

Topic	Student Checklist	R	A	G
5.3.1 Chemical measurements, conservation of mass and the	State that mass is conserved and explain why, including describing balanced equations in terms of conservation of mass			
	Explain the use of the multipliers in equations in normal script before a formula and in subscript within a formula			
	Describe what the relative formula mass ( $M_r$ ) of a compound is and calculate the relative formula mass of a compound, given its formula			
	Calculate the relative formula masses of reactants and products to prove that mass is conserved in a balanced chemical equation			
	Explain observed changes of mass during chemical reactions in non-enclosed systems using the particle model when given the balanced symbol equation			
	Explain why whenever a measurement is made there is always some uncertainty about the result obtained			
5.3.2 Use of amount of substance in relation to masses of pure substances	<b>HT ONLY: State that chemical amounts are measured in moles (mol) and explain what a mol is with reference to relative formula mass and Avogadro's constant</b>			
	<b>HT ONLY: Use the relative formula mass of a substance to calculate the number of moles in a given mass of the substance</b>			
	<b>HT ONLY: Calculate the masses of reactants and products when given a balanced symbol equation</b>			
	<b>HT ONLY: Use moles to write a balanced equation when given the masses of reactants and products (inc changing the subject of the equation)</b>			
	<b>HT ONLY: Explain the effect of limiting the quantity of a reactant on the amount of products in terms of moles or masses in grams</b>			
	<b>HT ONLY: Calculate the mass of solute in a given volume of solution of known concentration in terms of mass per given volume of solution</b>			
	<b>HT ONLY: Explain how the mass of a solute and the volume of a solution is related to the concentration of the solution</b>			