

**Curriculum Map**

	<b>Content and Essential Questions</b>	<b>Skills: Students will...</b>	<b>Assessment</b>	<b>Materials/Technology Resources</b>
	<p><b>Structure of the earth: (ESS 12)</b></p> <ul style="list-style-type: none"> <li>• Where is the earth in our solar system?</li> <li>• How old is the earth?</li> <li>• What is the structure of the earth?</li> <li>• How has the earth's crust moved since it was formed?</li> <li>• What was the land mass called Pangaea?</li> <li>• What is plate tectonics?</li> </ul>	<ul style="list-style-type: none"> <li>• locate our earth in the solar system in relationship to the sun and other planets</li> <li>• learn the age of the earth and the layers that make it up</li> <li>• learn about Pangaea and plate tectonics that explains the moving crust due to the molten condition of the earth's core</li> </ul>	<ul style="list-style-type: none"> <li>• draw and label a basic solar system and place the earth in its correct location</li> <li>• draw and describe the layers of the earth and its age</li> <li>• discuss and demonstrate that the earth's crust has moved due to plate tectonics</li> <li>• pose questions based on the topic</li> <li>• show and communicate in both verbal and written form results of their work</li> </ul>	<ul style="list-style-type: none"> <li>• diagrams of our solar system</li> <li>• diagrams of the earth's structure</li> <li>• video clips of the story of Pangaea to show crustal motion.</li> </ul>
	<p><b>Earthquakes and volcanoes: (ESS 12)</b></p> <ul style="list-style-type: none"> <li>• How do earthquakes form and show that the earth is still changing?</li> <li>• What are the different types of earthquakes</li> <li>• What are the different types of volcanoes</li> <li>• Where on earth do earthquakes and volcanoes occur more often?</li> </ul>	<ul style="list-style-type: none"> <li>• investigate the forces that cause various types of earthquake faults</li> <li>• investigate the forces that cause various types of volcanoes to form</li> <li>• learn where these events take place more often (ring of fire)</li> </ul>	<ul style="list-style-type: none"> <li>• explain and demonstrate how earthquakes and volcanoes form</li> <li>• draw and label the different types of earthquakes and volcanoes</li> <li>• plot earthquake and volcanic activity on a map of the world</li> <li>• pose questions based on the topic</li> <li>• show and communicate in both verbal and written form results of their work</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• earthquake and volcano video clips, pictures, models</li> <li>• world maps for plotting earthquakes and volcanoes</li> <li>•</li> </ul>

	<b>Content and Essential Questions</b>	<b>Skills: Students will...</b>	<b>Assessment</b>	<b>Materials/Technology Resources</b>
	<p><b>Earth materials – minerals (ESS 1, 2)</b></p> <ul style="list-style-type: none"> <li>• How did the earth's crust form?</li> <li>• What are minerals?</li> <li>• How do you identify minerals?</li> <li>• What are common uses of minerals?</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• learn how cooling of earth materials formed the crust</li> <li>• learn how elements combine to form earth minerals</li> <li>• use mineral test kits to determine hardness, color, luster, cleavage, texture, streak for identifying minerals</li> </ul>	<ul style="list-style-type: none"> <li>• draw and label the layers of the earth's structure</li> <li>• investigate how elements form minerals</li> <li>• conduct mineral tests for identifying minerals</li> </ul>	<ul style="list-style-type: none"> <li>• diagrams of earth's structure</li> <li>• simple element chart</li> <li>• mineral test kits</li> </ul>
	<p><b>Earth materials – rocks (ESS 3)</b></p> <ul style="list-style-type: none"> <li>• What is a rock?</li> <li>• What is the rock cycle?</li> <li>• How do igneous rocks form?</li> <li>• What are some names of igneous rocks and their characteristics?</li> <li>• What are some uses of igneous rocks?</li> <li>• What are some names of sedimentary rocks and their characteristics?</li> <li>• What are some uses of sedimentary rocks?</li> <li>• What are some names of metamorphic rocks and their characteristics?</li> <li>• What are some uses of metamorphic rocks?</li> </ul>	<ul style="list-style-type: none"> <li>• collect a variety of rocks from the area</li> <li>• learn that rocks are a mixture of minerals</li> <li>• learn about the rock cycle</li> <li>• research how igneous rocks form and the characteristics they have</li> <li>• investigate uses of igneous rocks</li> <li>• research how sedimentary rocks form and the characteristics they have</li> <li>• investigate uses of sedimentary rocks</li> <li>• research how metamorphic rocks form and the characteristics they have</li> <li>• investigate uses of metamorphic rocks</li> </ul>	<ul style="list-style-type: none"> <li>• use rock samples for making general observations</li> <li>• demonstrate an understanding that rocks are mixtures of minerals</li> <li>• draw and label the rock cycle</li> <li>• explain how igneous rocks form and their characteristics</li> <li>• explain how sedimentary rocks form and their characteristics</li> <li>• explain how metamorphic rocks form and their characteristics</li> <li>• identify from a mixed sampling each type of rock</li> <li>• pose questions based on the topic</li> <li>• show and communicate in both verbal and written form results of their work</li> </ul>	<ul style="list-style-type: none"> <li>• collection of a variety of rocks</li> <li>• pictures of the rock cycle</li> <li>• samples or pictures of igneous, sedimentary, and metamorphic rocks</li> <li>•</li> </ul>

	<b>Content and Essential Questions</b>	<b>Skills: Students will...</b>	<b>Assessment</b>	<b>Materials/Technology Resources</b>	
	<p><b>Weathering, erosion and soil (ESS 4, 5)</b></p> <ul style="list-style-type: none"> <li>• What is weathering and what causes it to occur?</li> <li>• How is chemical weathering different from physical weathering?</li> <li>• What are the different forms of weathering?</li> <li>• What is erosion and deposition?</li> <li>• How is weathering different from erosion?</li> <li>• Where does weathering and erosion occur in your area?</li> <li>• What is soil?</li> <li>• How do you separate soil into its basic materials?</li> </ul>	<ul style="list-style-type: none"> <li>• investigate what weathering is and what forces cause it to occur</li> <li>• research how chemical and physical weathering are different</li> <li>• investigate how heat/cold, glaciers, natural forces, running water, gravity and human activity cause weathering and erosion</li> <li>• investigate what is erosion and how deposition occurs</li> <li>• explore places in the area where weathering and erosion are occurring</li> <li>• examine soil from different locations</li> <li>• learn skills needed to separate soil</li> </ul>	<ul style="list-style-type: none"> <li>• describe and demonstrate weathering of chemical and physical</li> <li>• describe and demonstrate erosion and deposition</li> <li>• explain how weathering and erosion are caused by heat/cold, glaciers, natural forces, running water, gravity and human activity cause weathering and erosion</li> <li>• explain and show evidence of weathering and erosion occurring in the area</li> <li>• conduct experiments to sort soil into its basic materials</li> <li>• pose questions based on the topic</li> <li>• show and communicate in both verbal and written form results of their work</li> </ul>	<ul style="list-style-type: none"> <li>• samples of materials that are weathered</li> <li>• weak acid for chemical weathering</li> <li>• maps and pictures of where erosion have occurred</li> <li>• video clips of weathering and erosion</li> <li>• soil samples</li> <li>• sieves, funnels, filters</li> <li>• trip outside to investigate weathering and erosion.</li> </ul>	