

## Mass/Volume Percent Problems (% m/v)

$$\text{Mass/Volume Percent} = \frac{\text{Mass of solute (g)}}{\text{Volume of solution (mL)}} \times 100$$

**You cannot add mass and volume = they are apples and oranges!!!**

1. What is the concentration in percent mass/volume of 150 mL of solution containing 30 g of solute? **(20 %)**
2. What is the concentration by % m/v if 67 g are dissolved to make 1.2 L of solution? **(5.6 %)**
3. What volume of a 40 % m/v solution contains 70 g of solute? **(175 mL)**
4. What amount of solute is dissolved to make 0.5 L of a 20 % m/v solution? **(100g solute)**
5. What amount of a 75 % m/v solution will be made if 50 g of solute are dissolved? **(66.7 mL solution)**
6. What is the concentration in % m/v if 0.55 kg of solute is dissolved to make 1.5 L of solution? **(36.7 %)**