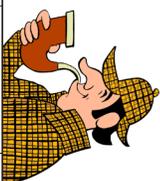




Be a Mineral Detective Known Mineral Properties



Mineral Name	Observations	Light Interaction	Streak	Hardness	Cleavage	Smell	Ice	Solubility	Remarks
Quartz (Rose)	Pinkish to colorless; Shiny; No flat surfaces	Opaque to translucent	Colorless	7	None	None	Average	Insoluble in water and acid	Sand on most beaches is made of quartz; Variations are used in jewelry
Feldspar (Microcline)	Pinkish white; Some very flat surfaces; Slightly shiny	Opaque	Colorless	6	Good to perfect	None	Slow to average	Insoluble in water and acid	Major component is granite, which is used in building construction
Calcite (Iceland spar)	Clear, colorless crystal; Shaped like a squashed box	Transparent; Double Refractive	Colorless to white	3	Perfect	None	Average to fast	Insoluble in water; soluble in acid	Perfect cleavage; Cleavage not at 90 degrees; Primary mineral in limestone
Mica (muscovite)	Colorless to metallic brown; Thin and very flat; Layered	Transparent to translucent	Colorless	2-2.5	Perfect	None	Slowest of group	Insoluble in water and acid	Thin, flat, sheet-like flexible pieces peel off easily
Halite	Clear, colorless crystal; Shaped like a perfect box	Transparent to translucent	Colorless to white	2-2.5	Perfect	None	Very fast	Soluble in water and acid	Commonly known as salt; Perfect 90-degree cleavage
Hematite	Dark red-brown to silver; Dull, not shiny	Opaque	Red to silver	3-6	None	None	Average	Insoluble in water and acid	Can look earthy or metallic; Metallic version used in jewelry
Sulfur	Bright yellow; Dull, not shiny	Opaque	White to yellow	1.5-2.5	None	Rotten eggs	Average	Insoluble in water and acid	Used to make explosives, fertilizer and sulfuric acid
Pyrite	Brass yellow to metallic gold	Opaque	Green to black	6-6.5	None	None	Above average to fast	Insoluble in water and acid	Known as fool's gold

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