

# I. Determinative Table for the Non-Silicate Minerals

## Ia. Non-Silicate Minerals with a Prominent Streak

Streak has a fetid smell and is pale yellow to brown; prominent cleavage in three directions. Resinous luster. H=3.5-4, G=4. May be massive or form equant crystals.	Pyrite
Lead gray streak and color, metallic luster. Perfect cleavage in 3 directions. H=2.5, G=7.6.	Galena
Dark black streak and color, sooty, with shiny metallic luster. Perfect cleavage in one direction. H=1, G=2.2. May be massive or occur as platy crystals.	Graphite
Black to dark brown streak and color. Usually magnetic. H=6, G=5.2.	Magnetite
Deep red to reddish brown streak; color varies from reddish brown to grey or black Luster is dull metallic, may be 'splendent' (as in 'specular hematite'). G=5.3, H=5.5-6.5.	Hematite
Brown to yellow-brown streak and color. Earthy, non-metallic luster. H=4-6, G=2.7-4.3. Generally massive or forming fine crystals. Actually not a mineral, but a mixture of several iron oxides and hydroxides.	Goethite
Green-brown to black streak; pale yellow to brass yellow color. Crystals often form cubes and pyrohedrons (with each face as a pentagon). Conchoidal to irregular fracture.	Malachite
Greenish black streak and brass yellow color, with a metallic luster that tarnishes to brown and purple. H=3.5-4, G=4.2. Usually massive.	Azurite
Grey to black streak; and bronze-yellow color and metallic luster that may have a reddish or brownish cast. Commonly magnetic. H=3.5-4.5, G=4.6. Usually massive.	Pyrrhotite

## Ib. Non-Silicate Minerals with an Inconspicuous Streak

Perfect rhombohedral cleavage. Streak may be colorless to light yellow or brown, and the mineral may be transparent, white, or yellow to pink, red or brown. H=3, G=2.7. Effervesces readily in cold, dilute HCl.	Calcite
Perfect rhombohedral cleavage, and commonly as rhombohedral crystals. Streak and mineral color may be colorless to light yellow, pink, or brown. H=3, G=2.8. Effervesces in cold HCl only when powdered.	Aragonite
Perfect cleavage in 3 directions, commonly forming octahedral fragments. Specimens may be colorless, purple, white, green, etc. H=4, G=3.2.	Fluorite
Transparent crystals are common, but may be white, red, or blue. Perfect cleavage in 3 directions, 90° apart, forming cubic fragments. Salty taste. H=2, G=2.2.	Halite
Transparent to white crystals, with perfect cleavage in one direction. Crystal forms vary considerably, and are commonly platy, bladed or prismatic. H=2, G=2.3.	Sphalerite

Table I Abbreviations: H = hardness; G = specific gravity.