

1. Give 5 major differences between elements and compounds?

Ans. 

Element	Compound
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An element is a material that consists of a single type of atoms.

\* A compound contains atoms of different elements chemically combined in a fixed ratio.

= There are nearly 118 elements and 94 of them occur on earth naturally.

\* Compounds are nearly infinite in number.

- Elements are represented by symbols.

\* Compounds are represented by chemical formula.

= Elements cannot be further broken down by any physical or chemical reactions.

\* Compounds can be easily separated into simpler substances by chemical reactions.

→ Can be classified as either, metals, non-metals or metalloids.

\* Can be classified by bonds, ionic, covalent etc.

2. Explain why we say  $H_2O$  as a compound but  $H_2$  and  $O_2$  are elements?

Ans  $H_2O$  (water) is a compound because it is formed when  $H_2$  and  $O_2$  chemically diffuse together. But  $H_2$  and  $O_2$  are elements because they further cannot be broken down.