

2
He
Helium

10
Ne
Neon

18
Ar
Argon

36
Kr
Krypton

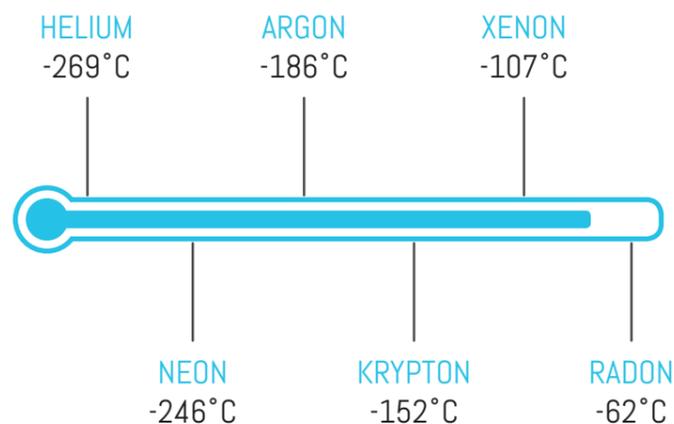
54
Xe
Xenon

86
Rn
Radon

Group 18 - The Noble Gases

THE GROUP 18 ELEMENTS ARE ALL ODOURLESS, COLOURLESS, MONOATOMIC GASES WITH A VERY LOW CHEMICAL REACTIVITY

BOILING POINTS



THE NOBLE GASES ARE ALL **MONOATOMIC** AND **RARELY FORM COMPOUNDS**

THE COLOURS IN 'NEON' SIGNS ARE CAUSED BY IONISED NOBLE GASES

He Ne Ar Kr Xe

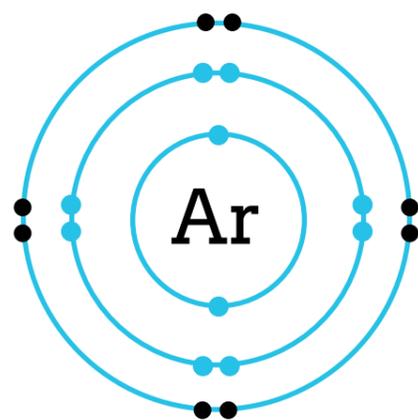
1
H
75%

2
He
23%

3
O
1%

HELIUM
IS THE
SECOND MOST ABUNDANT ELEMENT
IN THE UNIVERSE

RADON IS RADIOACTIVE
AND CAN ENTER HOMES THROUGH BASEMENTS AFTER **RADIOACTIVE DECAY OF ROCKS** BELOW THE EARTH



ALL OF THE GROUP 18 ELEMENTS HAVE A FULL OUTER SHELL OF ELECTRONS

THE GROUP 8 ELEMENTS ARE **VERY UNREACTIVE** AS THEY ALREADY HAVE A **FULL VALENCE ELECTRON SHELL**

-269 °C HELIUM HAS THE LOWEST BOILING POINT OF ALL ELEMENTS IN THE PERIODIC TABLE

USES OF THE NOBLE GASES



HELIUM
BALLOONS



NEON
NEON LIGHTS
REFRIGERANT



ARGON
MEDICAL LASERS
LIGHT BULBS



KRYPTON
CAMERA FLASHES



XENON
MEDICAL IMAGING