

HW
30/06/2021

Ch-2 Matter in our surroundings

Q1 Mention five characteristics of Element.

Ans The five characteristics of Element are:-

(i) ~~Metals are solids~~

(ii) The pure substance which is made up of one kind of atoms only is called an element. For eg:- hydrogen, carbon, gold etc

(iii) Elements can be classified into metals, non-metals and metalloids on the basis of their properties.

(iii) Metals are solids at room temperature except mercury, which is a liquid at room temperature. Non-metals are either gases, liquids or solids at room temperature. Bromine is liquid at room temperature. Boron, Carbon, sulphur are solids. Hydrogen, Oxygen and nitrogen are gases. Metalloids are the elements which have properties of both metals and non-metals.

(iv) Metals are malleable which means that they can be hammered into thin sheets. For eg: Gold and silver are the most malleable metals. Non-metals are brittle. They are not malleable or ductile. They break into pieces when hammered. They are not metallic. They look like metals but they are brittle like non-metals.

(v) Metals have high melting point and boiling points. But Sodium and Potassium have low melting point. Gallium has such a low melting point that it starts melting in hand by the heat of our body. Non-metals have comparatively low melting and boiling points except boron, graphite and diamond have high boiling points. Metalloids ~~have~~ generally have low melting and boiling point.

Q2 Why carbon dioxide is a compound whereas carbon is an element?

Ans) Carbon is an element ^{whereas} ~~and~~ carbon-dioxide contains ~~to~~ two ~~or more~~ elements combined together in a fixed proportion by mass which is carbon and oxygen and it is mixed with 3:8 by mass proportion. Therefore, carbon dioxide is ~~an~~ a compound whereas ~~an~~ carbon is an element.