N Nitrogen

Group 5 - The Pnictogens

THE GROUP 5 ELEMENTS ARE ALL SOLIDS APART FROM NITROGEN, AND ARE A MIX OF NON-METALS, METALLOIDS AND A METAL

15 Phosphorus

> 33 As Arsenic

51 Sb Antimony

83 Bi Bismuth

115 Uup Ununpentium

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MELTING POINTS **NITROGEN BISMUTH ANTIMONY** -210°C 271°C 631°C **PHOSPHORUS ARSENIC** 44°C 603°C

BISMUTH IS THE ONLY ELEMEN PRESENT IN GROUP FIVE

OF THE **GROUP5 ELEMENTS** HAVE FIVE VALENCE ELECTRONS

ANCIENT EGYPTIANS USE THE ANTIMONY COMPOUND BNI AKE M



GRAMS OF ARSENIC



GEN MOST ABUNDANT ELEMENT IN THE EARTH'S ATMOSPHERE

THE PNICTOGENS FORM PNICTIDES WITH MOST ELEMENTS

PNICTOGENS FORM: **HYDRIDES**

WITH HYDROGEN OXIDES

HALIDES

WITH HALOGENS

PHOSPHORUS CONTAINING **CALCIUM PHOSPHATE** COMPOUNDS MAKE UP



0 F BONE

USES THE PNICTOGENS



NITROGEN

EXPLOSIVES FERTILISERS



PHOSPHORUS

SAFETY MATCHES



ARSENIC

AMMUNITION MANUFACTURING SMOKE BOMBS



ANTIMONY

COSMETICS



FLAME RETARDENTS

BISMUTH X-RAY SHIELDS MEDICINES