

Law of Definite Mass Proportions Worksheet  
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Hydrogen and Oxygen combine by mass to make water according to these proportions:

1 gram hydrogen : 8 grams of oxygen : 9 grams of water

***You should immediately notice that within mass proportions, the total mass of the proportions are cumulative.***

	Trial A (g)	Trial B (g)	Trial C (g)	Trial D (g)
Mass of O <sub>2</sub> (begin)	8	16	10	100
Mass of H <sub>2</sub> (begin)	1	5	10	8
Mass of O <sub>2</sub> used				
Mass of H <sub>2</sub> used				
What gas at what mass should be left over ?				
Which mass of water should be produced?				

The reaction of sodium and chlorine combine to form sodium chloride:

1 gram of sodium : 1.5 grams of chlorine : 2.5 grams of sodium chloride

***Once again note that total mass proportions are cumulative.***

	Trial A (g)	Trial B (g)	Trial C (g)	Trial D (g)
Mass of sodium Na (begin)	1	3	50	10
Mass of Chlorine Cl <sub>2</sub> (begin)	1.5	1.5	100	10
Mass of sodium Na used				
Mass of Chlorine Cl <sub>2</sub> used				
Which element at what mass should be left over?				
Which mass of salt should				