Name : Carbon

Symbol : C

Atomic number (Z) : 6

Atomic mass : 12.011

Group : 14

Period : 2

block : p

Color : Black

Phase : solid

Oxidation states : +4, +3,+2, +1,0, -1, -2, -3, -4

Electronegativity : Pauling scale: 2.55

Melting point :

Boiling point :

Density at stp : amorphous: 1.8–2.1 g/cm3

graphite: 2.267 g/cm3

diamond: 3.515 g/cm3

Triple point : 4600 K, 10,800 kPa

Critical point :

Heat of fusion : graphite: 117 kJ/mol

Heat of vaporization :

Molar heat capacity : graphite: 8.517 J/(mol•K),diamond: 6.155 J/(mol•K)

Ionization energies : 1st: 1086.5 kJ/mol

Covalent radius : sp3: 77 pm

sp2: 73 pm

sp: 69 pm

Van der Waals radius : 170 pm

Speed of sound : diamond: 18,350 m/s (at 20 °C)

Crystal structure : graphite: simple hexagonal (black)

Magnetic ordering : diamagnetic

Discovery : Egyptians and Sumerians(3750 BCE)

Named by : Antoine Lavoisier(1789)