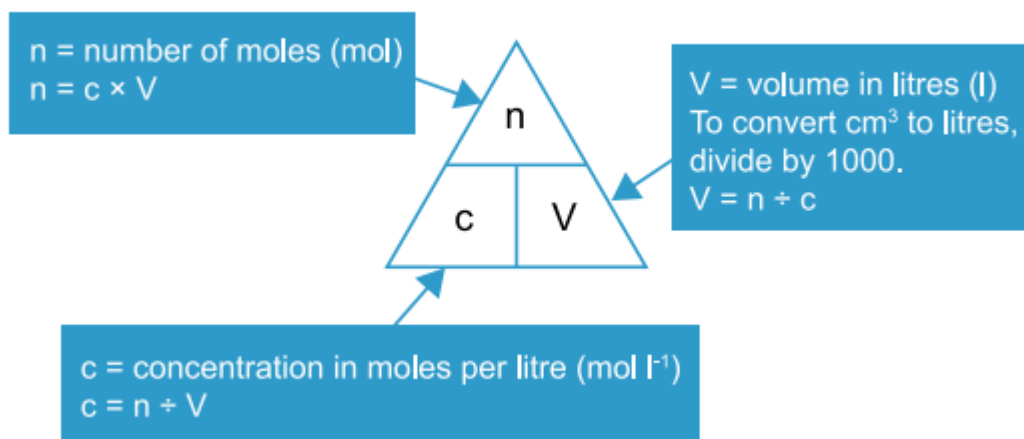
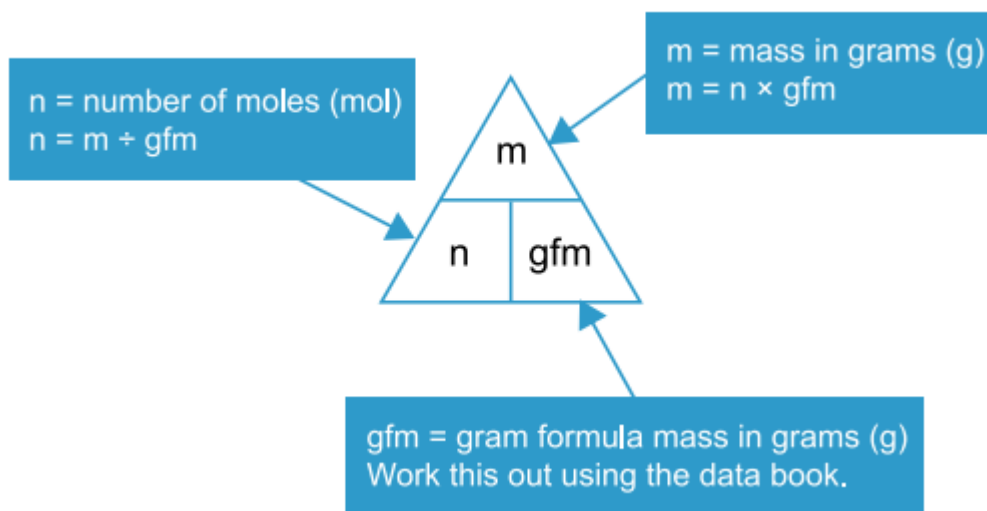


TOPIC 6 SUMMARY NOTES

CALCULATIONS - MOLES AND BALANCED EQUATIONS



Summary

- **Balanced equations:**
 - chemical equations, using formulae and state symbols, can be written and balanced.
- **Gram formula mass:**
 - the mass of a mole of any substance, in grams (g), is equal to the gram formula mass and can be calculated using relative atomic masses.
- **The mole:**
 - calculations can be performed using the relationship between the mass and the number of moles of a substance;
 - given a balanced equation, the mass or number of moles of a substance can be calculated given the mass or number of moles of another substance in the reaction.
- **Solutions:**
 - a solution is formed when a solute is dissolved in a solvent;
 - for solutions, the mass of solute (grams or g), the number of moles of solute (moles or mol), the volume of solution (litres or l) or the concentration of the solution (moles per litre or mol l^{-1}) can be calculated from data provided.