

Copper



- Streak:** Reddish/brown
Fluorescence: No
Hardness: Fairly soft – can sometimes be scratched by fingernail
Magnetic: No

General information:

Copper is often found in basic (not acidic) volcanic rocks. One of the first ores to be used to make tools. Its high conductivity still makes it very useful for modern tools such as electronics.

Fluorite



- Streak:** White-gray
Fluorescence: Some samples fluoresce (usually will look blue or violet under UV light)
Hardness: Can scratch a penny, but not glass
Magnetic: No

General information:

Fluorite forms in hydrothermal veins (places where there is water and heat) or around hot springs. It may be found in colors ranging from purple to white to green.

Halite



- Streak:** White
Fluorescence: Some samples may glow very slightly
Hardness: Soft – some samples may be scratched by a fingernail, but it cannot scratch a penny
Magnetic: No

General information:

Halite is an evaporate mineral that forms when water in a salt lake or lagoon dries out. It has a great range in colors, but always has a white streak.

Hematite



- Streak:** Dark cherry red
Fluorescence: No
Hardness: Hard – can scratch glass
Magnetic: No

General information:

Hematite is often formed in relation to hydrothermal vents (places with hot water) or precipitated from iron-rich water. It is the most important source of iron ore in our world.

Magnetite

Streak: Black
Fluorescence: No
Hardness: Hard – can scratch glass
Magnetic: Yes

General information:

Magnetite is usually found in igneous (volcanic) rocks. It has two distinct iron ions in its crystal structure. This creates an electric current, which causes Magnetite to be a natural magnet.

Opal

Streak: White-gray
Fluorescence: Yes (often yellow or green in UV light)
Hardness: Hard – can scratch glass
Magnetic: No

General information:

Opal forms at low-temperature hot springs. Technically this is a “mineraloid” because it does not have a true crystal structure, and still contains water. The amount of water in the stone is an indicator of at what temperature the rock was when it formed.

Quartz

Streak: White-gray
Fluorescence: No
Hardness: 7 (very hard – can scratch glass)
Magnetic: No

General information:

Quartz is one of the earth’s most abundant minerals and makes up twelve percent of its crust. It can be found in a wide variety of colors and formations, some of which are considered fairly valuable.