Quantitative Chemistry – Combined Higher

Content	RAG
Recall the law of conservation of mass	
Calculate the relative formula mass of a compound.	
Give examples of reactions that appear to involve a change in mass and explain why the mass appears to change.	
Explain what is meant by measurement uncertainty, use distribution and range to estimate and measure uncertainty	
Recall that chemical amounts are measured in moles. Know about the Avogadro constant & its value. (HT only)	
Recall that the mass of one mole of a substance in grams is equal to its relative formula mass. (HT only) Use Mr to calculate the number of moles and vice versa	
Interpret chemical equations in terms of moles. (HT only)	
Calculate the masses of substances shown in a balanced symbol equation. (HT only)	
Calculate the masses of reactants and products from the balanced symbol equation and the mass of a given reactant or product. (HT only)	
Balance equations using masses and moles. (HT only)	
State what is meant by "limiting reactants" and "reactant in excess". Explain the effect of limiting a reactant. (HT only)	
Recall that the concentration of a solution can be measured in mass per given volume of solution, eg grams per dm^3 (g/dm^3). Calculate the mass of a solute in a given volume of a solution	
Explain how the mass of a solute and the volume of a solution is related to the concentration of the solution. (HT only)	