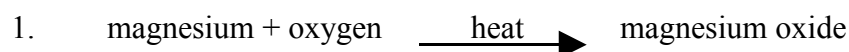


The greatest challenge when investigating mass during a chemical change is collecting everything: all the starting materials and all the products. Lavoisier was one of the chemists to use this “balanced” view of chemical changes. What Lavoisier observed during his experiments is what is now called the ***Law of Conservation of Mass***: In a chemical change, the total mass of the new substances is always the same as the total mass of the original substances.

“Matter is neither created or destroyed”

Law of conservation of Mass: Calculations



If 5.0 g of magnesium reacts with 3.3g of oxygen, how much magnesium oxide is produced?

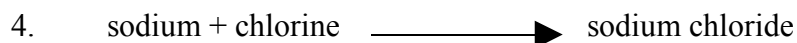
5.0 g + 3.3.g = _____g of magnesium oxide will be produced.



How much calcium is required to react with 2.50 g of sulphur in order to produce 5.63 g of calcium sulphide?



25.0 g of potassium reacts with 9.6 g of fluorine to produce 29.3 g of potassium fluoride. How much potassium did NOT react?



25.0 g of sodium reacts with 14.3 g of chlorine to produce 23.7 g of sodium chloride and 15.6 g of unreacted sodium. Show (prove) that this example verifies the ***Law of Conservation of Mass***.