

Minerals Detective Information Sheet for Mystery Minerals

Fluorite:

Color: colorless, but can have the following colors because of impurities: green, purple, blue, yellow, pink, brown, & black

Feel: smooth or rough feeling

Streak: white

Smell: does not smell

Luster: glassy

Hardness: 4

Quartz:

Color: water-clear, but can have a variety of color because of impurities. For example, purple quartz is known as amethyst, white is milky quartz, black is smoky quartz, pink is rose quartz, and yellow/orange is citrine.

Feel: smooth and sometimes sharp

Streak: white

Smell: earthy to sour

Luster: glassy

Hardness: 7

Calcite:

Color: silvery, white or clear metal belonging

Feel: smooth but gritty

Streak: white

Smell: earthy

Luster: glassy

Hardness: 3-4

Gypsum:

Color: clear to white

Feel: smooth & glassy

Streak: white

Smell: earthy/powdery

Luster: glassy to chalky

Hardness: 1.5-2.0

Bauxite:

Color: reddish brown, white, tan & tan-yellow

Feel: gritty/rough

Streak: brown to brownish red

Smell: little smell

Luster: rather earthy & dull (a metallic mineral)

Hardness: 1-3

Magnetite:

Color: Black or dark reddish brown

Feel: rough

Streak: black

Smell: none

Luster: dull to metallic

Hardness: 6

Halite:

Color: colorless to light gray or silvery white

Feel: smooth to bumpy

Streak: no streak

Smell: earthy to no smell

Luster: glossy (shines like glass)

Hardness: 2-2.5

Talc:

Color: white, greenish, gray or black

Feel: smooth, soft and somewhat greasy to the touch

Streak: white

Smell: earthy to powdery

Luster: pearly

Hardness: 1

Galena:

Color: blue-gray

Feel: smooth but gritty

Streak: gray to black

Smell: earthy to sour

Luster: shiny & metallic

Hardness: 2.5

Mystery Mineral Identification

Use your tools to study the physical properties of the mystery minerals.

Mystery Mineral	Color	Feel	Streak	Smell	Luster	Hardness	Magnetic? (Yes or No)
1.							
2.							
3.							
4.							
5.							
6.							
7.							
	Color white, black, gray, green yellow, blue, red, orange, brown, pinkish, purple, turquoise, etc.	<u>Feel (Texture)</u> • Gritty-sandy • Powdery-earthly or chalky • Smooth-glassy • Smooth & sticky-waxy • Sharp-metallic	<u>Streak</u> Color of the mineral when it is scratched across a streak plate.	<u>Smell</u> • Earthy • Sour • Sweet • Rotten egg • other	<u>Luster</u> • glassy/glossy • earthy/chalky-dull • metallic-looks like metal • waxy/silky/pearly- has a muted shine	<u>Hardness</u> Moh's Scale (1-10) Mineral scratched by 1 2 fingernail 3 penny 4 steel nail 5 glass 6 glass 7-10 Mineral will scratch steel/glass	<u>Magnetic</u> Attracts to a magnet or has flecks of metals that, with enough content, would likely make it magnetic