

CONCENTRATIONS OF SOLUTIONS

Materials: balance, beaker, 50-100mL volumetric flask, spoon, bottle of water

Assigned molarity of solution, $c = \text{_____ mol/dm}^3$

Assume the ingredient is sucrose, $C_{12}H_{22}O_{11}$

1. Calculate **Molar mass** of sucrose _____ g/mol

2. Calculate how many moles of sucrose are required to make **50-100 mL** (it depends on of your volumetric flask) of the assigned solution.

Use $c = \frac{n \text{ (mole)}}{V \text{ (dm}^3\text{)}} \rightarrow n =$

3. Convert the moles of sucrose into grams, remember that

$$n = \frac{m}{M} \rightarrow m =$$

4. Write out a detailed procedure to prepare the solution with your assigned molarity concentration using the materials listed above. Show your teacher your procedure before proceeding.