

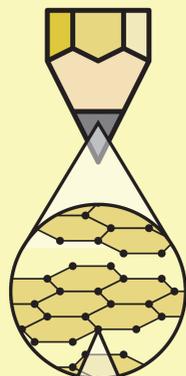
CARBON STRUCTURES

One of the softest natural materials, graphite is used in pencil lead.

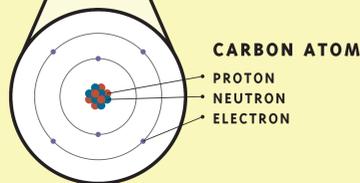
Graphite is a good conductor of electricity.

Graphite is also used in medicine to absorb poisons and toxins.

GRAPHITE



GRAPHITE STRUCTURE GREATLY MAGNIFIED



CARBON ATOM
PROTON
NEUTRON
ELECTRON

A single human hair is 50,000 times wider than a carbon nanotube.

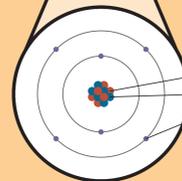
Carbon nanotubes are useful in electronics and optics.

Carbon nanotubes are extremely strong and conduct electricity well.

BUCKYBALL



BUCKYBALL STRUCTURE GREATLY MAGNIFIED



CARBON ATOM
PROTON
NEUTRON
ELECTRON

The form of a buckyball closely resembles a soccerball.

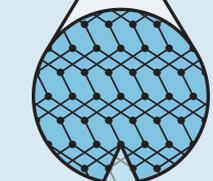
Buckyballs are named after the architect Buckminster Fuller.

Buckyballs have potential uses in medicine and may help fight cancer.

DIAMOND



DIAMOND STRUCTURE GREATLY MAGNIFIED



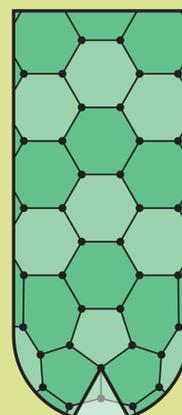
CARBON ATOM
PROTON
NEUTRON
ELECTRON

Formed at high pressures, diamond is one of the hardest known natural materials.

Diamonds are sometimes used in drill bits to make them very hard.

Diamonds are excellent electrical insulators.

CARBON NANOTUBE



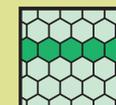
CARBON NANOTUBE STRUCTURE GREATLY MAGNIFIED



CHIRAL

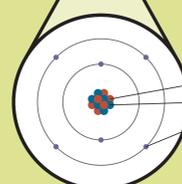


ARMCHAIR



ZIGZAG

TYPES OF CARBON NANOTUBES



CARBON ATOM
PROTON
NEUTRON
ELECTRON