

MINERAL IDENTIFICATION

PURPOSE: This activity will teach the student to identify minerals using the physical properties of each mineral. This is accomplished through observation and testing of the minerals involved.

INSTRUCTIONS:

1. Set up mineral stations for each mineral the students are to identify. If necessary, some stations may have two minerals to identify.
2. Each station should be equipped with one each of the following items:
 - Eye dropper
 - Vinegar or 10% solution of HCL (Hydrochloric acid)
 - Glass plate
 - Penny
 - Streak plate (white unglazed porcelain)
 - Magnet
 - Steel blade or knife
3. Divide students into equal groups. Have the number of student groups match the number of mineral stations.
4. Distribute to each student the Mineral Worksheet. Have students read the descriptions at the bottom of Mineral Worksheet.
5. Have student groups move to the mineral stations with one group of students at each station. Have the students perform the physical property tests listed and record the test results on the Mineral Worksheet.
6. Rotate the student groups through each of the work stations performing the tests at each station. Allow 3 to 5 minutes per mineral per station.
7. Handout the Mineral Identification sheet (page 2 of this packet). The Rock Identification sheet (page 3) would provide a real challenge.
8. Have students compare their test results with the Mineral Identification sheet. Can the students correctly name each of the minerals using their test results? If the students can correctly identify their mineral from the testing, have them write the name of the mineral on the Mineral Worksheet.

REVIEW: The students learned to perform tests for physical properties of minerals, observe the test results and then identify a mineral using the test results.

