

Mohs Hardness Scale

Name _____

One of the most useful properties used for identification of a mineral is its hardness. The Mohs hardness scale measures a mineral's hardness by means of a simple scratch test.

Name the mineral that belongs in each step of the Mohs Hardness Scale chart.

Mohs Hardness Scale		
Hardness	Mineral	Common Tests
1		Fingernail will scratch it.
2		
3		Fingernail will not scratch it; a copper penny will.
4		Knife blade or window glass will scratch it.
5		
6		Will scratch a steel knife or window glass.
7		
8		
9		
10		Will scratch all common materials.

WORD BANK

Talc
Calcite
Apatite

diamond
Topaz
Feldspar/Orthoclase

Gypsum
Fluorite

Corundum
Quartz

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	