

Week	Topic area	Lesson title	Practicals
1	C1 States of matter	SC1a: States of matter	Suggested practical: heating curve for water (ice cubes); Demo1: solid,liquid,gas; Demo2: Sublimation (iodine crystals)
		SC1a: States of matter	
	C2 Methods of separating and purifying substances	SC2a: Mixtures	Suggested practical: melting of ice in addition of salt
		SC2b: Filtration and crystallisation	Suggested practical: purifying rock salt
		SC2c: Paper chromatography	
3		SC2c: Paper chromatography	Suggested practical: chromatography with food colouring (ruler for Rf)/ can try with permanent inks and other solvents eg: ethanol
		SC2d: Distillation	Suggested practical1: simple distillation of impure water; Practical 2: miscible or immiscible (ethanol, water, oil); Demo: fractional distillation of crude oil (use Liebig condenser)
		SC2d: Distillation	
5		SC2d: Core practical - Investigating inks	CORE PRACTICAL: investigate the composition of inks using simple distillation and paper chromatography
		SC2d: Core practical - Investigating inks	
		SC2e: Drinking water	Suggested practical:cleaning dirty water
7		Revision	
		Test C1/C2	
		Review lesson	
oct half term			
	C3 Atomic structure	SC3a: Structure of an atom	Demo: atom model; Suggested practical: students may make their own model(polysterene balls; card, thread, etc)
		SC3b: Atomic mass and number	
9		SC3b: Atomic mass and number	
		SC3c: Isotopes	
		SC3c: Isotopes	
		SC4a: Elements and the periodic table	
11	C4 The periodic table	SC4a: Elements and the periodic table	
		SC4b: Atomic number and the periodic table	Suggested practical: Properties of metals and non metals (aluminium, copper, sulfur, graphite, charcoal); Demo: group1 and 7 elements
		SC4b: Atomic number and the periodic table	
		SC4c: Electronic configurations and the periodic table	
13		SC4c: Electronic configurations and the periodic table	
		Revision	
		Test C3/C4	
		Review lesson	
xmas			
15	C5 Ionic bonding	SC5a: Ionic bonds	Demo: electrostatic forces
		SC5b: Ionic lattices	Demo: Sodium chloride model
		SC5b: Ionic lattices	
		SC5c: Properties of ionic compounds	Suggested practical: solubility and conductivity of ionic compounds(sodium chloride, sodium bromide and magnesium oxide)
17		SC5c: Properties of ionic compounds	
	C6 Covalent bonding	SC6a: Covalent bonding	Suggested practical: use molymod to make simple covalent molecules
		SC6a: Covalent bonding	
19	C7 Types of substance	SC7a: Properties of covalent compounds	Suggested practical1: solubility, conductivity and melting point of simple covalent molecules; Suggested practical2: making slime
		SC7a: Properties of covalent compounds	
		SC7b: Allotropes of carbon	Suggested practical: graphene, bucky ball, diamond and graphite model
feb half term		SC7b: Allotropes of carbon	
		SC7c: Properties of metals	Suggested practical: Malleability, heat and electrical properties of metals
21		SC7c: Properties of metals	
		SC7d: Bonding models	

		Revision Test C5/C6/C7 Review lesson	
23	C8 Acids	SC8a: Acids, indicators and pH	Suggested practical: testing different substances with different indicators
		SC8b: Looking at acids	SC8a: Acids, indicators and pH Suggested practical: HCl of different concentrations and magnesium; Demo: Electrolysis of HCl testing hydrogen
25		SC8c: Bases and salts	SC8b: Looking at acids HCl testing hydrogen
		SC8d: Alkalis and balancing equations	SC8c: Bases and salts CORE PRACTICAL: Preparing a pure, dry sample of copper sulfate crystals from copper oxide using a water bath
easter		SC8e: Alkalis and neutralisation	SC8d: Alkalis and balancing equations CORE PRACTICAL: Investigate the change in pH on adding powdered calcium hydroxide or calcium oxide to a fixed volume of dilute hydrochloric acid
27		SC8f: Reactions of acids with metals and carbonates	SC8e: Alkalis and neutralisation Suggested practical: titration
		SC8g: Solubility	SC8f: Reactions of acids with metals and carbonates Suggested practical: copper and copper carbonate to react with different acids (test for carbon dioxide)
29			SC8g: Solubility Suggested practical: making precipitates
		Revision Test C8 Review lesson	
31		Revision	
may half term		Revision	
33		Revision	
		Revision	
		Revision	
35		Revision	
		Revision	
		Revision	
37	END OF YEAR ASSESSMENT Feedback		