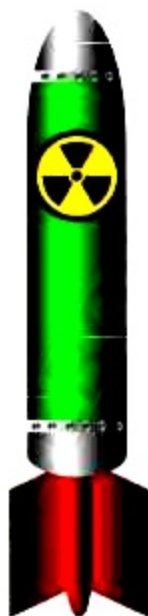


HYDROGEN-H

1

Atomic Number



Hydrogen Bomb

Clue: Hydrogen is used to make highly destructive hydrogen bombs. This picture shows that hydrogen bomb is the number 1 destructive bomb till date. This picture shows that atomic number of element hydrogen is 1.

Facts about Hydrogen

The name Hydrogen is derived from the Greek words '**Hydro**' and '**Genes**' which together mean '**Water Forming**' because water molecules contains atoms of hydrogen. It is the lightest element known. It is the most abundant element in the universe. Almost all stars and planets in this universe consist of hydrogen. In nature hydrogen is mainly found in the form of water and hydrogen gas. Pure hydrogen gas can be prepared in the lab by electrolysis of water. Hydrogen (Protium) is the only element in periodic table having 0 neutrons in its nucleus.

Type of Element	: Non-Metal
Atomic Number	: 1
Electronic	: 1 or
Configuration	: $1s^1$
Atomic Mass	: 1.0079 g/mol
Group, block	: 1, s-block
Period	: 1
Valency	: 1
Oxidation States	: -1, 0, +1
Isotopes	: 3 (Protium, H^1 , Deuterium, H^2 and Tritium, H^3)
Discovered by	: English chemist Henry Cavendish in 1766



Uses of Hydrogen:

1. Hydrogen is used in manufacture of **syn gas** ($CO + H_2$) and **ammonia gas**.
2. It is also used as important rocket fuel.
3. It is also used as fuel in **fuel cells** which is used to produce electricity.

Multiple Choice Question

Question 1: Very pure hydrogen (99.9%) can be made by which of the following processes?

- a) Mixing natural hydrocarbon of high molecular weight.
- b) Electrolysis of water.
- c) Reaction of salt like hydrides with water.
- d) Reaction of methane with steam.