

Name \_\_\_\_\_ Date \_\_\_\_\_ period \_\_\_\_\_

## Find the formula mass (weight)

### Objectives:

1. To learn how to add the atomic mass from a compound or a chemical formula
2. To learn that chemical formulas are made of atoms from different elements

### Procedures:

1. Count the amount of atoms of each elements and add the mass
2. Write the total mass of the formulas and include your units at the end

### Examples:

<p><b>Sulfuric acid</b> <math>\text{H}_2\text{SO}_4</math></p> <p style="margin-left: 40px;"><b>H</b> 2 (1) = 2</p> <p style="margin-left: 40px;"><b>S</b> 1 (32) = 32</p> <p style="margin-left: 40px;"><b>O</b> 4 (16) = 64</p> <p style="text-align: right; margin-right: 20px;"><b>TOTAL = 98 amu</b></p>	<p><b>4 molecules of</b></p> <p><b>Ammonium acetate</b></p> <p style="margin-left: 40px;"><math>4\text{NH}_4\text{CH}_3\text{COO}</math></p> <p style="margin-left: 40px;"><b>N</b> 4 ( ) =</p> <p style="margin-left: 40px;"><b>H</b> ___ (1) =</p> <p style="margin-left: 40px;"><b>C</b> ___ ( ) =</p> <p style="margin-left: 40px;"><b>O</b> ___ ( ) =</p> <p style="text-align: right; margin-right: 20px;"><b>TOTAL</b> _____</p>
<p><b>Ferric Sulfate</b></p> <p style="margin-left: 40px;">_____ 2 ( ) =</p> <p style="margin-left: 40px;"><b>S</b> ___ ( ) =</p> <p><b><math>\text{Fe}_2(\text{SO}_4)_3</math></b></p> <p style="margin-left: 40px;">_____ ( ) =</p> <p style="text-align: right; margin-right: 20px;"><b>TOTAL =</b> _____</p>	<p><b>2 molecules of</b></p> <p><b>Caffeine</b></p> <p style="margin-left: 40px;"><math>2\text{C}_8\text{H}_{10}(\text{N}_4\text{O}_2)_2</math></p> <p style="margin-left: 40px;"><b>C</b> 16 ( ) =</p> <p style="margin-left: 40px;"><b>H</b> ___ (1) =</p> <p style="margin-left: 40px;"><b>N</b> 8 ( ) =</p> <p style="margin-left: 40px;"><b>O</b> ___ ( ) =</p> <p style="text-align: right; margin-right: 20px;"><b>TOTAL</b> _____</p>

Name and chemical formula	Formula mass
Water $\text{H}_2\text{O}$	
Hydrogen peroxide $3\text{H}_2\text{O}_2$	
Terephthalic acid $\text{C}_6\text{H}_4(\text{COOH})_2$	

Name and chemical formula	Formula mass
Sugar $C_6H_{12}O_6$	
Ammonium hydroxide $NH_4OH$	
Ammonium sulfide $2(NH_4)_2S$	
Sodium acetate $NaCH_3COO$	
Ammonium $3NH_4HCO_3$	
Acetic acid $4CH_3CO(OH)_2$	
Acetone $2(CH_3C)_3OCH_3$	