

Week	w/c	Topic area	Lesson title	Practicals
1	03/09/2018	B5 Health, disease and the development of medicines	CB5 revision CB5h: Antibiotics Revision/end of unit test Review	Suggested practical: Investigate antimicrobial properties of plants
		B6 Plant structures and their functions	CB6a: Photosynthesis CB6a: Photosynthesis CB6b: Factors affecting photosynthesis CB6b: Factors affecting photosynthesis CB6c: Absorbing water and mineral ions CB6d: Transpiration and translocation CB6d: Transpiration and translocation Revision/end of unit test Review	Suggested practical: Investigate how the structure of the leaf is adapted for photosynthesis. B6.5 Core practical: Investigate the effect of light intensity on the rate of photosynthesis. Suggested practical: Investigate the effect of pollutants on plant germination and plant growth. Suggested practical: Investigate how the loss of water vapour from leaves drives transpiration.
3	17/09/2018	C13 Groups 1, 7 and 0	CC13a: Group 1 CC13b: Group 7 CC13b: Group 7 CC13c: Halogen reactivity CC13d: Group 0 CC14a: Rates of reaction	Investigate displacement reactions of halogens reacting with halide ions in solution.
5	01/10/2018	C14 Rates of reaction	CC14b: Factors affecting reaction rate CC14b: Factors affecting reaction rate CC14c: Catalysts and activation energy CC14c: Catalysts and activation energy Revision/End of unit test. Review	Core Practical: Investigate the effects of changing the conditions of a reaction on the rates of chemical reactions by: a) measuring the production of a gas (in the reaction between hydrochloric acid and marble chips) b) observing a colour change (in the reaction between sodium thiosulfate and hydrochloric acid) Investigate the effect of potential catalysts on the rate of decomposition of hydrogen peroxide.
7	15/10/2018	C15 Heat changes in chemical reactions	CC15a: Exothermic and endothermic reactions CC15a: Exothermic and endothermic reactions CC15b: Energy changes in reactions Revision/end of unit test Review	Measure temperature changes accompanying some of the following types of change: a) salts dissolving in water b) neutralisation reactions c) displacement reactions d) precipitation reactions
		P10 Magnetism and the motor effect	CP10a: Magnets and magnetic fields CP10b: Electromagnetism	Construct an electromagnet
		P11 Electromagnetic induction	CP11a Transformers CP11b: Transformers and energy Revision/end of unit test Review	
HALF TERM				
9	05/11/2018	B7 Animal coordination, control and homeostasis	CB7a: Hormones CB7c: The menstrual cycle CB7d: Hormonal control of the menstrual cycle CB7e: Control of blood glucose CB7e: Control of blood glucose CB7f: Type 2 diabetes Revision/end of unit test Review	Suggested practical: Investigate the presence of sugar in simulated urine/body fluids.
11	19/11/2018	B8 Exchange and transport in animals	CB8a: Efficient transport and exchange CB8a: Efficient transport and exchange CB8b: The circulatory system CB8c: The heart CB8c: The heart CB8d: Cellular respiration CB8d: Cellular respiration CB8d: Cellular respiration End of unit test Review	Suggested practical: Investigate the short-term effects of exercise on breathing rate and heart rate. Suggested practical: Investigate the short-term effects of exercise on breathing rate and heart rate. Core practical: Investigate the rate of respiration in living organisms. Suggested practical: Investigate the effect of glucose concentration on the rate of anaerobic respiration in yeast.
13	03/12/2018	C16 Fuels	CC16a: Hydrocarbons in crude oil and natural gas CC16b: Fractional distillation of crude oil CC16b: Fractional distillation of crude oil CC16c: The alkane homologous series MOCKS MOCKS MOCKS MOCKS MOCKS	Investigate the fractional distillation of synthetic crude oil and the ease of ignition and viscosity of the fractions.
15	17/12/2018	C17 Earth and atmospheric science	CC16d: Complete and incomplete combustion CC16d: Complete and incomplete combustion CC16e: Combustible fuels and pollution CC16f: Breaking down hydrocarbons CC16f: Breaking down hydrocarbons CC17a: The early atmosphere CC17b: A changing atmosphere CC17b: A changing atmosphere MOCK REVIEW LESSON	Investigate the products produced from the complete combustion of a hydrocarbon. Suggested practical: Investigate the cracking of paraffin oil. Investigate the proportion of oxygen in the atmosphere.
XMAS				
17	14/01/2019	P12 Particle model	CC17c: The atmosphere CC17c: The atmosphere CC17d: Climate change CC17d: Climate change End of unit test Review	Investigate the volume of air used up and products formed when candles are burned. Investigate the presence of water vapour and carbon dioxide in the atmosphere.
19	28/01/2019	P13 Forces and matter	Lesson CP12a: Particles and density Lesson CP12a: Particles and density CP12b: Energy and changes of state CP12b: Energy and changes of state CP12c: Energy calculations CP12c: Energy calculations CP12d: Gas temperature and pressure CP12d: Gas temperature and pressure CP13a: Bending and stretching CP13a: Bending and stretching	P14.3: Core practical: Investigate the densities of solid and liquids Suggested practical: Investigate latent heat of vaporisation. P14.11: Core Practical: Investigate the properties of water by determining the specific heat capacity of water and obtaining a temperature-time graph for melting ice Suggested practical: Investigate the temperature and volume relationship for a gas. Suggested practical: Investigate the volume and pressure relationship for a gas Suggested practical: Investigate the stretching of rubber bands P15.6: Core Practical: Investigate the extension and work done when applying forces to a spring
21	11/02/2019		CP13b: Extension and energy transfers * CP13b: Extension and energy transfers * Revision/end of unit test Review	

B9 Ecosystems and material cycles		CB9a: Ecosystems	B9.5: Core practical: Investigate the relationship between organisms and their environment using field-work techniques, including quadrats and belt transects
HALF TERM		CB9a: Ecosystems CB9b: Abiotic factors and communities CB9c: Biotic factors and communities CB9d: Parasitism and mutualism CB9e: Biodiversity and humans CB9f: Preserving biodiversity CB9g: The water cycle CB9h: The carbon cycle CB9i: The carbon cycle	Suggested practical: Investigate animal behaviour using choice chambers.
23	04/03/2019		
25	18/03/2019	Revision of core practicals	Year 9 Year 9 Year 9 y9 Year 9 prac
27	01/04/2019	Revision Revision Revision Revision MOCKS MOCKS MOCKS Core practical: Investigate the change in pH on adding powdered calcium hydroxide or calcium oxide to a fixed volume of dilute hydrochloric acid. Core Practical: Investigate the electrolysis of copper sulfate solution with inert electrodes and copper electrodes P5.9: Core practical: Investigate refraction in rectangular glass blocks in terms of the interaction of electromagnetic waves with matter Core Practical: Construct electrical circuits to: a) investigate the relationship between potential difference, current and resistance for a resistor and a filament lamp b) test series and parallel circuits using resistors and filament lamps	Year 10 Year 10 Year 9 Year 10
EASTER			
29	29/04/2019	B1.10: Core Practical: Investigate the effect of pH on enzyme activity MOCK REVIEW LESSON B1.16: Core practical: Investigate osmosis in potatoes B6.5 Core practical: Investigate the effect of light intensity on the rate of photosynthesis.	Year 9 prac Year 9 prac Year 10 prac
31	13/05/2019	Revision Revision Revision Revision Revision Revision B1 14/5/19 Revision C1 16/5/19 Revision Revision P1 22/5/19 Revision Revision Revision Revision Revision B2 7/6/19 Revision Revision C2 12/6/19 Revision P2 14/06/2019	
HALF TERM			
33	03/06/2019		
35	17/06/2019		
37	01/07/2019		
39	15/07/2019		