

TABLE 1.2 METALLIC AND SUBMETALLIC LUSTRE

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Hardness	Streak	Cleavage directions	Other Properties C Colour H Hardness SG Specific Gravity	Mineral
H ≥ 5	Greenish black to brownish black	POOR or ABSENT	C Brass or dull gold, tarnishes bronze. H 6-6.5. SG 5. Frequently massive, may occur in cubes or octahedrons, flat surfaces may be striated.	PYRITE
	Black		C Greyish black. H 5.5-6.5. SG 5.2. Frequently massive, magnetic.	MAGNETITE
	Red to reddish brown		C Steel grey, silvery with a reddish hint, or bright silver. H 5-6. SG 5.3. Frequently massive. Note: Can also be dark red with an earthy lustre.	HEMATITE
H < 5 Does not scratch glass	Greenish black	POOR or ABSENT	C Bright yellow gold, tarnishes iridescent. H 3.5-4. SG 4.2. Frequently massive.	CHALCOPYRITE
	Black to dark grey		C Dark silver grey to black. H 1-2. SG 2.1. Frequently massive, prone to leaving grey residue on surfaces, clothing, and hands.	GRAPHITE
	White to pale yellowish brown <i>Check for a rotten egg smell.</i>	6 <i>Perfect</i>	C Variable. Silver grey, brown shades, red shades, yellow shades. H 3.5-4. SG 4.0. Red/yellow/brown varieties may have adamantine or resinous lustre.	SPHALERITE
	Lead grey	3 at 90° <i>Perfect cubic cleavage</i>	C Lead grey. H 2.5. SG 7.6. Very heavy. Cubic cleavage and crystal form often visible. Cube corners are clipped to form triangles.	GALENA

TABLE 1.3 NON METALLIC LUSTRE: Dark & Medium Colours

BLACK, BROWN, DARK to MEDIUM GREEN, DARK to MEDIUM BLUE

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Hardness	Cleavage directions	Other Properties C Colour L Lustre St Streak H Hardness SG Specific Gravity	Mineral
H ≥ 5	ABSENT	C Olive green, translucent or transparent. L Vitreous. St Colourless. H 6.5-7. SG 3.3. <i>May resemble green granulated sugar.</i>	OLIVINE
	2 at 56° and 124° <i>Prismatic cleavage</i>	C Black to greenish black. Opaque. L Vitreous. St Pale grey to colourless H 5-6. SG 2.9-3.4. <i>Crystals are prismatic and elongated</i>	AMPHIBOLE (var. hornblende)
	2 at nearly 90° <i>Prismatic cleavage</i>	C Black to greenish black. Opaque. L Vitreous. St Light greenish grey to colourless. H 5.5-6. SG 3.2-3.6. <i>Crystals are prismatic but stubby.</i>	PYROXENE (var. augite)
	POOR	C Green, brown, blue, or purple. Translucent or transparent. L Vitreous. St Colourless H 5. SG 3.2. <i>May display hexagonal prisms, conchoidal fracture.</i>	APATITE
H < 5	4 <i>Octahedral cleavage</i>	C Green, blue, purple, grey, or yellow. Translucent to transparent. L Vitreous. St Colourless H 4. SG 3.2-3.6. <i>May form as cubes.</i>	FLUORITE
	1 <i>Perfect basal cleavage</i>	C Brown to black. L Pearly to vitreous. H 2.5-3. SG 2.7-3.3. <i>Breaks apart into thin elastic sheets. Thin sheets may be translucent.</i>	BIOTITE (mica)

TABLE 1.4 NON METALLIC LUSTRE: Light Colours

PINK, PALE SHADES, WHITE

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Hardness	Cleavage directions	Other Properties C Colour L Lustre St Streak H Hardness SG Specific Gravity	Mineral
H ≥ 6 Scratches glass	ABSENT <i>Conchoidal fracture</i>	C Colourless, grey, white, pink, purple. Translucent to transparent. L Vitreous. St Colourless. H 7. SG 2.6. <i>May occur as hexagonal prisms capped with pyramids.</i>	QUARTZ
	2 at nearly 90° <i>Prismatic cleavage</i>	C White to light grey. Translucent to transparent. L Vitreous. St Colourless H 6-6.5. SG 2.6. <i>Striations may be present.</i>	PLAGIOCLASE FELDSPAR (var. albite)
	2 at 90° <i>Prismatic cleavage</i>	C Salmon coloured, pink, green, or white. Opaque. L Vitreous. St Colourless. H 6-6.5. SG 2.5-2.6. <i>Wavy coloured lines on cleavage surfaces.</i>	POTASSIUM FELDSPAR
H < 5 Does not scratch glass	4 <i>Octahedral</i>	C Green, blue, purple, grey, or yellow. Translucent to transparent. L Vitreous. St Colourless H 4. SG 3.2-3.6. <i>May form as cubes.</i>	FLUORITE
	3 not at 90° <i>Perfect rhombohedral cleavage</i>	C Colourless, white, yellow. Translucent to transparent. L Vitreous. St White. H 3. SG 2.7. <i>Reacts to hydrochloric acid by fizzing.</i>	CALCITE
	1 <i>Perfect basal cleavage</i>	C Colourless, light brown, yellow. L Pearly to vitreous. St White. H 2.5-3. SG 2.8. <i>Breaks apart into thin elastic sheets. Thin sheets may be translucent or transparent.</i>	MUSCOVITE (mica)
	3 at 90° <i>Perfect cubic cleavage</i>	C Colourless, white, blue. Translucent to transparent. L Vitreous. H 2.5. SG 2.2. <i>Salty taste. Water soluble.</i>	HALITE
	3* <i>*1 perfect, 2 poor.</i>	C Colourless to white. Transparent. L Vitreous, pearly, or silky. St White. H 2-2.5. SG 2.7. <i>Water soluble.</i>	GYPSUM (var. selenite)