	Mass in Reactions	
1.	Law of conservation of mass	no atoms are lost or made in a chemical reaction, so mass of products = mass of reactants
2.	Reactants	go into a reaction
3.	Products	come out of a reaction
4.	Balanced equation	the number of atoms of each element is the same on both sides
5.	Relative Atomic Mass (A_r)	the mass number
6.	Relative Formula Mass (M_r)	the sum of the A_r of all atoms in the compound
7.	% by Mass in a compound	$\frac{\text{number of atoms} \times A_r}{M_r} \times 100$
8.	Limiting Reactant	a reactant that is completely used up
9.	Excess	more than you need

	Measurements in Reactions	
10.	Balance	equipment used to measure mass (g)
11.	Range	difference between highest and lowest values
12.	Mean	$\frac{\text{sum of all values}}{\text{number of values}}$
13.	% Uncertainty	$\frac{\text{range}}{\text{mean}} \times 100$

	Equations	
14.	The little number (eg $CO_{\mathbf{2}}$)	how many of that atom eg. 2 oxygen atoms
15.	The big number (eg $\mathbf{6}CO_2$)	multiplies the number of atoms in the compound by that value. eg. 6 Carbon atoms & 12 Oxygen atoms
16.	The arrow (→)	"reacts to form"

	Units	
17.	Mass	g
18.	Volume	dm^3
19.	Concentration	g/dm^3 or mol/dm^3
20.	Moles	mol

	Moles (HT only)	
21.	Mole	a measurement of chemical amounts
22.	1 mole	6×10^{23} of anything (Avogadro's constant)
23.	Mass (g) of 1 mole	same as the M_r
24.	Number of Moles	number of moles = $\frac{\text{Mass (g)}}{M_r}$
25.	The big number (eg $\mathbf{6}CO_2$)	tells you how many moles of something you have

	Concentration	
26.	Concentration	mass (grams or moles) per given volume
27.	Volume	quantity of liquid or gas
28.	Concentration equation	concentration = $\frac{\text{mass (g or moles)}}{\text{volume } (dm^3)}$

	Scientific Method (These can appear in all units)	
29.	Accurate	close to the true value
30.	Precise	results cluster closely
31.	Repeatable results	the same person gets similar results
32.	Reproducible results	a different person gets similar results
33.	Random Error	unpredictable variation in results
34.	Systematic Error	results differ from the true value by a consistent amount every time
35.	Zero Error	systematic error where equipment not calibrated to start at zero
36.	Hypothesis	theory or prediction
37.	Method	a step by step guide
38.	Variable	anything that could change in an investigation
39.	Independent Variable	the one thing that you decide to change
40.	Dependent Variable	the variable that is being measured
41.	Control Variables	variables you keep the same
42.	Conclusion	what you found out
43.	Evaluation	strengths and weaknesses of the method