

# Topic: Rocks and Minerals

## 1. COLOR –

Is helpful when identifying minerals, but it is not a distinguishing characteristic because ...

- some minerals have many colors
- many different types of minerals can have the same color.

## 4. HARDNESS –

A mineral's resistance to being scratched.

### Moh's Scale of Hardness

1 talc	6 feldspar
2 gypsum	7 quartz
3 calcite	8 topaz
4 fluorite	9 corundum
5 apatite	10 diamond

fingernail - 2.5      glass plate – 5.5  
penny – 3.0

A mineral's hardness rating is determined by what common items/minerals can or cannot scratch it.

**Aim:**

What  
properties  
are used  
to identify  
minerals?

## 2. STREAK –

The color of a mineral's powder when rubbed against a porcelain plate (streak plate)

can be any color, white, or the mineral might have no streak

## 5. BREAKAGE –

Cleavage: Mineral breaks into even or flat parallel surfaces.

Fracture: Mineral breaks rough or unevenly.

## 3. LUSTER –

How a mineral shines / reflects light.

Metallic (looks like a metal)  
or  
Nonmetallic  
(glassy, pearly, dull, earthy, etc.)

## 6. OTHER SPECIAL PROPERTIES –

1. crystal shape - some minerals clearly exhibit crystals in specific geometric shapes
2. magnetism – some minerals are attracted to a magnet
3. reaction to hydrochloric acid ( $\text{HCl}_{\text{aq}}$ ) – bubbles form
4. density – a few minerals have a uniquely high density

**SPECIAL NOTE:**  
A mineral's properties are a result of its internal arrangement of atoms and chemical composition\*\*