



# Minerals

## Graphite

C

### Crystallography:

Hexagonal;  $6/m2/m2/m$ . Usually in foliated or scaly masses, but may be radiated or granular. Crystals tabular, of hexagonal outline with prominent basal plane.

### Physical Properties:

**Cleavage:** {0001} perfect; thin laminae flexible but not elastic. Greasy feel.

**Hardness:** 1.0-2.0.

**Specific Gravity:** 2.23.

**Luster:** Metallic, sometimes dull earthy.

**Color:** Steel-gray to iron black; opaque.

**Streak:** Black.

### Composition/Features:

A native element composed of carbon, graphite is easily recognized by its color, softness, foliated nature and greasy feel. Readily marks paper. Generally infusible and insoluble in acids.

### Occurrence/Use:

Principally occurs in metamorphic rocks such as crystalline limestones, schists and gneisses or in hydrothermal veins. Used in the manufacture of refractory crucibles for the metals industry, as "lead" in pencils and as a lubricant.