

## The Nature of Matter(Classification of matter)

### Summary

1. Matter can be classified into pure substances and mixtures.
2. Pure substances can be classified into elements and compounds.
3. An element is a pure substance which cannot be further broken into two or more pure substances by any chemical means.
4. There are about 118 different elements known which can be classified as metals, non metals, metalloids and inert gases.
5. J.J.Berzelius introduced the modern system of naming elements by their symbols. Two elements cannot have the same symbol. The symbol is derived from either the English name or Latin name.
6. Compounds are pure substances formed by the combination of two or more elements in a fixed proportion by weight.
7. Compounds have definite physical and chemical properties which are entirely different from the constituent elements.