

# Rocks & Minerals

# **Learning outcomes**

» Students know how to compare the physical properties of different kinds of rocks and know that rock is composed of different combinations of minerals. (Grade 2 – Earth Sciences)

» Students know that fossils provide evidence about the plants and animals that lived long ago and that scientists learn about the past history of Earth by studying fossils. (Grade 2 - Earth Sciences).

» Students know how to identify resources from Earth that are used in everyday life and understand that many resources can be conserved. (Kindergarten - Earth Sciences)

From: California's Science Content Standards

### Books we read

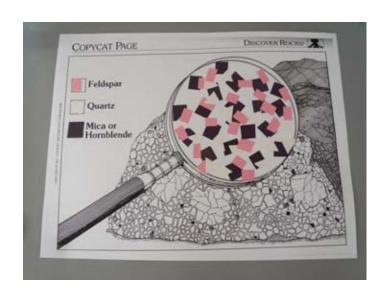
Rocks: Hard, Soft, Smooth, and Rough by Natalie M. Rosinsky

If You Find a Rock by Peggy Christian

### Activities we did

- » We examined a fossil and talked about the scientists who study them, known as geologists.
- » We looked at different rock specimens and deteremined whether they were igneous, sedimentary or metamorphic rocks.
- » We did a mineral match activity where we matched minerals to the household items in which they are found.
- » We looked at different types of granite specimens and talked about how the different amounts of its three minerals makes it look different.

# **Today's craft: Mineral Mosaic**



#### You will need:

» Mineral Mosaics sheet\*

» Scissors

» Pink, white and black construction paper

» Glue

#### Directions:

- 1. Photocopy the Mineral Mosaics sheet.
- 2. Cut out small white triangles (quartz), small pink rectangles (feldspar) and small black squares (mica) from the contsruciton paper to represent the different minerals that make up granite.
- 3. Glue the different minerals onto the Mineral Mosaics sheet.

\*From Braus, Judy (ed.). *Geology: The Active Earth.* Washington DC: National Wildlife Federation, 1988.

# Want to find out more?

Here is a selection of further resources to explore in the Naturalist Center, in the public library or at home. Please ask if you can't find what you're looking for.

#### **Books**

*Me Fascinan las Piedras* por Cari Meister. Nat. Ctr. Juv. QE432.2 .M355 2001\*

Explore with a young girl how rocks come in all kinds of shapes, sizes and colors and can used in many different ways.

The Magic School Bus Inside the Earth by Joanna Cole. Nat. Ctr. Juv. QE29 .C696 1987

Join Mrs. Frizzle and her class as they learn about different types of rocks and how our Earth was formed by traveling to the center of it.

Rocas y Fósiles por Chris Pellant. Nat. Ctr. Juv. QE432.2 .P4518 2006\*

Full page photographs help explain the characteristics of different rocks, minerals and fossils, as well as the ways they are formed and used by humans. Includes activities that you can do at home with rocks and fossils.

Rocks and Minerals by Steve Parker. Nat. Ctr. Juv. QE432.2 .P37 1997

Brilliant photographs and engaging text introduce young readers to the world of rocks and minerals. Part of the Eyewitness Explorers series.

Rocks and Minerals: A Gem of a Book! by Basher

Get to know the fascinating traits of this cast of super hero-like caracters: the many different rocks and minerals found on our planet.

\*Libro en español

## **DVDs**

Eyewitness Rock & Mineral. Nat. Ctr. Media QE365 .R62

What forces shape and change rock? How have minerals been a source of conflict? Find out answers to these questions and more in this fascinating DVD.

#### **Websites**

Geology for Kids

An online textbook about geology with photos, videos and interactive educational games.

http://www.kidsgeo.com/geology-for-kids/

The Life Cycle of a Mineral Deposit: A Teacher's Guide for Hands-On Mineral Education Activities

Produced by the USGS this guide provides lesson plans and activities that can be done in the K-12 classroom or at home

http://pubs.usgs.gov/gip/2005/17/

Minerals in Sports

From baseball bats to pogo sticks, learn how minerals play a role in sports.

http://minerals.usgs.gov/minerals/pubs/general\_interest/

Science Kids: Geology for Kids

Learn all about rocks, minerals and earth science through experiments, games, videos and quizzes.

http://www.sciencekids.co.nz/geology.html