

NOBLE GASES

2
He
4.0026
Helium

10
Ne
20.179
Neon

18
Ar
39.948
Argon

36
Kr
83.80
Krypton

54
Xe
131.293
Xenon

86
Rn
222.017
Radon

Also known as **inert gases** as their atoms don't combine with other atoms in chemical reaction



First Noble Gas Compound - Xenon

Bartlett surprised every one by synthesizing **XePtF₆**

Atomic Size

Size increases as you go down the group.



Helium

Helium is used in **ballons**. Initially hydrogen was used which is much lighter than Helium but due to its **flammability**, we shifted to **Helium**.



Electronic Configuration

These elements have **8 electrons** in valence orbital which is considered stable.

Exception : Helium has two valence **electrons**

General electronic configuration



Krypton

Light bulb containing **krypton gas** can produce a bright white light useful for photography and runaway **lights**.

Neon Light

Neon Lights which we use in our streets are produced by **ionising inert** gas by applying voltage.



Argon

Do you know?

There are 22 known isotopes of argon ranging from **argon-31** to **argon-51** and **argon-53**.



Radon

Radon is radioactive and can enter homes through basements after **radioactive** decay of rocks below the **earth**.

Reactivity of Xenon

1 Xenon acts as fluorinating agent



2 Xenon acts as fluoride acceptor



3 Xenon acts as fluorine donar

