

WHAT MINERAL IS IT?

**specular
HEMATITE**

"Silvery"
hardness=5.5-6.5
(iron ore)

REDDISH
DARK BROWN
STREAK

GRAPHITE

Black to silvery gray. Fractures.
Smudges and feels slippery.
Hardness = 1. (*pencil lead*)

GRAY
STREAK

GALENA

Silvery to dark gray. Dense!
Cubic crystals, cubic cleavage.
Hardness=2.5. (*lead ore*)

MAGNETITE

Black. Metallic to dull luster.
Magnetic. Fractures.
Hardness=6. (*lodestone*)

BLACK
STREAK

PYRITE

Brassy yellow. Very dense.
Cubic crystals. Fractures.
Hardness=6-6.5. (*fool's gold*)

HORNBLende

Black, shiny, sparkly.
Two planes of cleavage.
Hardness = 5-6.

CLEAVAGE

BIOTITE MICA

Black to brown. Elastic.
One perfect cleavage plane.
Hardness = 2.5-3.0.

NO
CLEAVAGE

QUARTZ

Flint=gray, Jasper = red.
Conchoidal fracture. Dull luster.
Hardness=7.. (*chalcedony*)

HEMATITE

Dark gray to rusty red.
Dull luster. Sometimes "silvery."
Hardness=5.5-6.5. (*iron ore*)

REDDISH
DARK BROWN
STREAK

LIMONITE

Yellowish to rusty brown.
Dull luster.
Hardness=6. (*goethite*)

BROWN
STREAK

START
HERE

BASIC
COLOR

DARK

LIGHT

METALLIC
LUSTER

NON-METALLIC
LUSTER

RUSTY
LUSTER

WILL SCRATCH
GLASS

WILL NOT
SCRATCH GLASS

CLEAVAGE

Pink, gray, white, even blue.
Two cleavage planes at ~ 90°.
Hardness=6. (*orthoclase, plagioclase*)

FELDSPAR

NO
CLEAVAGE

Milky, rose, smoky, optical, etc.
Hexagonal crystals, but fractures.
Hardness = 7. Glassy luster

QUARTZ

1
CLEAVAGE

Cloudy white to pink (*Alabaster*).
Non-elastic. (*Selenite if transparent*)
Hardness=2. White streak.

GYPSUM

Colorless to silvery.
One perfect cleavage plane. Layers
Hardness=4. Elastic.

MUSCOVITE MICA

Colorless to white. Salty taste.
Cubic crystals, cubic cleavage.
Hardness=2.5. (*salt*)

HALITE

Colorless to white, gray, etc.
Cleavages not at 90°. (*rhombohedral*)
Hardness=3. Fizzes in HCl acid.

CALCITE

Purple to green to colorless.
Glassy luster. Octahedral cleavage.
Hardness=4. Will not fizz in HCl acid.

FLUORITE

White to greenish gray.
Feels soapy. Pearly luster.
Hardness=1. (*soapstone*)

TALC

White, but often stained.
Dull luster. Earthy odor when damp.
Hardness=2. (*chalky*)

KAOLIN

Yellow, smells like
matches when
scratched
hardness=2

SULFUR

