

## Common Mineral Identification Chart

	Streak	Hardness	Cleavage/ Fracture	Other Properties	Uses	Mineral	
<b>Metallic Luster</b>	Scratched by fingernail	Black	1	1-Cleavage	Greasy feel, writes on paper	Pencil "lead", steel making, lubricant	Graphite
	Scratched by penny	Black	2.5	3-Cubic Cleavage	Bright silver, heavy	Lead ore	Galena
	Won't scratch glass	Gray to Black	3	Rough Fracture	"Peacock ore" Bronze color tarnishes to bright blues and purples.	Copper ore	Bornite
		Greenish Black	3.5	Rough Fracture	Softer and darker yellow than pyrite.	Copper ore	Chalcopyrite
	Will scratch glass	Greenish Black	6	Rough Fracture	"Fools Gold", Brassy yellow. Often forms cubic crystals	Production of sulfuric acid	Pyrite
		Black	6	Rough Fracture	"Lode Stone", Magnetic.	Iron ore	Magnetite
		Rust Red	6	Rough Fracture	Can also be nonmetallic. Color ranges from bright silver to brick red.	Iron ore, jewelry	Hematite

# Robert Krampf the Happy Scientist

		Streak	Hardness	Cleavage/ Fracture	Other Properties	Uses	Mineral
<b>Non-Metallic Luster</b>	Scratched by fingernail	White	1	1-Cleavage	Earthy or pearly luster. Soapy feel.	Baby powder, paints, ceramics	Talc
		Yellow Brown	1 to 5.5	Earthy Fracture	Earthy luster, yellow to almost black. Technically not a mineral, as it lacks a crystalline structure.	Iron ore	Limonite
		White	2	1-Good Cleavage	Vitreous to earthy luster	Plaster	Gypsum
		White	2.5	3-Cubic Cleavage	Dissolves in water, salty taste	table salt	Halite
		White	2	1-Perfect Cleavage	Peels apart in thin, transparent sheets	Insulation	Muscovite
	Scratched by penny	White	3	3-Perfect Cleavage	Vitreous luster. Breaks into rhombohedrons. Fizzes in dilute HCl.	Cement	Calcite
		White	3	1-Cleavage	Heavy,	Paints, oil drilling lubricant	Barite
	Won't scratch glass	Yellow	3.5	6-Cleavage	Resinous luster,	Zinc ore	Sphalerite
		White	4	4-Cleavage	Vitreous luster, commonly purple, green, yellow, or clear.	Fluorine for toothpaste, Steel making	Fluorite
		White	5	Fracture	Vitreous or earthy luster,	Phosphate for fertilizer	Apatite

# Robert Krampf the Happy Scientist

<b>Non-Metallic Luster</b>		Streak	Hardness	Cleavage/ Fracture	Other Properties	Uses	Mineral
	Will scratch glass	None	6	2 Good Cleavage	Smooth cleavage planes	ceramics, porcelain	Orthoclase
		None	6	2 Good Cleavage	Striations on cleavage planes	ceramics	Plagioclase
		None	6 - 7.5	Uneven Fracture	Vitreous to resinous luster	Abrasives, gemstone	Garnet
		None	7	Conchoidal Fracture	Vitreous luster, six sided crystals,	glass, source of silicon	Quartz
		None	7	Uneven Fracture	Vitreous luster, crystals have strong striations running lengthwise.	gemstone	Tourmaline
		None	7	Uneven Fracture	Often forms cross shaped crystal twins	jewelry	Staurolite