

I Spy

<p>Standard II Students will gain an understanding of Earth and Space Science through the study of earth materials, celestial movement, weather.</p>
<p>Objective 1 Describe the characteristics of different rocks.</p>
<p>Intended Learning Outcomes Knowing In Science: Understandg the nature of science.</p>
<p>Content Connections: Language Arts</p>

Background Information

All material on Earth can be sorted into three categories— animal, plant, or mineral. Some materials are easily identified, such as dogs, carrots, or rocks. Other materials may be less obvious, such as rubber, glass, and aluminum. These categories can be more specifically defined as living, once living, and nonliving. The availability, and properties of these resources will determine how humans use these materials.

Connections

Invitation to Learn

Play a game of *I Spy*. Start by saying, “I spy something that was made from a rock.” Let students ask yes/no questions to discover the answer.

Instructional Procedures

1. Pass out magazine pictures to table groups. Have students sort the pictures according to living and nonliving objects. Allow each table to explain why they sorted their objects the way they did.
2. Go on an *I Spy* search on the playground. Students are searching for objects made from rock material— items that are nonliving. When an object is found, students should do the following in their *Rock Journals* (p. 7-5):
 - a. Make a rubbing of the item.
 - b. Describe the item.
 - c. Mark the item on their playground map.
3. When the *I Spy* search is over, take students back into the classroom and compare some of their findings. Be sure to call on any student who found items that may not have been easily identified as rock material (e.g., a metal link from a swing).

Materials

- Magazine pictures of living and nonliving objects
- Hand lens for each student
- Pencil
- Crayons
- Clipboard
- Map of the school playground (can be hand-drawn or aerial satellite photos can be acquired for a small fee at landvoyage.com and intelius.com)
- Rock Journal*

Possible Extensions/Adaptations/Integration

- Have students make maps of the classroom or of the school and complete the same activity. Be sure to have them describe the object and label it on their maps.
- Have students make an *I Spy* book by cutting out magazine pictures of living or nonliving items and gluing them into a collage. Using the writing process, students can write the text and put it into a class book.
- If you have access to several technology sources, students could get into groups and create mini collections of objects made from rock material (e.g., keys, paper clips, rocks, coins, thumb tacks, staples, chalk, etc.). Take a digital picture, which could also be used to create a class book in the computer lab. (A regular camera could also be used.)

Assessment Suggestions

Use the first *Rock Journal* as a pre-assessment tool. At the end of the unit, go on another hunt and have the students compare their journals. Were the items they found just simple rocks, or were they were more complicated, less obvious items? Students who can identify material made of metal or glass probably have a solid understanding of this concept.

Additional Resources

Web sites

<http://www.landvoyage.com> (aerial satellite photos)

<http://www.intelius.com> (aerial satellite photos)

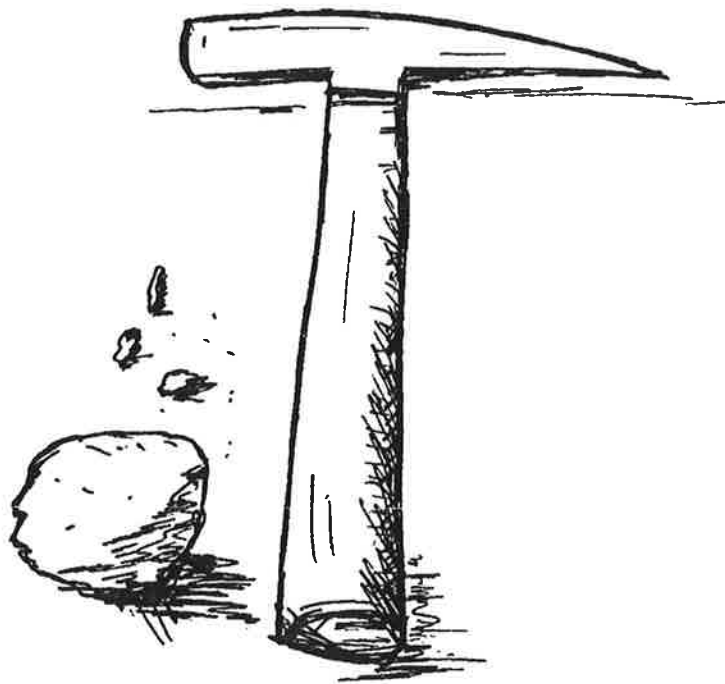
Family Connections

- Students could create an *I Spy* box, bottle, or photograph at home and bring it to class to share.
- Students could make a map of their bedroom and use a symbol to identify items made from rock material.
- With their families, students could go on an *I Spy* hunt around their house. Ask students to bring in or share unusual items found at their homes that were made from rock materials.

_____ 's

Rock Journal

Date Started _____



School

*Use a colored circle to mark each
place you found a rock or rock
material.*



Key:

○ = Rock 1 ○ = Rock 2 ○ = Rock 3 ○ = Rock 4
(Use a different colored dot for each rock.)

I Spy Rock Material

*Number your rock, make a rubbing of your rock, and describe your rock.
Be sure to mark where you found it on the map.*

Rock #1

Description of your rock:

Make a rubbing of your rock:

Rock #2

Description of your rock:

Make a rubbing of your rock:

I Spy Rock Material

*Number your rock, make a rubbing of your rock, and describe your rock.
Be sure to mark where you found it on the map.*

Rock #3

Description of your rock:

Make a rubbing of your rock:

Rock #4

Description of your rock:

Make a rubbing of your rock: