Minerals

Diamond

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Crystallography:

Isometric; 4/m$\bar{3}$2/m. Crystals usually octahedral, but can be cubic or dodecahedral; curved faces are frequently observed.

Physical Properties:

Cleavage: {111} perfect; 4-cleavage directions. Fracture conchoidal; brittle.
Hardness: 10.0 (hardest mineral known).
Specific Gravity: 3.51.
Luster: Adamantine; uncut crystals have a greasy appearance.
Color: Often pale yellow or colorless; may also be pale shades or red, orange, blue, green, or brown.
Streak: White.

Composition/Features:

Pure carbon. Diamond is readily distinguished from minerals resembling it by its great hardness, adamantine luster, and cleavage. Insoluble in acids and alkalis.

Occurrence/Use:

Diamond is most commonly found in alluvial deposits or in situ in altered peridotite rock called kimberlite. Used as an abrasive in cutting and grinding tools, as well as a premier gemstone.