

I am light green, in color, with sugary (or granular) crystals. I have a hardness near that of the ceramic plate (7), and I fracture rather than breaking into geometric structures. I am **OLIVINE**, and I am a major component of the oceanic crust.



I am dark green, almost blackish in color. I have two major directions of “cleavage” at near 90 degree angles (right angles). This means that when I break, I form rectangles, making right angles at my edges. I am also very hard, close to 6 on the hardness scale. I will scratch the glass plate. When I am scratched on the streak plate, I leave a white powder. I am **PYROXENE**, and I like to be in rocks with olivine, like those that make up the oceanic crust.





I am very thin, forming sheets. This is because I have one main direction of cleavage (the way I break, which is apart in single sheets, forming these very thin, flexible layers). I am generally dark, black, in color, and I am very soft, 2.5 - 3 on Moh's hardness scale. I am **BIOTITE**, and I am a major mineral that forms part of the continental crust. I occur in the rock called "granite".



I am very thin, forming sheets. This is because I have one main direction of cleavage (the way I break, which is apart in single sheets, forming these very thin, flexible layers). I am generally light (white, pale green, gold) in color, and I am very soft, 2.5 - 3 on Moh's hardness scale. I am a mineral in the same group, mica, as biotite. I am **MUSCOVITE**, and I am a major mineral that forms part of the continental crust. I occur in the rock called "granite".





I am tan, or white in color. I have very, very faint parallel lines on my sides that you might be able to see. I have two major directions of “cleavage” at near 90 degree angles (right angles). This means that when I break, I form rectangles, making right angles at my edges. I am also very hard, close to 6 on the hardness scale, I will scratch the glass plate. When I am scratched on the streak plate, I leave a white powder. I am **PLAGIOCLASE**, a feldspar mineral. I am a major mineral that forms part of the continental crust. I occur in the rock called “granite”.





I am pink in color. I have two major directions of “cleavage” at near 90 degree angles (right angles). This means that when I break, I form rectangles, making right angles at my edges. I am also very hard, close to 6 on the hardness scale, I will scratch the glass plate. When I am scratched on the streak plate, I leave a white powder. I am **ORTHOCLASE**, or POTASSIUM FELDSPAR,, a feldspar mineral, related to plagioclase. I am a major mineral that forms part of the continental crust. I occur in the rock called “granite”.





I am clear, or milky white in color. I am what you call, translucent, light can partially transmit through me, which is what makes me look whitish, or clear. I am very hard, a 7 on the hardness scale. You likely won't be able to see a streak left behind by me, because I am as hard as the ceramic streak plate. Instead, I will scratch the glass plate, and I might even scratch the ceramic plate. I break randomly, in curved fractures almost like the way glass breaks. In a slowly grown, well-formed crystal, I like to grow in the shape of a hexagon. I am **QUARTZ**, I am a major mineral that forms part of the continental crust. I occur in the rock called "granite".



I am greenish yellow in color. If you smell me, I smell like rotten eggs, but I am not bright yellow. I have a hardness of 5, which means that I will leave a streak on both the ceramic tile, and probably the glass plate, which will be like cream in its color. I am **SPHALERITE** (ZnS). I am used and mined in places like Tennessee for my Zn. The Sulfur in me is what makes me smell.



I am bright yellow, and very soft, only 2 on the hardness scale. This means, that you can scratch me with a penny, and maybe even your fingernail. Like the mineral sphalerite, I will smell like rotten eggs. This is because I am **SULFUR**. I come out of volcanoes.



I have a metallic luster, I look very much like a metal. I am made of pretty cubes, and I am very shiny. I am also, very, very, heavy. If you compare me in your hand to a mineral of similar size, you can tell just how much heavier I am. This is because I contain the element lead, and I am very dense. My hardness though, is only about 3 on the hardness scale. I am **GALENA**, and I am used in batteries and mined for my lead.



I am what you call “fool’s gold.” I look like gold (Au). I am shiny, I reflect light very well off of my cubic surfaces, and I am gold in color. I have a hardness near 6. I am **PYRITE**.



I will fizz if you have the instructor put acid on me. I am what shelly organisms make their shells out of. I am clear, and I break into diamond, or rhombus shapes. I am **CALCITE**, and I am found in rocks formed from the remains of shelly organisms living in the ocean.



I am green and translucent in your sample, though I can be many colors. Your dentist gives you a treatment made out of me, because I protect your teeth from decay. I am found in toothpaste, and my hardness is 4. I am **FLUORITE**.

