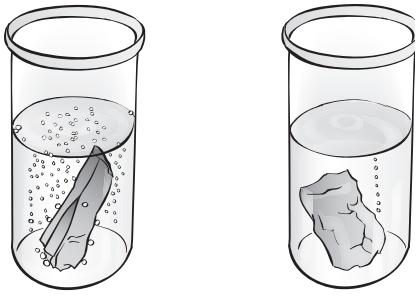
LETTER TO FAMILY

Cut here and glue letter onto school letterhead before making copies.

Science News

Dear Family,



Our class is beginning a new science unit using the **FOSS Soils, Rocks, and Landforms Module**. We will observe soils and explore how the weathering of rocks provides the basic ingredients that form soil. Through stream-table investigations we will investigate how erosion and deposition move earth materials and shape new landforms. We will study how changes in Earth can be due to slow processes, such as erosion, as well as rapid processes, such as landslides, volcanic eruptions, and earthquakes.

Later, we will examine a selection of rocks and minerals that make up Earth's crust, and learn some techniques that geologists use to identify them. Finally, we will study earth materials as important natural resources.

You can increase your child's understanding and interest in earth materials by asking him or her to talk about the investigations we are doing at school. To expand your rock and mineral knowledge, you and your child may want to explore soils in your neighborhood, start a rock collection, visit the library, and if possible visit a rock and mineral store or display. A visit to a landscape materials center or a jewelry store (gems are minerals) can expose the broad range of uses for earth materials.

Watch for Home/School Connection sheets that I will be sending home from time to time. These describe ways the whole family can look more closely at soils, rocks, and minerals around your home. Your child will be asked to bring a rock or mineral to class to begin a class collection. He or she may choose to bring a special sample you picked up on a family outing, or a rock collected right around the neighborhood.

We're looking forward to weeks of fun with soils, rocks, minerals, and landforms! If you have questions or comments, or have expertise you would like to share with the class, please drop me a note. You can get more information on this module by going to www.FOSSweb.com.

Sincerely,

HOME/SCHOOL CONNECTION

Investigation 1: Soils and Weathering

Explain to members of your family how you tested rocks to find out which ones react with acid rain. Explain that rocks are made of various mineral ingredients. The mineral calcite an ingredient in many rocks, is the mineral that reacts with acid rain.

Take a short walk with your family. See if you can find five or six rocks to test for calcite.

Test the rocks by putting a few drops of vinegar on each rock. Record your findings in the table below. **Safety note: Be careful using vinegar.**

Do not test special rocks, such as fancy crystals or valuable rocks. The vinegar could change their appearance and lessen their value.

Rock location	Test results

HOME/SCHOOL CONNECTION

Investigation 2: Landforms

Watch a television newscast, read a newspaper or magazine, or browse the Internet for information about landforms and the natural or human-caused processes that create or change landforms. Some ideas might include floods, hurricanes and storm surges, earthquakes, landslides, and dams.

Record in the space below the following information about the news story:

- The details of the event.
- The kinds of landforms that were affected by the event.
- How the event changed or created the landform(s).
- Where the event occurred. Look up the location on a map so you can point it out to someone else.

If possible, include a copy of the newspaper or magazine article.

HOME/SCHOOL CONNECTION

Investigation 3: Rocks and Minerals

Tell your family what you learned about birthstones and the difference between rocks and minerals.

Ask your family and friends when their birthdays are. See if they know their birthstones. (If they don't, you can tell them!) Complete the chart below.

Then make a bar graph to show which month has the most birthdays.

January	Garnet
February	Amethyst
March	Aquamarine
April	Diamond
May	Emerald
June	Alexandrite
July	Ruby
August	Peridot
September	Sapphire
October	Opal
November	Topaz
December	Turquoise

Name of person	**Birthday month**
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
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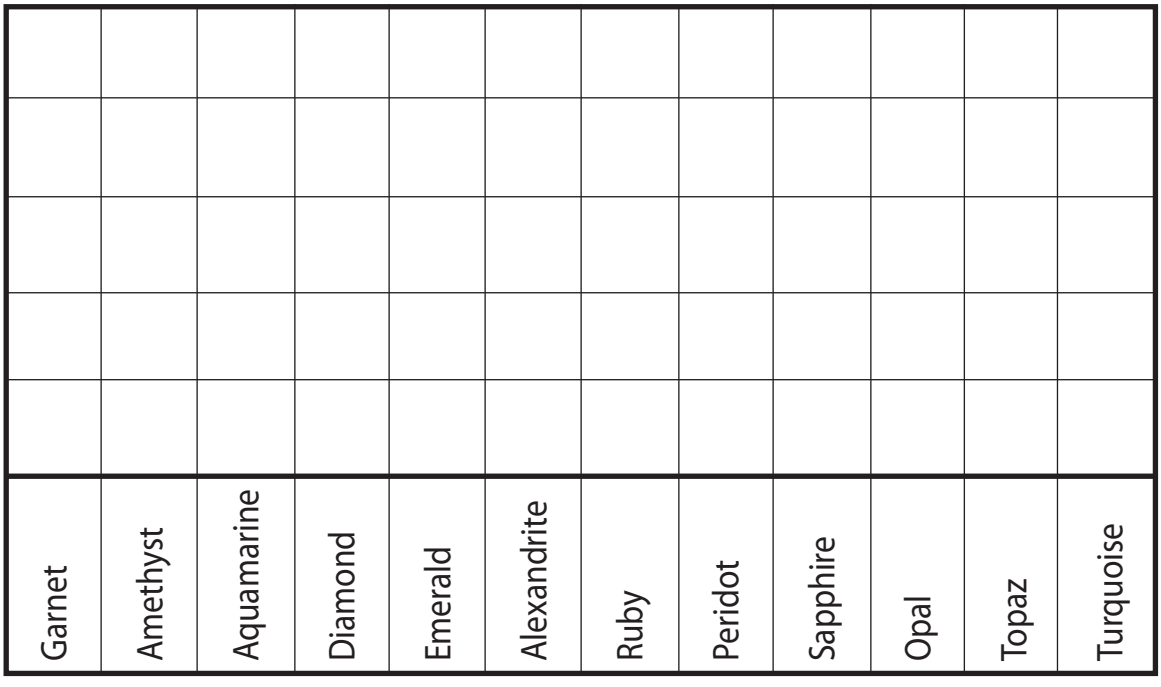

HOME/SCHOOL CONNECTION

Investigation 4: Natural Resources

Explore the inside and outside of your home to find earth materials in use. Organize the information you collect in a table or diagram.

Here are some hints to get you started on your hunt.

Clay Used for bricks, plumbing, ceramics, floor tiles, and decorative tiles

Sand and gravel Combined with cement to make concrete. Mortar, stucco, and plaster are kinds of concrete. Used with clay to make bricks

Industrial sand Used to make glass in windows, TVs, refrigerator shelves, and dishware. Also used to make fiberglass

Gypsum Used in plaster and wallboard

Limestone Used to make Portland cement, abrasive cleanser, carpets, and even toothpaste