

5  
B

Boron

# Group 13 - The Icosagens

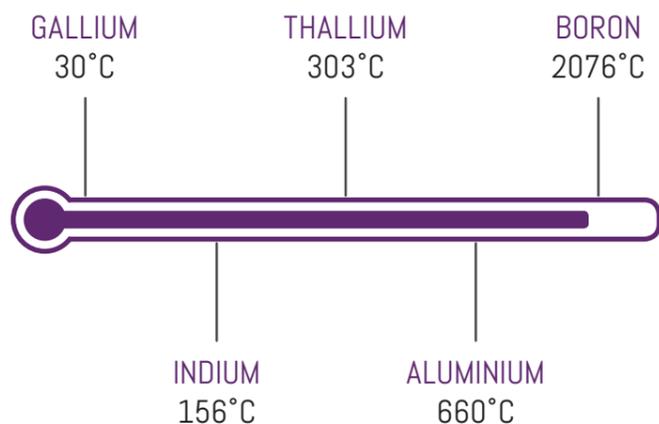
EXCEPT FOR BORON, THE GROUP 13 ELEMENTS ARE ALL METALS, KNOWN AS 'POOR METALS' DUE TO THEIR LOW MELTING POINTS & HARDNESS

13

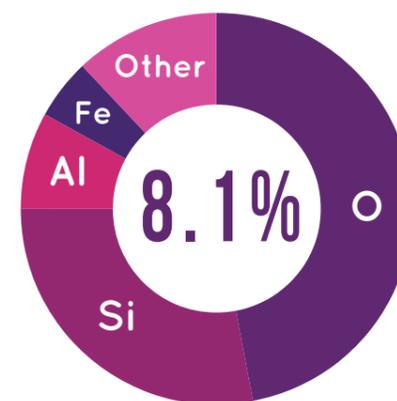
Al

Aluminium

## MELTING POINTS



BORON IS A METALLOID AND THE ONLY NON-METAL IN GROUP 13

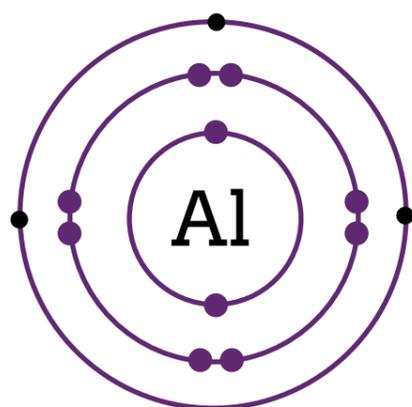


ALUMINIUM IS THE THIRD MOST ABUNDANT ELEMENT IN THE EARTH'S CRUST AND THE MOST ABUNDANT METAL

31

Ga

Gallium



ALL OF THE GROUP 13 ELEMENTS HAVE THREE VALENCE ELECTRONS

GROUP 13 ELEMENTS REACT WITH OXYGEN TO FORM METAL OXIDES



1 GRAM



THE AVERAGE LETHAL DOSE FOR THE TOXIC ELEMENT THALLIUM

81

Tl

Thallium

GALLIUM IS SOLID AT ROOM TEMPERATURE BUT IS LIQUID AT A LARGER RANGE OF TEMPERATURES THAN ANY OTHER ELEMENT



## USES OF THE ICOSAGENS



BORON

GLASSWARE  
DETERGENT



ALUMINIUM

DRINK CANS  
AIRCRAFT BODIES



GALLIUM

ELECTRONIC COMPONENTS



INDIUM

TOUCH SCREENS



THALLIUM

USED TO BE USED IN RAT POISON

113

Uut

Ununtrium