

Standards-Based Lesson Planning Springfield Schools

Standard(s): Science and Technology/Engineering

Strand #1: Earth and Space

Learning Standard #1: Give a simple explanation of what a mineral is and some examples e.g. quartz, mica.

Learning Standard #2: Identify the three categories of rock (metamorphic, igneous, and sedimentary) based on how they are formed and explain the natural and physical processes that create these rocks.

Standard(s): English Language Arts

Strand: Language

Learning Standard #2: Questioning, listening, and contributing – Students will pose questions, listen to ideas of others, and contribute their own information or ideas in group discussions or interviews in order to acquire knowledge.

Desired Results

Scope and Sequence

Topic: Habitats: Rocks and Minerals

Suggested Time Frame: Two day environmental education experience at **ECOS (Environmental Center for Our Schools)** in Forest Park, Springfield, MA

Essential Questions

- Where do rocks come from?
- What are rocks made of?

Content and Skills

(Progress Indicators)

- Participate in discussion of past observations of rocks.
- Observe and compare characteristics of rock samples.
- Collect rocks with different characteristics.

Assessment Evidence

- Students are able to collect and identify examples of igneous, metamorphic or sedimentary rocks.
- Students are able to observe and recognize evidence of different minerals in the samples collected.

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Learning Activities

- Students will participate in answering teacher prompted questions to assess knowledge of how rocks are formed.
- Hands-on examination of different rock types showing clues of origin.
- Students will collect their own samples of different rocks.
- Students will draw different examples of rocks showing evidence to support whether the rock is igneous, metamorphic or sedimentary.