclamation”	Section 4 Review, p. 172, questions 1-8, 10.
49	Chapter 7 Chapter Review and Assessment, pp. 173-81			Inquiry Lab, pp. 178-179, “Blowing in the Wind”	Chapter 7 Review, pp. 174-175, questions 1-23, 25-26, 29-30, 33-35.
50	Chapter 7 Chapter Review and Assessment (cont.)				<p>Regents Exam Prep, pp. 176-177, questions 1-14.</p> <p>Read Chapter 14, Section 1, pp. 343-348.</p>

Unit 4—Landscapes**The Physical Setting****Chapter 14: Weathering and Erosion****Chapter 15: River Systems****Chapter 16: Groundwater****Chapter 17: Glaciers****Chapter 18: Erosion by Wind and Waves****New York Physical Settings/Earth Science Core Curriculum**

- 1.MA.1 Abstraction and symbolic representation are used to communicate mathematically.
- 1.MA.2 Deductive and inductive reasoning are used to reach mathematical conclusions.
- 1.MA.3 Critical thinking skills are used in the solution of mathematical problems.
- 1.SI.1 The central purpose of scientific inquiry is to develop explanations of natural phenomena in a continuing, creative process.
- 1.SI.2 Beyond the use of reasoning and consensus, scientific inquiry involves the testing of proposed explanations involving the use of conventional techniques and procedures and usually requiring considerable ingenuity.
- 1.SI.3 The observations made while testing proposed explanations, when analyzed using conventional and invented methods, provide new insights into phenomena.
- 2.IS.1 Information technology is used to retrieve, process, and communicate information as a tool to enhance learning.
- 6.M.2 Models are simplified representations of objects, structures, or systems used in analysis, explanation, interpretation, or design.
- 6.PC.5 Identifying patterns of change is necessary for making predictions about future behavior and conditions.
- 7.S.2 Solving interdisciplinary problems involves a variety of skills and strategies, including effective work habits, gathering and processing information; generating and analyzing ideas; realizing ideas; making connections among the common themes of mathematics, science, and technology; and presenting results.
- LE4.7.1a The Earth has finite resources; increasing human consumption of resources places stress on the natural processes that renew some resources and deplete those resources that cannot be renewed.
- LE4.7.1b Natural ecosystems provide an array of basic processes that affect humans. Those processes include but are not limited to: maintenance of the quality of the atmosphere, generation of soils, control of the water cycle, removal of wastes, energy flow, and recycling of nutrients. Humans are changing many of these basic processes and the changes may be detrimental.
- LE4.7.1c Human beings are part of the Earth's ecosystems. Human activities can, deliberately or inadvertently, alter the equilibrium in ecosystems. Humans modify ecosystems as a result of population growth, consumption, and technology. Human destruction of habitats through direct harvesting, pollution, atmospheric changes, and other factors is threatening current global stability, and if not addressed, ecosystems may be irreversibly affected.

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- LE4.7.2c Industrialization brings an increased demand for and use of energy and other resources.
- PSE 4.1.1a Most objects in the solar system are in regular and predictable motion.
- PSE 4.1.2g Earth has continuously been recycling water since the outgassing of water early in its history. This constant recirculation of water at and near Earth's surface is described by the hydrologic cycle.
- PSE 4.1.2j Geologic history can be reconstructed by observing sequences of rock types and fossils to correlate bedrock at various locations.
- PSE 4.2.1n Many of Earth's surface features such as mid-ocean ridges/rifts, trenches/subduction zones/island arcs, mountain ranges, hot spots, and the magnetic and age patterns in surface bedrock are a consequence of forces associated with plate motion and interaction.
- PSE 4.2.1o Plate motions have resulted in global changes in geography, climate, and the patterns of organic evolution.
- PSE 4.2.1p Landforms are the result of the interaction of tectonic forces and the processes of weathering, erosion and deposition.
- PSE 4.2.1r Climate variations, structure, and characteristics of bedrock influence the development of landscape features.
- PSE 4.2.1s Weathering is the physical and chemical breakdown of rocks at or near Earth's surface. Soils are the results of weathering and biological activity over long periods of time.
- PSE 4.2.1t Natural agents of erosion, generally driven by gravity, remove, transport, and deposit weathered rock particles. Each agent of erosion produces distinctive changes in the material that it transports and creates characteristic surface features and landscapes. In certain erosional situations, loss of property, personal injury, and loss of life can be reduced by effective emergency preparedness.
- PSE 4.2.1u The natural agents of erosion.
- PSE 4.2.1v Patterns of deposition result from a loss of energy within the transporting system and are influenced by the size, shape, and density of the transported particles. Sediment deposits may be sorted or unsorted.
- PSE 4.2.1w Sediments of inorganic and organic origin often accumulate in depositional environments. Sedimentary rocks form when sediments are compacted and/or cemented after burial or as the result of chemical precipitation from seawater.
- PSE 4.2.2a Insolation heats Earth's surface and atmosphere unequally due to variations.
- PSE 4.3.1a Minerals have physical properties determined by their chemical composition and crystal structure.

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DAY*	CHAPTER/ SECTION	KEY IDEAS	NYS CORE CURRICULUM	LABS & ACTIVITIES	HOMEWORK SUGGESTIONS
51	Chapter 14 Opener and Section 1, pp. 342-48	<ol style="list-style-type: none"> Identify three agents of mechanical weathering. Compare mechanical and chemical weathering processes. Describe four chemical reactions that decompose rock. 	LE4.7.1c LE4.7.2c PSE 4.2.1s	Pre-Reading Activity, p. 342, Trifold QuickLab, p. 345, “Mechanical Weathering”	Section 1 Review, p. 348, questions 1-10. Read Chapter 14, Section 2, pp. 349-352.
52	Chapter 14 Section 2, pp. 349-52	<ol style="list-style-type: none"> Explain how rock composition affects the rate of weathering. Discuss how surface area affects the rate at which rock weathers. Describe the effects of climate and topography on the rate of weathering. 	LE4.7.1c PSE 4.2.1r PSE 4.2.1s PSE 4.2.1t PSE4.3.1a	QuickLab, p. 350, “Surface Area”	Section 2 Review, p. 352, questions 1-9. Read Chapter 14, Section 3, pp. 353-356.
53	Chapter 14 Section 3, pp. 353-56	<ol style="list-style-type: none"> Summarize how soils form. Explain how the composition of parent rock affects soil composition. Describe the characteristic layers of mature residual soils. Predict the type of soil that will form in arctic and tropical climates. 	PSE 4.2.1r PSE 4.2.1s PSE 4.2.1t	Skill Builder –Math, p. 354 (Teachers Edition) Flipbook activity, p. 355 (Teachers Edition)	Section 3 Review, p. 353, questions 1-9. Read Chapter 14, Section 4, pp. 357-364.
54	Chapter 14 Section 4, pp. 357-64	<ol style="list-style-type: none"> Define erosion, and list four agents of erosion. Identify four farming methods that conserve soil. Discuss two ways gravity contributes to erosion. Describe the three major landforms shaped by weathering and erosion. 	LE4.7.1b LE4.7.1c PSE 4.2.1r PSE 4.2.1s PSE 4.2.1t PSE 4.2.1u	Skill Builder – Math, p. 359 (Teachers Edition) Demonstration, p. 360 (Teachers Edition), “Soil Conservation”	Section 4 Review, p. 364, questions 1-7.

* A Day equals a 45-minute period.

DAY*	CHAPTER/SECTION	KEY IDEAS	NYS CORE CURRICULUM	LABS & ACTIVITIES	HOMEWORK SUGGESTIONS
55	Chapter 14 Section 4, (cont.)			Activity, p. 360 (Teachers Edition), “Plants and Soil”	Section 4 Review, p. 364, questions 8-12.
56	Chapter 14 Lab Experiments			Skills Practice Lab, pp. 370-371, “Soil Chemistry”	Chapter 14 Review, pp. 366-367, questions 1-27, 32-33, 36-37.
57	Chapter 14 Chapter Review and Assessment, pp. 365-73				Regents Exam Prep, pp. 368-369, questions 1-12.
58	Chapter 14 Chapter Review and Assessment (cont.)				Read Chapter 15, Section 1, pp. 375-378.
59	Chapter 15 Opener and Section 1, pp. 374-78	<ol style="list-style-type: none"> Outline the stages of the water cycle. Describe the factors that affect a water budget. List two approaches to water conservation. 	LE4.7.1a PSE4.1.2g	Pre-Reading Activity, p. 374, Layered Book QuickLab, p. 377, “Modeling the Water Cycle”	Section 1 Review, p. 378, questions 1-9. Read Chapter 15, Section 2, pp. 379-382.
60	Chapter 15 Section 2, pp. 379-82	<ol style="list-style-type: none"> Summarize how a river develops. Describe the parts of a river system. Explain factors that affect the erosive ability of a river. Describe how erosive factors affect the evolution of a river channel. 	1.SI.2 1.SI.3 6.M.2 7.S.2 LE4.7.1c PSE4.2.1t PSE 4.2.1u PSE 4.2.1v PSE4.1.2g	MathPractice, p. 380, “Water Discharge of a River” Graphic Organizer, p. 382, Cause-and- Effect Map	Section 2 Review, p. 382, questions 1-10. Read Chapter 15, Section 3, pp. 383-386.

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DAY*	CHAPTER/ SECTION	KEY IDEAS	NYS CORE CURRICULUM	LABS & ACTIVITIES	HOMEWORK SUGGESTIONS
61	Chapter 15 Section 3, pp. 383-86	<ol style="list-style-type: none"> Explain the two types of stream deposition. Describe one advantage and one disadvantage of living in a floodplain. Identify three methods of flood control. Describe the life cycle of a lake. 	LE4.7.1c PSE 4.2.1t PSE 4.2.1u PSE 4.2.1v PSE 4.2.1w	QuickLab, p. 385, “Soil Erosion”	Section 3 Review, p. 386, questions 1-9.
62	Chapter 15 Lab Experiments			Inquiry Lab, p. 392, “Sediments and Water”	Chapter 15 Review, pp. 388-389, questions 1-23, 27-29, 32-35.
63	Chapter 15 Chapter Review and Assessment, pp. 387-95			Maps in Action, p. 394, “World Watershed Sediment Yield”	Regents Exam Prep, pp. 390-391, questions 1-12.
64	Chapter 15 Chapter Review and Assessment, (cont.)			Pre-Reading Activity, p. 396, Key-Term Fold	Read Chapter 16, Section 1, pp. 397-404.
65	Chapter 16 Opener and Section 1, pp. 396-404	<ol style="list-style-type: none"> Identify properties of aquifers that affect the flow of groundwater. Describe the water table and its relationship to the land surface. Compare wells, springs, and artesian formations. Describe two land features formed by hot groundwater. 	1.MA.2 1.SI.2 1.SI.3 6.M.2 6.PC.5 7.S.2 LE4.7.1a LE4.7.1c PSE 4.2.1s PSE 4.2.1t PSE4.1.2g	QuickLab, p. 398, “Permeability”	Section 1 Review, p. 404, questions 1-7

DAY*	CHAPTER/ SECTION	KEY IDEAS	NYS CORE CURRICULUM	LABS & ACTIVITIES	HOMEWORK SUGGESTIONS
66	Chapter 16 Section 1 (cont.)			MathPractice, p. 400, “Rate of Groundwater Depletion” Graphic Organizer, p. 402	Section 1 Review, p. 404, questions 8-11. Read Chapter 16, Section 2, pp.405-408.
67	Chapter 16 Section 2, pp. 405-08	<ol style="list-style-type: none"> Describe how water chemically weathers rock. Explain how caverns and sinkholes form. Identify two features of karst topography. 	1.SI.2 PSE 4.2.1s PSE 4.2.1t	QuickLab, p. 405, “Chemical Weathering”	Section 2 Review, p. 408, questions 1-9.
68	Chapter 16 Chapter Review and Assessment, pp. 409-17			Skills Practice Lab, p. 414, “Porosity”	Chapter 16 Review, pp. 410-411, questions 1-28, 31-33, 36-38.
69	Chapter 16 Chapter Review and Assessment (cont.)			Demonstration, p. 423, (Teachers Edition) “Glacial Erosion and Deposition Simulation”	Regents Exam Prep, pp. 412-413, questions 1-11. Read Chapter 17, Section 2, pp. 423-430.
70	Chapter 17 Opener and Section 2, pp. 418; 423-30	<ol style="list-style-type: none"> Describe the landscape features that are produced by glacial erosion. Name and describe five features formed by glacial deposition. Explain how glacial lakes form. 	PSE 4.2.1r PSE 4.2.1t PSE 4.2.1u PSE 4.2.1v	QuickLab, p. 425, “Glacial Erosion”	Section 2 Review, p.408, questions 1-7.

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DAY*	CHAPTER/ SECTION	KEY IDEAS	NYS CORE CURRICULUM	LABS & ACTIVITIES	HOMEWORK SUGGESTIONS
71	Chapter 17 Section 2, (cont.)			Graphic Organizer, p. 427, Spider Map	Section 2 Review, p. 408, questions 8-11. Read Chapter 17, Section 3, pp. 431-434.
72	Chapter 17 Section 3, pp. 431-34	<ol style="list-style-type: none"> Describe glacial and interglacial periods within an ice age. Summarize the theory that best accounts for the ice ages. 	1.MA.1 1.MA.2 1.MA.3 1.SI.1 2.IS.1 6.M.2 PSE 4.1.2j PSE 4.2.1n PSE 4.2.1o PSE 4.2.1t PSE 4.2.1u PSE 4.2.2a	MathPractice, p. 433, “Earth’s Tilt”	Section 3 Review, p. 434, questions 1-9.
73	Chapter 17 Chapter Review and Assessment, pp. 435-43			Making Models Lab, pp. 440-441, “Glaciers and Sea Level Change”	Chapter 17 Review, pp. 436-437, questions 3, 5, 7-8, 13-20, 24, 30-33.
74	Chapter 17 Chapter Review and Assessment (cont.)				Regents Exam Prep, pp. 438-439, questions 1-14. Read Chapter 18, Section 1, pp. 445-450.

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DAY*	CHAPTER/ SECTION	KEY IDEAS	NYS CORE CURRICULUM	LABS & ACTIVITIES	HOMEWORK SUGGESTIONS
75	Chapter 18 Opener and Section 1, pp. 444-50	<ol style="list-style-type: none"> Describe two ways that wind erodes land. Compare the two types of wind deposits. 	PSE 4.2.1t PSE 4.2.1u PSE 4.2.1v PSE 4.2.1w	Pre-Reading Activity, Pyramid QuickLab, p. 449, "Modeling Desert Winds"	Section 1 Review, p. 450, questions 1-9, 11. Read Chapter 18, Section 2, pp. 451-454.
76	Chapter 18 Section 2, pp. 451-54	<ol style="list-style-type: none"> Compare the formation of six features produced by wave erosion. Explain how beaches form. Describe the features produced by the movement of sand along a shore. 	1.MA.1 6.M.2 PSE 4.2.1s PSE 4.2.1t PSE 4.2.1u PSE 4.2.1v	MathPractice, p. 453, "Wave Depth"	Section 2 Review, p. 454, questions 1-8. Read Chapter 18, Section 3, pp. 455-458.
77	Chapter 18 Section 3, pp. 455-58	<ol style="list-style-type: none"> Explain how changes in sea level affect coastlines. Describe the features of a barrier island. Analyze the effect of human activity on coastal land. 	6.PC.5 LE4.7.1c PSE 4.2.1p PSE 4.2.1r PSE 4.2.1t PSE 4.2.1u PSE 4.2.1v PSE4.1.1a	QuickLab, p. 456, "Graphing Tides"	Section 3 Review, p. 458, questions 1-8.
78	Chapter 18 Lab Experiments			Inquiry Lab, p. 464, "Beaches"	Chapter 18 Review, pp. 460-461, questions 1-22, 24-26, 29-32.

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DAY*	CHAPTER/ SECTION	KEY IDEAS	NYS CORE CURRICULUM	LABS & ACTIVITIES	HOMEWORK SUGGESTIONS
79	Chapter 18 Chapter Review and Assessment, pp. 459-67			Maps in Action, p. 466, “Coastal Erosion Near the Beaufort Sea”	Regents Exam Prep, pp. 462-463, questions 1-12.
80	Chapter 18 Chapter Review and Assessment (cont.)				Read Chapter 8, Section 1, pp. 185-190.

Unit 5—Earth History**The Physical Setting****Chapter 8: The Rock Record****Chapter 9: A View of Earth's Past****New York Physical Settings/Earth Science Core Curriculum**

- 1.MA.2 Deductive and inductive reasoning are used to reach mathematical conclusions.
- 1.MA.3 Critical thinking skills are used in the solution of mathematical problems.
- 1.SI.1 The central purpose of scientific inquiry is to develop explanations of natural phenomena in a continuing, creative process.
- 1.SI.3 The observations made while testing proposed explanations, when analyzed using conventional and invented methods, provide new insights into phenomena.
- 6.M.2 Models are simplified representations of objects, structures, or systems used in analysis, explanation, interpretation, or design.
- 6.MS.3 The grouping of magnitudes of sizes, time, frequency, and pressures or other units of measurement into a series of relative order provides a useful way to deal with the immense range and the changes in scale that affect the behavior and design of systems.
- LE4.3.1e Natural selection and its evolutionary consequences provide a scientific explanation for the fossil record of ancient life-forms, as well as for the molecular and structural similarities observed among the diverse species of living organisms.
- LE4.3.1f Species evolve over time. Evolution is the consequence of the interactions of (1) the potential for a species to increase its numbers, (2) the genetic variability of offspring due to mutation and recombination of genes, (3) a finite supply of the resources required for life, and (4) the ensuing selection by the environment of those offspring better able to survive and leave offspring.
- LE4.3.11 Extinction of a species occurs when the environment changes and the adaptive characteristics of a species are insufficient to allow its survival. Fossils indicate that many organisms that lived long ago are extinct. Extinction of species is common; most of the species that have lived on Earth no longer exist.
- PSE 4.1.2c Our solar system formed about five billion years ago from a giant cloud of gas and debris. Gravity caused Earth and the other planets to become layered according to density differences in their materials.
- PSE 4.1.2i The pattern of evolution of life-forms on Earth is at least partially preserved in the rock record.
- PSE 4.1.2j Geologic history can be reconstructed by observing sequences of rock types and fossils to correlate bedrock at various locations.
- PSE 4.2.1o Plate motions have resulted in global changes in geography, climate, and the patterns of organic evolution.
- PSE 4.2.1p Landforms are the result of the interaction of tectonic forces and the processes of weathering, erosion and deposition.
- PSE 4.2.1w Sediments of inorganic and organic origin often accumulate in depositional environments. Sedimentary rocks form when sediments are compacted and/or cemented after burial or as the result of chemical precipitation from seawater.

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DAY*	CHAPTER/SECTION	KEY IDEAS	NYS CORE CURRICULUM	LABS & ACTIVITIES	HOMEWORK SUGGESTIONS
81	Chapter 8 Opener and Section 1, pp. 184-90	<ol style="list-style-type: none"> 1. State the principle of uniformitarianism. 2. Explain how the law of superposition can be used to determine the relative age of rocks. 3. Compare three types of unconformities. 4. Apply the law of crosscutting relationships to determine the relative age of rocks. 	1.SI.1 PSE 4.1.2j PSE 4.2.1w	<p>Pre-Reading Activity, p. 184, Table Fold</p> <p>QuickLab, p. 186, “What’s Your Relative Age?”</p>	<p>Section 1 Review, p. 190, questions 1-9.</p> <p>Read Chapter 8, Section 2, pp. 191-196.</p>
82	Chapter 8 Section 2, pp. 191-96	<ol style="list-style-type: none"> 1. Summarize the limitations of using the rates of erosion and deposition to determine the absolute age of rock formations. 2. Describe the formation of varves. 3. Explain how the process of radioactive decay can be used to determine the absolute age of rocks. 	PSE 4.1.2j PSE 4.2.1w	QuickLab, p. 194, “Radioactive Decay”	<p>Section 2 Review, p. 196, questions 1-9.</p> <p>Read Chapter 8, Section 3, pp. 197-200.</p>
83	Chapter 8 Section 3, pp. 197-200	<ol style="list-style-type: none"> 1. Describe four ways in which entire organisms can be preserved as fossils. 2. List five examples of fossilized traces of organisms. 3. Describe how index fossils can be used to determine the age of rocks. 	1.MA.2 1.MA.3 1.SI.1 1.SI.3 6.M.2 PSE 4.1.2j PSE 4.2.1p	<p>Demonstration, p. 197 (Teachers Edition) “Learning Earth’s History”</p> <p>Activity, p. 199 (Teachers Edition), Spacing Footprints”</p>	Section 2 Review, p. 200, questions 1-8.

* A Day equals a 45-minute period.

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DAY*	CHAPTER/ SECTION	KEY IDEAS	NYS CORE CURRICULUM	LABS & ACTIVITIES	HOMEWORK SUGGESTIONS
84	Chapter 8 Lab Experiments			Making Models Lab, p. 206, “Types of Fossils”	Chapter 8 Review, pp. 202-203, questions 1-23, 27-29, 32-35.
85	Chapter 8 Chapter Review and Assessment, pp. 201-09			Maps in Action, p. 208, “Geologic Map of Bedrock in Ohio”	Chapter 8 Regents Exam Prep, pp. 204-205, questions 1-12.
86	Chapter 8 Chapter Review and Assessment (cont.)				Read Chapter 9, Section 1, pp. 211-214.
87	Chapter 9 Opener and Section 1, pp. 210-14	<ol style="list-style-type: none"> Summarize how scientists worked together to develop the geologic column. List the major divisions of geologic time. 	6.MS.3 PSE 4.1.2i PSE 4.1.2j	<p>Pre-Reading Activity, p. 210, Two-Panel Flip Chart</p> <p>QuickLab, p. 212, “Geologic Time Scale”</p>	<p>Section 1 Review, p. 214, questions 1-9.</p> <p>Read Chapter 9, Section 2, pp. 215-220.</p>
88	Chapter 9 Section 2, pp. 215-20	<ol style="list-style-type: none"> Summarize how evolution is related to geologic change. Identify two characteristics of Precambrian rock. Identify one major geologic and two major biological developments during the Paleozoic Era. 	LE4.3.1e LE4.3.1f LE4.3.1i PSE 4.1.2c PSE 4.1.2i PSE 4.1.2j PSE 4.2.1o	QuickLab, p. 217, “Chocolate Candy Survival”	<p>Section 2 Review, p. 220, questions 1-10.</p> <p>Read Chapter 9, Section 3, pp. 221-226.</p>

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DAY*	CHAPTER/ SECTION	KEY IDEAS	NYS CORE CURRICULUM	LABS & ACTIVITIES	HOMEWORK SUGGESTIONS
89	Chapter 9 Section 3, pp. 221-26	<ol style="list-style-type: none"> List the periods of the Mesozoic and Cenozoic Eras. Identify two major geological and biological developments during the Mesozoic Era. Identify two major geological and biological developments during the Cenozoic Era. 	PSE 4.1.2i PSE 4.1.2j PSE 4.2.1o	Reading Skill Builder, p. 222 (Teachers Edition), Reading Organizer Timeline, p. 226 (Teachers Edition)	Section 3 Review, p. 226, questions 1-10.
90	Chapter 9 Lab Experiments			Skills Practice Lab, pp. 232-233, “History in the Rocks”	Chapter 9 Review, pp. 228-229, questions 1-24, 26-28, 31-33.
91	Chapter 9 Chapter Review and Assessment, pp. 227-35			Maps in Action, p. 234, “Evidence for Gondwanaland”	Regents Exam Prep, pp. 230-231, questions 1-11.
92	Chapter 9 Chapter Review and Assessment (cont.)				Per Teacher Assessment