Common Mineral Identification Chart

Metallic Luster		Streak	Hardness	Cleavage/ Fracture	Other Properties	Uses	Mineral
	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

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

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fertilizer

Apatite

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

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