

NITROGEN FAMILY



ELECTRONIC CONFIGURATION



Valence Electron = 5

BORAZONE

Borazone(cBN) has graphite like structure and it is harder than diamond. So, it is used for cutting the diamond.



Half life of Bismuth is very high. If 100 gm of Bismuth had been present at the beginning of universe, 14 billion years ago. About 99.9999 gm would be left today.

INERT NATURE OF N_2 ($N \equiv N$)

Triple bond exists between Nitrogen, which is very hard to break. It reacts only when suitable conditions are met for reaction.

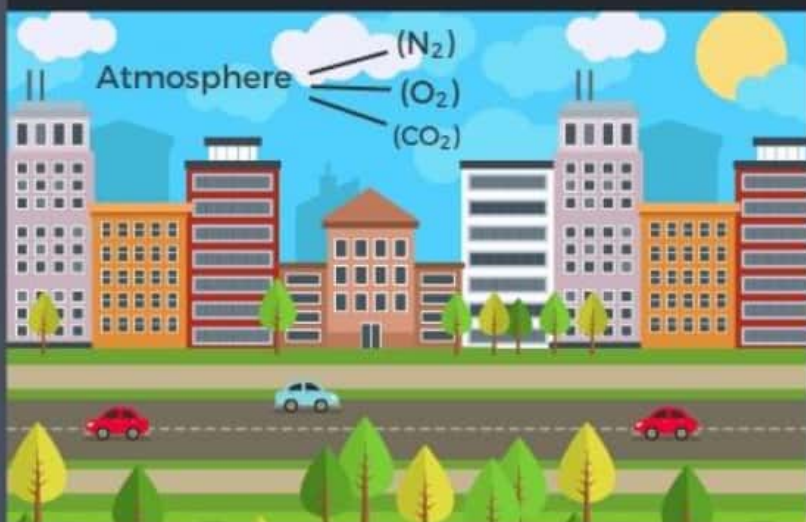


TEST OF PROTIENS

Nitric acid attacks the protien and forms Xanthoprotien which is yellow is colour.

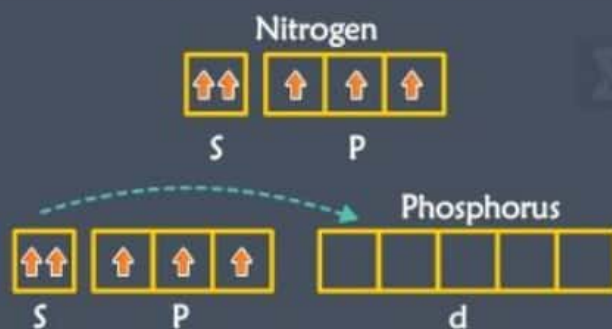


EARTH ATMOSPHERE CONTAINS 71% NITROGEN



PENTAHALIDES

Nitrogen does not show pentahalides because of the absence of d-orbitals. Phosphorous shows pentahalides by exciting s electrons into d-orbitals.



TNT



Tri Nitro Toulene is used in explosives.

USES

Red phosphorus is used in matchbox.



Arsenic is a poisonous gas therefore, it is used as pesticides for trees.

P_2O_5 is used as a drying agent, but it is corrosive to use outside the labs.

