

		Objectives: 1.1 Students will explain the difference between a mineral and a rock.													
CONTENT	TIME FRAME	SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
Rocks & Minerals	4 days	1.1.1 Explain the difference between a mineral and a rock.	1.1.2 Define minerals and rocks (including essential key terms)	3.3.6A; 3.3.7A	S8.D.1.1.1, S8.A.1.1.4	ESM-PE.1.5.1; 1.5.3; 1.5.5	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10				
		Objectives: 1.2 Students will identify the properties of each rock type													
	5 days	SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
		1.2.1 Describe the properties and formation of igneous rocks.	1.2.2 Describe the properties and formation of sedimentary rocks.	1.2.3 Describe the properties and formation of metamorphic rocks.	3.3.6A; 3.3.7A	S8.D.1.1.1, S8.A.1.1.4	ESM-PE.1.5.2; 1.5.4 ESM-PE.1.5.2; 1.5.4; 1.5.6 ESM-PE.1.5.2; 1.5.4; 1.5.6	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10			
		1.2.4 Diagram and discuss the rock cycle.	1.2.5 List the geologic processes involved in the formation of each rock group.	1.2.6 List the uses and common examples of minerals, igneous rocks, sedimentary rocks, and metamorphic rocks											
		Objectives: 1.3 Students will identify properties used to describe/identify mineral													
		SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
	4 days	1.3.1 Describe the physical properties of minerals and how they are used for mineral identification.	3.3.6A; 3.3.7A	S8.D.1.1.1, S8.A.1.1.4	ESM-PE.1.5.1; 1.5.3; 1.5.5	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10					
Changing Earth Surface	3 days	Objectives: 2.1 Students will determine if landforms develop from constructive or destructive processes.													
		SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
		2.1.1 Describe the processes of weathering, erosion, and mass wasting.	2.1.3 Describe the process of wearing down and building up of Earth's surface.	3.3.7A; 3.3.8A	S8.A.3.2.1, S8.A.3.2.3, S8.D.1.1	ESM-PE.1.1.1	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10				
	4 days	Objectives: 2.2 Students will identify types of erosion and weathering and how they shape the surface of the Earth.													
		SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
		2.2.1 Explain the difference between mechanical and chemical weathering.	2.2.2 Describe the rate of weathering.	2.2.3 Describe the controls of mass wasting.	2.2.4 Describe the types of glaciers	3.3.7A; 3.3.8A	S8.A.3.2.1, S8.A.3.2.3, S8.D.1.1	ESM-PE.1.1.1	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10		
		2.2.5 Describe how glaciers erode the land.	2.2.6 Identify areas of erosion and deposition in a meandering alluvial stream.												
		Objectives: 2.3 Students will define plate tectonics and explain the force that changes the Earth													
		SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
		2.3.1 Discuss the formation and breakup of Pangaea.	2.3.2 List the evidence that was used to support the continental drift hypothesis.	2.3.3 Describe the theory of plate tectonics.	2.3.4 Explain the differences between the continental drift and the theory of plate tectonics.	3.3.7A; 3.3.8A	S8.A.3.2.1, S8.A.3.2.3, S8.D.1.1	ESM-PE.1.3.1; 1.3.2	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10		
		2.3.5 List and describe the evidence used to support the plate tectonics theory.	2.3.6 Explain the difference between divergent, convergent, and transform plate boundaries.												
Weather Factors	2 days	Objectives: 3.1 Students will become familiar with local weather phenomenon.													
		SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
		3.1.1 Determine the difference between weather and climate.	3.1.2 Identify layers of the atmosphere and the role of the troposphere in weather.	3.1.3 Identify local weather conditions.	3.3.7A; 3.3.8A	S8.A.2.1.1, S8.A.2.1.2, S8.D.2.1.2, S8.D.2.1.3	ESM-PE.1.4.1; 2.4.1	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10			
	4 days	Objectives: 3.2 Students will identify types and cause of extreme weather conditions.													
		SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
	4 days	3.2.1 Identify extreme weather types including tornadoes, hurricanes, floods, and droughts.		3.3.7A; 3.3.8A	S8.A.2.1.1, S8.A.2.1.2, S8.D.2.1.2, S8.D.2.1.3	ESM-PE.1.4.1	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10				
Weather Factors	2 days	Objectives: 3.3 Students will define cloud types and how they form.													
		SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
	2 days	3.3.1 Discuss the basis of cloud classification and list the major cloud types.	3.3.2 Describe the process of condensation and the formation of clouds.	3.3.7A; 3.3.8A	S8.A.2.1.1, S8.A.2.1.2, S8.D.2.1.2, S8.D.2.1.3	ESM-PE.1.4.1; 2.4.1	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10				

	Objectives: 3.4 Students will understand weather maps and weather prediction.												
SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
5 days	3.4.1 Define air pressure, and explain how it is measured.	3.3.7A; 3.3.8A	S8.A.2.1.1, S8.A.2.1.2, S8.D.2.1.2, S8.D.2.1.3	ESM-PE.1.4.1	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10				
	3.4.2 Discuss pressure changes with increasing altitude.												
	3.4.3 Describe what happens to incoming solar radiation as it passes through the atmosphere.												
	3.4.4 Describe the causes of wind.												
	3.4.5 Describe the instruments used to determine the basic wind measurements; direction & speed.												
	3.4.6 Distinguish between local winds and global winds												
	3.4.7 Describe how relative humidity is measured.												
	3.4.8 Identify how barometric pressure changes are associated with weather patterns.												
	3.4.9 Describe how meteorological instruments (barometer) is used to determine air pressure.												
	3.4.10 Distinguish among rain, snow, sleet, freezing rain, & hail, describe the circumstances under which each forms.												
	3.4.11 Describe how precipitation is measured using standard instruments.												
	Objectives: 4.1 Students will review and understand general concepts of the solar system.												
SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
3 days	4.1.1 Describe the general motion of celestial bodies in the solar system.	3.3.7B; 3.3.8B	S8.D.3.1.1, S8.D.3.1.2, S8.D.3.1.3	ESM-PE.2.5.1; 2.5.2	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10				
	4.1.2 Describe terms associated with the solar system (i.e. planets, moons, sun, etc.)												
	Objectives: 4.2 Students will identify celestial objects in the solar system and how the objects interact.												
SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
3 days	4.2.1 Identify basic properties of planets, comets, asteroids, meteors	3.3.7B; 3.3.8B	S8.D.3.1.1, S8.D.3.1.2, S8.D.3.1.3	ESM-PE.2.5.1; 2.5.2	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10				
	4.2.2 Explain the relationship between the Sun, Earth, and Moon.												
	Objectives: 4.3 Students will identify the relationship of the Earth, Moon, and Sun.												
SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
4 days	4.3.1 Compare and contrast rotation and revolution of Earth, Moon, and Sun.	3.3.7B; 3.3.8B	S8.D.3.1.1, S8.D.3.1.2, S8.D.3.1.3	ESM-PE.2.5.1; 2.5.2	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10				
	4.3.2 Define year and day for the Earth and Moon.												
	4.3.3 Identify the phases of the Moon.												
	4.3.4 Define the causes of tides on Earth.												
	Objectives: 4.4 Students will identify properties of the Sun.												
SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
2 days	4.4.1 List and describe the four parts of the Sun.	3.3.7B; 3.3.8B	S8.D.3.1.1, S8.D.3.1.2, S8.D.3.1.3	ESM-PE.2.5.1; 2.5.2	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10				
	4.4.2 Describe several features found on the active Sun.												
	4.4.3 Describe the source of the Sun's energy												
	Objectives: 4.5 Students will identify the characteristics of stars.												
SKILLS		STANDARD(s)	ASSESSMENT ANCHORS	PRE-AP ASSESSMENT	COMMON CORE								
5 days	4.5.1 List and describe the major intrinsic properties of stars.	3.3.7B; 3.3.8B	S8.D.3.1.1, S8.D.3.1.2, S8.D.3.1.3	ESM-PE.2.5.1; 2.5.2	RI.8.1; RI.8.2; RI.8.3; RI.8.4	W.8.1; W.8.2; W.8.3; W.8.4; W.8.7; W.8.8; W.8.10	SL.8.1; SL.8.2; SL.8.4; SL.8.5; SL.8.6	L.8.4; L.8.5; L.8.6	RST.6-8.1; RST.6-8.2; RST.6-8.3; RST.6-8.4; RST.6-8.6; RST.6-8.7; RST.6-8.8; RST.6-8.9; RST.6-8.10				
	4.5.2 Describe the states that a star may assume after it consumes its nuclear fuel and collapses.												
	4.5.3 Describe the most plausible model for stellar evolution and the stages in the life cycle of a star.												
	4.5.4 Describe electromagnetic radiation and the two models used to explain its properties.												
	4.5.5 Explain how light (electromagnetic radiation) is used to investigate the properties of a star.												
	4.5.6 List and describe the major types of galaxies.												
	4.5.7 Describe the Big Bang theory of the origin of the universe												