Mineral Guide and Student Investigation Activities

Hints for Teachers

HARVARD MUSEUM & NATURAL HVSTORY

EARTH & PLANETARY SCIENCES GALLERY INFORMATION:

The Mineral Guide and Student Investigation ask students to look closely at specific minerals. Here are some hints for finding the minerals in the gallery

- Both activities list numbers next to the mineral name. These numbers correspond to the case number in which the mineral can be found.
- Some samples in the EPS Gallery show one mineral growing on top of another mineral.
- Mica is the name for a group of minerals including biotite, muscovite, and phlogopite.
- Feldspar is the name for a group of minerals including albite, orthoclase, microcline, and labradorite.

SELECTING AN ACTIVITY:

You may choose to use one or both activity sheets. Here are some hints to help you find what will work best for you.

- **The Mineral Guide** is designed to be used by chaperones. It directs chaperones to common minerals and suggests some things for them to discuss with the students.
- The **Student Investigation** is designed to be used by students. It asks them to make specific observations about a selected mineral.
- The Mineral Guide is NOT meant to be used as an answer key for the Student Investigation. If you plan on using both items, we recommend reminding your chaperones to allow the students to complete the Student Investigation on their own.
- Please print copies of the materials for your class visit. The museum will not provide copies.

MODIFYING THE ACTIVITIES TO FIT YOUR NEEDS:

- The **Student Investigation** has space for the students to sketch or write their answers. If you are working on making scientific drawings, select the sketching option for your students. If you are working on making and recording observations, you can give the students the option of sketching or writing. You can also ask your students to make labeled drawings.
- Give students multiple copies of the **Student Investigation** so they can observe more than one mineral. We recommend students observe between one and three minerals on a trip to the museum.
- The final question asks the students to record one additional characteristic of their chosen mineral. If you are working on identifying minerals in your class and have discussed cleavage, fracture, or luster, this final question can be used to address one of these characteristics (since students will be unable to touch the minerals, they will not be able to observe hardness or heft).
- Connect the **Student Investigation** to other classroom lessons by asking students to compare their museum observations to the classroom mineral collection, or ask the students to create a Venn diagram comparing two minerals.