Rocks and Minerals Poster Activity

Post Lesson 1

Age: Grades 3-5

Setting: Classroom

Standards: Science and Technology: 3.5.4.B(1), 3.5.7.B(3)

Objectives: The students will be able to:

- recognize the many uses of rocks and mineral resource products in their environment
- recognize different types of mining
- list 5 occupations associated with mining

Overview: This lesson gives students the opportunity to learn about the uses of rocks and minerals by studying a poster of a variety of mining activities.

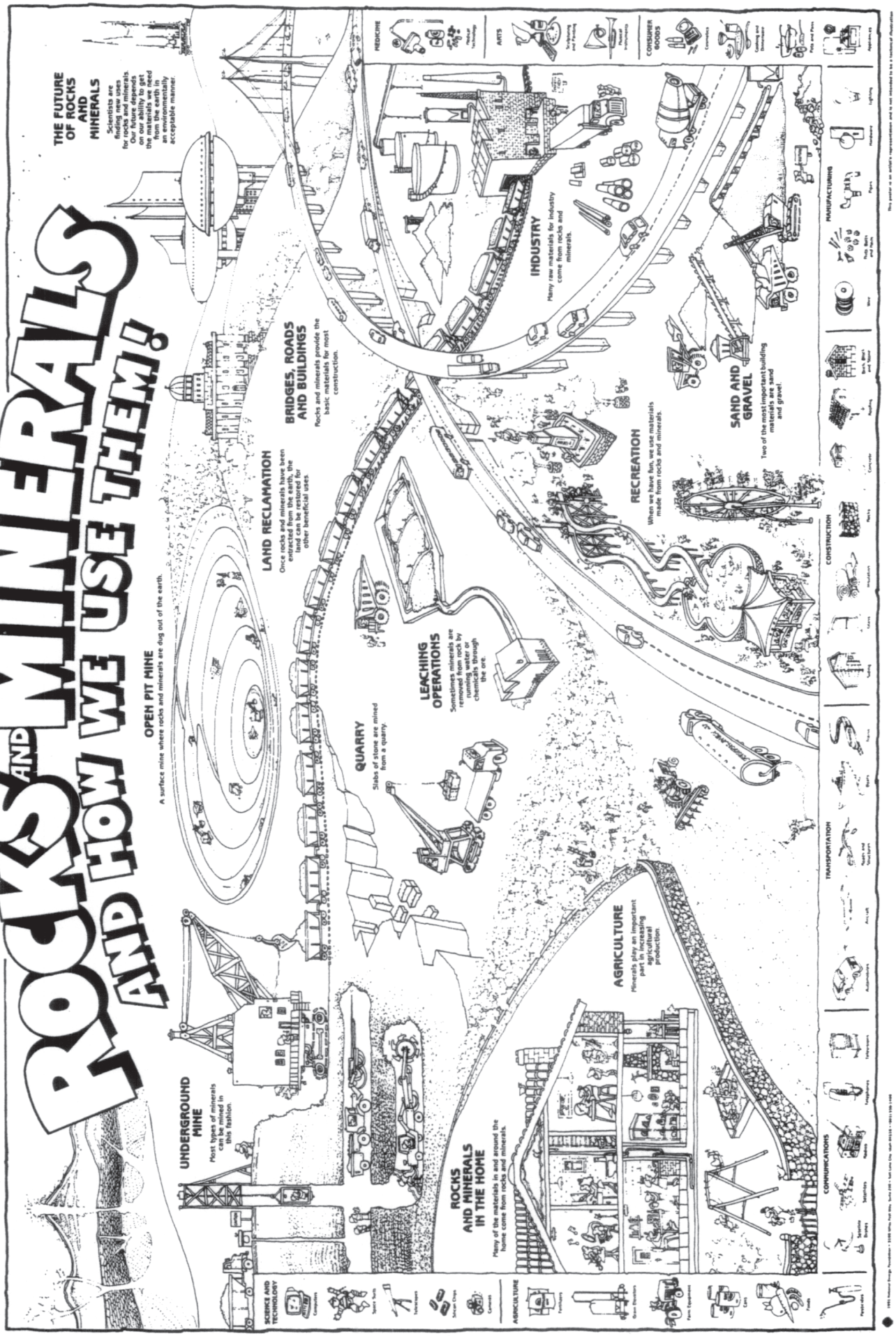
Materials:

- Black and white copy of "Rocks and Minerals"
- Poster
- Paper
- Pencil
- Crayons, colored pencils, or colored markers

Procedure:

1. Ask students the following questions to assess their knowledge of the topic and to stimulate interest in the activity: What is one product that you use every day, that you know requires a mineral resource? Where does that mineral resource come from?
2. Divide the class into 3 or 4 groups. Distribute the poster and allow the groups to look at them for a set period of time.
3. Based on the poster, have students write down at least 10 ways we use mineral resources.
    a. Have the students share their lists with the rest of the class.
    b. Using the poster, discuss with the students how rocks and minerals are mined and used.
    c. Have the students do the following poster activities:
        i. Circle the types of mines illustrated on the poster.
        ii. Put an "X" by each person on the poster who is helping mine for rocks and minerals.
        iii. Color the items in and around the home that come from minerals.
        iv. List five occupations represented on the poster that are a result of mining.
        v. List ten items we use everyday from mineral resources.

Assessment: Ask the students to visualize a room in their home. Give the students three minutes to write down all the items made of rocks or mineral resources that are in or part of their selected room. Have the students orally share their lists in the sharing experience. Students should emphasize the importance of rocks and mineral resources to our modern way of life.


ROCKS AND MINERALS AND HOW WE USE THEM!
THE FUTURE OF ROCKS AND MINERALS
Scientists are finding new uses for rocks and minerals. Our future depends on our ability to get the materials we need from the earth in an environmentally acceptable manner.
OPEN PIT MINE
A surface mine where rocks and minerals are dug out of the earth.
LAND RECLAMATION
Once rocks and minerals have been excavated from the earth, the land can be restored for other beneficial uses.
BRIDGES, ROADS AND BUILDINGS
Rocks and minerals provide the basic materials for most construction.
INDUSTRY
Many raw materials for industry come from rocks and minerals.
RECREATION
When we have fun, we use materials made from rocks and minerals.
SAND AND GRAVEL
Two of the most important building materials are sand and gravel.
QUARRY
Slabs of stone are mined from a quarry.
LEACHING OPERATIONS
Sometimes minerals are removed from rock by running water or chemicals through the ore.
UNDERGROUND MINE
Most types of minerals can be mined in this fashion.
ROCKS AND MINERALS IN THE HOME
Many of the materials in and around the home come from rocks and minerals.
AGRICULTURE
Minerals play an important part in increasing agricultural production.
MEDICINE
ARTS
CONSUMER GOODS
MANUFACTURING
CONSTRUCTION
TRANSPORTATION
COMMUNICATIONS
AGRICULTURE
SCIENCE AND TECHNOLOGY