



KS4 Biology Homework

AQA Higher Tier Separate Science



Create a set of revision notes for the topic that is stated.
Your teacher will provide you with an exam question on that topic during lesson when the homework is complete.

Date set	Topic	CGP Revision guide page number	Evidence
B1 – Cell Biology			
	Cells	11	
	Microscopy	12 & 13	
	Cell differentiation and specialisation	14	
	Chromosomes and mitosis	15	
	Binary Fission	16	
	Culturing microorganisms	17	
	Stem cells	19	
	Diffusion	20	
	Osmosis	21	
	Active transport	22	
	Exchanging surfaces	23	
	Exchanging substances	24 & 25	
B2 - Organisation			
	Cell organisation	27	
	Enzymes and enzymatic reactions	28 & 29	
	Enzymes and digestion	30 & 31	
	Food tests	32	
	The lungs	33	
	The circulatory system	34-36	
	Cardiovascular disease	37 & 38	
	Health and disease	39	
	Risk factors for non-communicable diseases	40	

	Cancer	41	
	Plant cell organisation	42	
	Transpiration and translocation	43 & 44	
B3 – Infection and response			
	Communicable disease	46-48	
	Fighting disease	49-51	
	Developing drugs	52	
	Monoclonal antibodies	53 & 54	
	Plant disease and defences	55	
B4 - Bioenergetics			
	Photosynthesis and limiting factors	57	
	The rate of photosynthesis	58	
	Respiration and metabolism	61	
	Aerobic and anaerobic respiration	62	
	Exercise	63	
B5 – Homeostasis and response			
	Homeostasis	65	
	The nervous system	66	
	Synapses and reflexes	67	
	Reaction time	68	
	The brain	69	
	The eye	70	
	Correcting vision defects	71	
	Controlling body temperature	72	
	The endocrine system	73	
	Controlling blood sugar	74	
	The kidneys and kidney failure	75 & 76	
	Puberty and the menstrual cycle	77	
	Controlling fertility	78 & 79	
	Adrenaline and thyroxine	80	
	Plant hormones	81	
	Commercial use of plant hormones	82	
B6 – Inheritance, variation and evolution			
	DNA	84	

	Structure of DNA and protein synthesis	85	
	Mutations	86	
	Reproduction	87 & 89	
	Meiosis	88	
	X and Y chromosomes	90	
	Genetic diagrams	91 & 92	
	Inherited disorders	93	
	The work of Mendel	94	
	Variation	95	
	Evolution	96 & 97	
	Selective breeding	98	
	Genetic engineering	99	
	Cloning	100	
	Fossils	101	
	Speciation	102	
	Antibiotic- resistant bacteria	103	
	Classification	104	
B7 - Ecology			
	Competition	106	
	Abiotic and biotic factors	107	
	Adaptations	108	
	Food chains	109	
	Using quadrats and transects	110 & 111	
	Environmental Change & The water cycle	112	
	The carbon cycle	113	
	Decay	114 & 115	
	Biodiversity and waste management	116	
	Global warming	117	
	Deforestation and land use	118	
	Maintaining ecosystems and biodiversity	119	
	Trophic levels	120	
	Pyramids of biomass & biomass transfer	121 & 122	
	Food security and farming	123	
	Biotechnology	124	

If you do not have the CPG book then you can find similar material on Kerboodle and Bitesize.