

AQA Chemistry (8462) from 2016 Topics C4.1 Atomic structure and the periodic table				
Topic	Student Checklist	R	A	G
4.1.1 A simple model of the atom, symbols, relative atomic mass, electronic charge	Atoms, elements and compounds			
	Mixtures			
	The development of the model of the atom			
	Relative electrical charges of subatomic particles			
	Size and mass of atoms			
	Relative atomic mass (revisit in 3)			
	Electronic structure			
4.1.2 The periodic table	The Periodic table			
	Development of the periodic table			
	Metals and non-metals			
	Group 0			
	Group 1			
	Group 7			
	<i>Properties of transition metals</i>			
	<i>Comparison with Group 1 elements</i>			
<i>Typical properties</i>				

AQA Chemistry (8462) from 2016 Topics C4.2 Bonding, structure, and the properties of matter				
Topic	Student Checklist	R	A	G
4.2.1 Chemical bonds, ionic, covalent and metallic 4.2.2 How bonding and structure are related to the properties of substances	The states of matter (revisit in 3 and 8 Chem)			
	State symbols			
	Chemical bonds			
	Ionic bonding			
	Ionic compounds			
	Properties of ionic compounds			
	Covalent bonding			
	Properties of small molecules			
	Giant covalent structures			
	Diamond			
	Graphite			
	Graphene and fullerenes			
	Metallic bonding			
	Properties of metals and alloys / Metals as conductors			
	<i>Sizes of particles and their properties</i>			
<i>Uses of nanoparticles</i>				

AQA Chemistry (8462) from 2016 Topics C4.3 Quantitative chemistry				
Topic	Student Checklist	R	A	G
4.3.1 Chemical measurements, conservation	Conservation of mass and balanced chemical equations			
	Mass changes when a reactant or product is a gas			
	Relative formula mass			
4.3.2 Use of amount of substance in relation to masses of pure substances	Moles (HT only)			
	Amounts of substances in equations (HT only)			
	Using moles to balance equations (HT only)			
	Limited reactants (HT only)			
	Concentration of solutions			
4.3.3 Yield and atom economy of chemical reactions. 4.3.4 Using concentrations	<i>Using concentrations of solutions in mol/dm⁻³ (chemistry, HT only)</i>			
	<i>Use of amount of substance in relation to volumes of gases (chemistry, HT only)</i>			
	<i>Yield and atom economy of chemical reactions (chemistry only)</i>			
	<i>Percentage yield</i>			
	<i>Atom economy</i>			

Personalised Learning Checklists AQA Chemistry Paper 1
Separate Science and Combined Science

AQA Chemistry (8462) from 2016 Topics C4.4 Chemical changes				
Topic	Student Checklist	R	A	G
4.4.1 Reactivity of metals	Metal oxides			
	The reactivity series			
	Extraction of metals and reduction			
	Oxidation and reduction in terms on electrons (HT only)			
4.4.2 Reactions of acids	Reactions of acids with metals			
	Neutralisation of acids and salt production			
	Soluble salts			
	<i>Required practical 1: preparation of a pure, dry sample of a soluble salt from an insoluble oxide or carbonate using a Bunsen burner to heat dilute acid and a water bath or electric heater to evaporate the solution</i>			
	The pH scale and neutralisation			
	<i>Titration</i>			
	<i>Chem ONLY: Required practical 2: determination of the reacting volumes of solutions of a strong acid and a strong alkali by titration</i>			
4.4.3 Electrolysis	Strong and weak acids (HT only)			
	The process of electrolysis			
	Electrolysis of molten ionic compounds			
	Using electrolysis to extract metals			
	Electrolysis of aqueous solutions			
	<i>Required practical 3: investigate what happens when aqueous solutions are electrolysed using inert electrodes</i>			
	Representation of reactions at electrodes as half equations (HT only)			

AQA Chemistry (8462) from 2016 Topics C4.5 Energy changes				
Topic	Student Checklist	R	A	G
4.5.1 Exothermic and endothermic reactions	Energy transfer during exothermic and endothermic reactions			
	<i>Required practical 4: investigate the variables that affect temperature changes in reacting solutions</i>			
	Reaction profiles			
	The energy change of reactions (HT only)			
4.5.2 Chemical cells and fuel cells	<i>Cells and batteries</i>			
	<i>Fuel cells</i>			