

Teachable Moments: A Guide for Your Fieldtrip

Gem and Mineral Hall, Grade 2

Gallery Description: More than 2,000 gem and mineral specimens are on view in the Gem and Mineral Hall. The hall features one of the largest gold exhibits in the world that includes over 300 pounds of natural gold, along with gold mining artifacts and other memorabilia. The walk-through Hixon Gem Vault houses such spectacular treasures as exquisite star rubies, emeralds, and sapphires.

Science Activities

- Gather students in front of any display in the Gem and Mineral Hall.

Pick a gem or mineral for the students to find. Give clues to find the gem/mineral by describing the relative position, using two references.

Example: "I'm going to give you a clue to find a gem or mineral. It is *above* the pink rock and *next to* the purple one. Can you find it?"

Ask for student volunteers to give clues for the class to find a gem or mineral by describing the relative position using two references.

Language Arts Activities

- Gather students in front of any display in the hall.

Ask students to find their favorite gem or mineral.

Ask for student volunteers to explain why they've chosen this gem or mineral and to give 3 details about it.

Math Activities

- Gather students in the back room of the hall.

Pick a gem or mineral that has more than one shape. Discuss how it is a three dimensional object. Then point out its faces, edges, and vertices, as well as the different shapes that create it.

In pairs, have students walk around and take turns picking a gem or mineral, and describing the shapes they observe, the number of corners, and the number of sides.

These activities support the following 2nd Grade California State Standards:

Science

Physical Science 1a: Students know the position of an object can be described by locating it in relation to another object or to the background.

Language Arts

Listening and Speaking 1.4: Give and follow three- and four-step oral directions.

Math

Measurement and Geometry 2.1: Describe and classify plane and solid geometric shapes (e.g., circle, triangle, square, rectangle, sphere, pyramid, cube, rectangular prism) according to the number and shape of faces, edges, and vertices.

Measurement and Geometry 2.2: Put shapes together and take them apart to form other shapes (e.g., two congruent right triangles can be arranged to form a rectangle).