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| **Name** | **Hardness** | **Color** | **Streak** | **Crystal Pattern** | **Cleavage or Breakage** | **Misc. Properties** | **Luster Type** |
| Biotite  K (Fe, Mg)3 AlSi3 O10 (F, OH)2 | 2.5 | black to brown and yellow with weathering | white | monoclinic | cleavage is perfect in one direction producing thin sheets or flakes, fracture is not readily observed due to cleavage but is uneven |  | vitreous to pearly |
| Calcite  CaCO3 | less than 2.5 up to 3 | colorless with light shades of blue, yellow, pink, orange, red, brown, green, black, or gray | white | vary with trigonal patterns | cleavage perfect in three directions, creating rhombohedrons,  fracture is conchoidal | reacts with acid | vitreous to resinous |
| Corundum  Al2 O3 | 9 | can be white or colorless, blue, red, yellow, green, brown, purple, and pink; there are also instances of color zonation | white | trigonal | cleavage is absent, although there is parting which occurs in three directions. fracture is conchoidal |  | vitreous to adamantine |
| Fluorrichterite  Na2Ca(Mg, Fe)5Si8O22(OH, F)2 | 6 | dark green to blue green or less commonly brown, gray and black | white | monoclinic | cleavage is imperfect in two directions at nearly 60 and 120 degrees, fracture is uneven |  | vitreous to pearly to dull |
| Gypsum  CaSO4 -2(H2O) | 2 | white colorless or gray | white | monoclinic tabular, bladed, fibrous, or blocky crystals | cleavage is good in one direction and distinct in two,  fracture is uneven but rarely seen |  | vitreous to pearly |
| Halite  NaCl | 2 | mostly clear or white, but can be found in blue, pink, purple, yellow, and gray | white | isometric cubes | cleavage perfect in three directions forming cubes,  fracture is conchoidal | tastes salty | vitreous |
| **Name** | **Hardness** | **Color** | **Streak** | **Crystal Pattern** | **Cleavage or Breakage** | **Misc. Properties** | **Luster Type** |
| Kernite  Na2B4O6(OH)2-3H2O | 2.5-3 | white or gray to colorless | white | monoclinic | cleavage is perfect in two directions forming splintery fragments, fracture is splintery due to cleavage |  | vitreous to greasy |
| Meta-uranocircite  Ba(UO2)2(PO4)2 - 6-8H2O | 2- 2.5 | yellow to yellow green | pale yellow | monoclinic with tabular square crystals | cleavage is perfect in one direction,  fracture is uneven |  | vitreous to pearly or dull |
| Muscovite  KAl2(AlSi3O10)(F, OH)2 | 2 - 2.5 | white, silver, yellow, green and brown | white | monoclinic | cleavage is perfect in one direction producing thin sheets or flakes, fracture is not readily observed due to cleavage but is uneven |  | vitreous to pearly |
| Quartz  SiO2 | 7 | clear, cloudy, purple, pink, gray, brown, or black | white | trigonal and vary, most common pattern is hexagonal prisms | cleavage is very weak in three directions,  fracture is conchoidal |  | glassy to vitreous |
| Talc  Mg3Si4O10(OH)2 | 1 | green, gray, and white | white | never in large individual crystals, but in flattened tabular crystals | cleavage in one direction  fracture is uneven to lamellar |  | dull or pearly |
| Xenotime  YPO4 | 4-5 | shades of brown, gray, muted red, and yellow | pale brown, to yellow or red | tetragonal | cleavage is perfect in two prismatic directions,  fracture is uneven |  | vitreous to resinous |
| **Name** | **Hardness** | **Color** | **Streak** | **Crystal Pattern** | **Cleavage or Breakage** | **Misc. Properties** | **Luster Type** |
| Chalcopyrite  CuFeS2 | 3.5-4 | brassy yellow, tarnishes to iridescent blues, greens, yellows and purples | dark green | tetragonal | cleavage is poor in one direction, fracture is conchoidal and brittle |  | metallic |
| Copper  Cu | 2.5-3 | copper colored with weathered specimens tarnished green | reddish copper color | usually cubes and octahedrons | cleavage is absent, and fracture is jagged |  | metallic |
| Galena  PbS | 2.5+ | lead to silver gray, occasional blue tint | lead gray | isometric with cube and octahedron | cleavage perfect in four directions, fracture is uneven and rarely seen |  | metallic to dull |
| Graphite  C | 1-2 | black silver | black gray to brownish gray | hexagonal with tabular veins | cleavage is perfect in one direction, fracture is flaky |  | metallic to dull |
| Hematite  Fe2O3 | 5-6 | steel or silver gray to black in some forms and red to brown in earthy forms, sometimes tarnished with iridescent colors when in a hydrated form (called Turgite). | blood red to brownish red for earthy forms | trigonal, tabular | cleavage is absent, however, there is a parting on two planes, fracture is uneven. |  | metallic or dull in earthy and oolitic forms |
| **Name** | **Hardness** | **Color** | **Streak** | **Crystal Pattern** | **Cleavage or Breakage** | **Misc. Properties** | **Luster Type** |
| Magnetite  Fe3O4 | 5.5 - 6.5 | black | black | octahedrons | cleavage is absent although octahedral parting can be seen on some specimens, fracture is conchoidal | magnetic | metallic to dull |
| Pyrite  FeS2 | 6 - 6.5 | brassy yellow | greenish black | isometric cubes | cleavage is very indistinct, fracture is conchoidal |  | metallic |