

AMHERST PUBLIC AND PELHAM ELEMENTARY SCHOOLS – CURRICULUM MAP

DEPARTMENT: SCIENCE GRADE: 6	UNIT TITLE: EARTH STRUCTURE AND HISTORY
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SECTION	LENGTH	CONTENT	SKILLS	METHODS OF ASSESSMENT	FRAMEWORK STRAND(S) & STANDARD(S) Grades 6-8
Earth layers	1 week	<ul style="list-style-type: none"> Layers of the earth can be separated by their composition into crust, mantle and core. 	<ul style="list-style-type: none"> Label a scaled cross section of earth layers. 	<ul style="list-style-type: none"> Student worksheet 	ESS 2.,
Plate tectonics	3 weeks	<ul style="list-style-type: none"> The outermost portion of the earth is divided into massive tectonic plates which move on the gel-like layer beneath. Plate movements at the boundaries include faulting, divergence, subduction and collision. Heat flow and movement within the earth cause earthquakes and volcanic eruptions, create mountains and ocean basins. 	<ul style="list-style-type: none"> Explain the cause and effect relationship between plate movement and changes on the surface of the earth. 	<ul style="list-style-type: none"> Student worksheet Performance task rubric Performance task checklist Teacher observation 	ESS 5.
Local geology	2 weeks	<ul style="list-style-type: none"> Review of igneous, metamorphic and sedimentary rock formation. Different kinds of rock show the geological history of the Pioneer Valley. 	<ul style="list-style-type: none"> Recognize and explain possible causes of local landforms. 	<ul style="list-style-type: none"> Student products Performance task checklist Quiz 	ESS 6., 7.

Massachusetts Science and Technology/Engineering Curriculum Framework, October 2006

Earth and Space Science (ESS), Grades 6-8

ESS 2 Describe the layers of the earth, including the lithosphere, the hot convecting mantle, and the dense metallic core.

ESS 5 Describe how the movement of the earth’s crustal plates causes both slow changes in the earth’s surface (e.g., formation of mountains and ocean basins) and rapid ones (e.g., volcanic eruptions and earthquakes).

ESS 6 Describe and give examples of ways in which the earth’s surface is built up and torn down by natural processes, including deposition of sediments, rock formation, erosion, and weathering.

ESS 7 Explain and give examples of how physical evidence, such as fossils and surface features of glaciation, supports theories that the earth has evolved over geologic time.