

CHEMISTRY – YEAR 10 – Quantitative Chemistry FOUNDATION

A QUANTITATIVE CHEMISTRY			B IMPORTANT EQUATIONS		
1	Conservation of mass	No atoms are lost or made during a chemical reaction. Mass of products equals the mass of reactants, in a closed system	1	% by Mass	$= \frac{\text{Total } A_r \text{ for every atom of the element}}{M_r \text{ of compound}} \times 100$
2	Relative formula mass, M_r	Sum of the relative atomic masses of the atoms in the numbers shown in the formula.	2	Concentration (g/dm^3)	$= \frac{\text{mass of solute (g)}}{\text{volume of solution (dm}^3\text{)}}$
3	Relative Atomic Mass, A_r	Average mass of the isotopes of an element relative to 1/12th carbon-12 atom	3	Volume Conversion	$\frac{\text{cm}^3}{1000} = \text{dm}^3$