**Dalton’s atomic Theory and Law of Multiple Proportions.**

**John Dalton came up with the following theory in 1808 which has 4 parts:**

1. **Elements are made of tiny particles called atoms.**
2. **Each element is characterized by the mass of its atoms. Atoms of the same elements have the same mass, atoms of different elements have different masses.**
3. **Chemical combination of elements (the making of compounds) to make different substances occurs when atoms join together in whole number ratios.**
4. **Chemical reactions only rearrange the way that atoms are combined; the atoms themselves are unchanged (disregarding nuclear reactions).**

**Law of Multiple Proportions: elements can combine in different ways to form different substances, whose mass ratios are small whole numbers of each other.**

**Example:**

**CO2: created during respiration.**

**CO: created during incomplete internal combustion.**