

Route through for year 11 - Science (Synergy)

A more detailed version of all units can be found by clicking here:

<https://filestore.aqa.org.uk/resources/science/specifications/AQA-8465-SP-2016.PDF>

Collins AQA GCSE Synergy textbooks - ISBN 978-0-00-817495-8 & ISBN 978-0-00-817496-5

Week	Date	Unit	Topics covered
1	2-6 Sept		introduction
2	9-13 Sept	interactions over small and large distances (6.2)	Ionic bonding, properties of ionic compounds, covalent bonding, Properties of substances with covalent bonding
3	16-20 Sept	interactions over small and large distances (6.2)	metallic bonding, properties of metals
4	23-27 Sept	interactions over small and large distances (6.3)	Magnets, magnetic fields
5	30-4 Oct	interactions over small and large distances (6.3)	The Earth's magnetism, the magnetic effect of electromagnets, motor effect and electric motors
6	7-11 Oct	movement and interactions (7.1)	speed and velocity; speed, distance, time; circular motion ; free fall
7	14-18 Oct	movement and interactions (7.1)	Newtons laws, RP effect of varying force on acceleration
8	21-25 Oct	movement and interactions (7.1)	momentum , kinetic energy, stopping distances
Autumn half-term			
1	4- 8Nov	movement and interactions (7.2)	current, resistance and potential difference; RP IV characteristics; RP factors affecting resistance
2	11-15 Nov	movement and interactions (7.2)	series and parallel circuits; circuit elements; direct and alternating current; mains cables
3	18-22 Nov	movement and interactions (7.2)	power; domestic electric appliances; National grid
4	25-29 Nov	movement and interactions (7.3)	reactions of acids; making salts; RP making salts ; energy changes and reactions
5	2-6 Dec	movement and interactions (7.3)	RP variables affecting temperature changes; ph and neutralisation; strong and weak acids
6	9-13Dec	movement and interactions (7.4)	factors affecting rates of reaction; effect of surface area, temperature, concentration and pressure on rates of reaction, rates of reaction RP
7	16-20 Dec	movement and interactions (7.4)	activation energy; bond breaking and forming ; catalysts; enzymes; RP investigating amylase

Christmas Holidays				
1	6-10 Jan	movement and interactions (7.4)	reversible reactions; dynamic equilibrium; factors affecting equilibrium	
2	13- 17 Jan	movement and interactions (7.5)	reactivity series for metals; electrolysis	
3	20- 25 Jan	movement and interactions (7.5)	electrolysis of aqueous solutions; RP electrolysis ; tests for gases; electron transfer reactions	
4	28-1 Feb	guiding spaceship Earth (8.1)	Bonding and structure in forms of carbon, hydrocarbons and crude oil	
5	4- 8 Feb	guiding spaceship Earth (8.1)	Fractional distillation, cracking, metal extraction by reduction of oxides	
6	11-15 Feb	guiding spaceship Earth (8.2)	Metal extraction by electrolysis, metal extraction by biological methods , energy resources, energy conservation and dissipation	
Spring half-term				
1	24- 28 Feb	guiding spaceship Earth (8.2)	Preventing unwanted energy transfers, energy efficiency, lifecycle assessment	
2	2- 6 Mar	guiding spaceship Earth (8.2)	recycling	
3	9- 13 Mar	Consolidation & revision		
4	16- 20 Mar			
5	23- 27 Mar			
6	30- 3 Apr			
Easter Holidays				
1	20- 24 April	Consolidation & revision		
2	27-1 May			
3	4- 8 May			
4	11-15 May			Paper 1 (H/F) 12th May 2020 (PM)
5	18- 22 May			Paper 2 (H/F) 20th May 2020 (PM)
Summer half-term				
1	1- 5 June	Paper 3(H/F) 1st June 2020 (PM) Paper 4(H/F) 10th June 2020 (PM)		
2	8-12 June			