

Name That Mineral

Name _____

One can identify many minerals by carefully observing their physical characteristics. **Some** of these characteristics are:

Hardness — This is determined with a scratch test.

Color — Color depends on the substances that make up the crystals. Varies greatly.

Luster — This refers to how light reflects off the mineral.

Enough information has been given to you here to help you find the unknown minerals and fill in the chart.

Hardness Scale		
Hardness	Mineral	Common Tests
1	Talc	Fingernail will scratch it.
2	Gypsum/ Kaolinite	
3	Mica/ Calcite	A copper penny will scratch it.
4	Fluorite	Knife blade or window glass will scratch it.
5	Apatite/ Hornblende	
6	Feldspar	Will scratch a steel knife or window glass.
7	Quartz	
8	Topaz	
9	Corundum	Will scratch all common materials.
10	Diamond	

Color	Mineral
White:	Quartz, Feldspar, Calcite, Kaolinite, Talc
Yellow:	Quartz, Kaolinite
Black:	Hornblende, Mica
Gray:	Feldspar, Gypsum
Colorless:	Quartz, Calcite, Gypsum

Luster	Mineral
Glassy:	Quartz, Feldspar, Hornblende
Pearly:	Mica, Gypsum, Talc
Dull:	Kaolinite

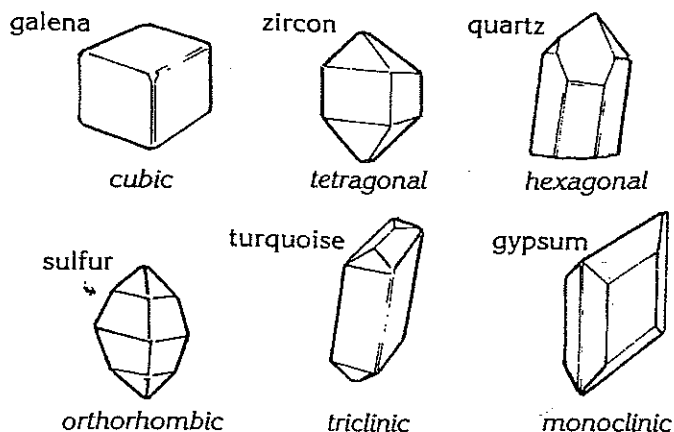
THE UNKNOWN MINERALS —

Hardness	Color	Luster	Mineral
Will scratch a steel knife or window glass.	yellow	glassy	
Will scratch a steel knife or window glass.	gray	glassy	
A copper penny will scratch it.	black	pearly	
Fingernail will scratch it.	white	pearly	
Knife blade or window glass will scratch it.	black	glassy	

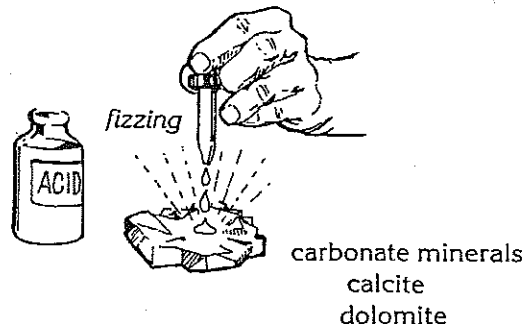
Minerals and Their Identification

Minerals are natural substances that have definite crystal structure and chemical composition.

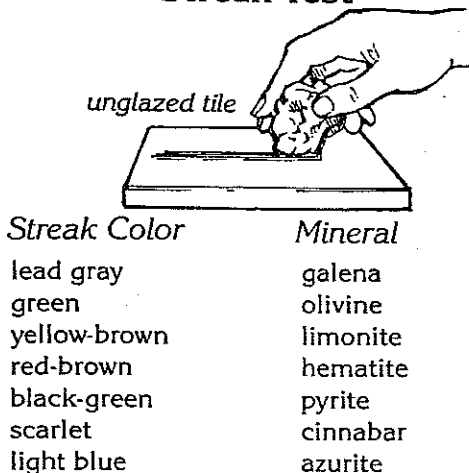
Crystal Shape



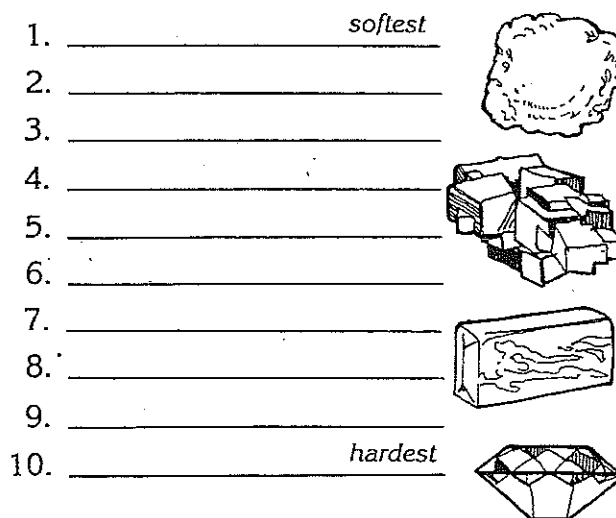
Acid Test



Streak Test



Hardness Test



- Write the names of the ten minerals in the correct order on the hardness scale at the top of the page.
- How can the streak test be used to identify the two iron minerals, limonite and hematite? _____
- Both calcite and quartz can be found as clear crystals. What tests can be used to correctly identify them? _____
- a. What is the softest mineral? _____
 b. What is the hardest mineral? _____
- Which mineral has a cubic crystal shape and a lead gray streak? _____
- Glass has a hardness of about 5.5. Which minerals will scratch it? _____