

Route through for year 10 - 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	Transport over large distances (2.2)	Photosynthesis, factors affecting the rate of photosynthesis
3	16-20 Sept	Transport over large distances (2.2)	Rate of photosynthesis RP, Translocation
4	23-27 Sept	Transport over large distances (2.2)	Plant disease
5	30-4 Oct	interactions with the environment (3.1)	Health and disease, Risk factors for non-communicable disease, Treatment for cardiovascular disease, feedback + catch up
6	7-11 Oct	interactions with the environment (3.1)	homeostasis, insulin and diabetes, human reproductive hormones
7	14-18 Oct	interactions with the environment (3.1)	Contraception
8	21-25 Oct	Consolidation & revision	
Autumn half-term			
1	4- 8Nov	interactions with the environment (3.2)	absorption and emission of radiation, Radioactive decay, half-life, penetration properties of radiations
2	11-15 Nov	interactions with the environment (3.2)	contamination and irradiation, ionising radiations, cancer, feedback + catch up
3	18-22 Nov	interactions with the environment (3.3)	spread of communicable diseases, human communicable diseases
4	25-29 Nov	interactions with the environment (3.3)	defence against pathogens, human immune system, Vaccination, medicines, feedback + catch up
5	2-6 Dec	interactions with the environment (3.3)	testing new drugs, genetic modification, stem cells, interactions between different types of disease
6	9-13Dec	Consolidation & revision	
7	16-20 Dec		
Christmas holiday			
1	6-10 Jan	Explaining change (4.1)	Development of the Earth's atmosphere, Carbon cycle, Greenhouse effect, human impacts of climate

2	13- 17 Jan	Explaining change (4.1)	Climate change: impacts and mitigation, pollutants that affect air quality ,
3	20- 25 Jan	Explaining change (4.1)	water cycle, sources of portable water RP11
4	28-1 Feb	Explaining change (4.2)	levels of organisation in an ecosystem, interdependence and competition
5	4- 8 Feb	Explaining change (4.2)	Factors that affect communities, Field investigations RP 12 , Biodiversity
6	11-15 Feb	Explaining change (4.2)	Negative human impacts on ecosystems, positive human impacts on ecosystems
Spring half-term			
1	24- 28 Feb	Explaining change (4.3)	Chromosomes and genes , Sex determination in humans, single gene inheritance , genotype and phenotype
2	2- 6 Mar	Explaining change (4.3)	Mutations, evolution through natural selection, Evidence for evolution
3	9- 13 Mar	Explaining change (4.3)	Identification and classification of living things , selective breeding , genetic engineering
4	16- 20 Mar	Building blocks for understanding (5.1)	Atomic number and the periodic table, metals and non- metals
5	23- 27 Mar	Building blocks for understanding (5.1)	group 0, group 1, group 7, feedback
6	30- 3 Apr	Consolidation & revision	
Easter holiday			
1	20- 24 April	Building blocks for understanding (5.2)	Chemical equations, conservation of mass,
2	27-1 May	Building blocks for understanding (5.2)	Relative formula mass, amounts in moles , calculations based on equations , concentration of solutions
3	4- 8 May	Interactions over small and large distances , (6.1)	forces as vectors, resolving forces
4	11-15 May	Interactions over small and large distances , (6.1)	work, mass and weight
5	18- 22 May	Interactions over small and large distances , (6.1)	GPE, Elastic deformation RP , energy stored in a stretched spring
Summer half-term			

1	1- 5June	Interactions over small and large distances, (6.2)	Types of chemical bonding, Ionic bonding, properties of ionic compounds
2	8-12 June	Interactions over small and large distances (6.2)	Covalent bonding, Properties of substances with covalent bonding
3	15-19 June	Interactions over small and large distances (6.2)	metallic bonding, properties of metals
4	22-26 Jun	Interactions over small and large distances (6.3)	Magnets, magnetic fields,
Industry week			
5	6- 10 Jul	Interactions over small and large distances (6.3)	The Earth's magnetism, the magnetic effect of electromagnets
6	13-17 Jul		