RAG List: AQA GCSE Biology for Combined Sciences: Trilogy

Required Practical's

Required Practical Number	Title	Topic	RAG
1	**Using a light microscope** Use a light microscope to observe, draw, and label a selection of plant and animal cells and include a scale magnification.	B1.2	
3	**Investigate the effect of a range of concentrations of salt or sugar solutions on the mass of plant tissue** Investigate osmosis by measuring how the mass of plant tissue changes in a range of concentrations of salt or sugar solution	B1.8	
4	**Use standard food tests to identify food groups** Detect sugars, starch and proteins in good using Benedict's test, the iodine test and Biuret reagent.	B3.3	
5	**Investigate the effect of pH on the rate of reaction of amylase enzyme.** Students should use a continuous sampling technique to determine the time taken to completely digest a starch solution at a range of pH values.	B3.6	
6	**Investigate the effect of light intensity on the rate of photosynthesis** Use an aquatic plant to observe the effect of light intensity has on the rate of photosynthesis.	B8.2	
7	**Investigate the effect of a factor on human reaction time.** Plan and carry out an investigation, choosing appropriate ways to measure reaction time and considering the risks and ethics of the investigation.	B10.2	
9	**Measuring the population size of a common species in a habitat** Using sampling techniques to investigate the effect of a factor of the distribution of this species	B15.3	

Biology Paper 1 – 14th May

Chapter	Topic		Page	RAG
B1 Cell Structure and transport	B1.1	The world of microscopes	4	
	B1.2	Animal and plant cells	6	
	B1.3	Eukaryotic and prokaryotic cells	8	
	B1.4	Specialisation in animal cells	10	
	B1.5	Specialisation in plant cells	12	
	B1.6	Diffusion	14	
	B1.7	Osmosis	16	
	B1.8	Osmosis in plants	18	
	B1.9	Active transport	20	
	B1.10	Exchanging materials	22	
B2 Cell division	B2.1	Cell division	26	
	B2.2	Growth and differentiation	28	
	B2.3	Stem cells	30	
	B2.4	Stem cell dilemmas	32	
B3 Organisation and the digestive system	B3.1	Tissues and organs	36	
	B3.2	The human digestive system	38	
	B3.3	The chemistry of food	40	
	B3.4	Catalysts and enzymes	42	
	B3.5	Factors affecting enzyme action	44	
	B3.6	How the digestive system works	46	

	B3.7	Making digestion efficient	48	
B4 Organising animals and plants	B4.1	The blood	52	
	B4.2	The blood vessels	54	
	B4.3	The heart	56	
	B4.4	Helping the heart	58	
	B4.5	Breathing and gas exchange	60	
	B4.6	Tissues and organs in plants	62	
	B4.7	Transport systems in plants	64	
	B4.8	Evaporation and transpiration	66	
	B4.9	Factors affecting transpiration	68	
B5 Communicable diseases	B5.1	Health and disease	74	
	B5.2	Pathogens and disease	76	
	B5.3	Preventing infections	78	
	B5.4	Viral diseases	80	
	B5.5	Bacterial diseases	82	
	B5.6	Diseases caused by fungi and protists	84	
	B5.7	Human defence responses	86	
B6 Preventing and treating diseases	B6.1	Vaccination	90	
	B6.2	Antibiotics and painkillers	92	
	B6.3	Discovering drugs	94	
	B6.4	Developing drugs	98	
B7 Non-communicable diseases	B7.1	Non-communicable diseases	100	
	B7.2	Cancer	102	
	B7.3	Smoking and the risk of disease	104	
	B7.4	Diet, exercise, and disease	106	
	B7.5	Alcohol and other carcinogens	108	
B8 Photosynthesis	B8.1	Photosynthesis	112	
	B8.2	The rate of photosynthesis	114	
	B8.3	How plants use glucose	116	
	B8.4	Making the most of photosynthesis	118	
B9 Respiration	B9.1	Aerobic respiration	120	
	B9.2	The response to exercise	124	
	B9.3	Anaerobic respiration	126	
	B9.4	Metabolism and the liver	128	

Biology Paper 2 – 7th June

Chapter	**Topic**	**Page**	**RAG**	
B10 The human nervous system	B10.1	Principles of homeostasis	134	
	B10.2	The structure and function of the nervous system	136	
	B10.3	Reflex actions	138	
B11 Hormonal coordination	B11.1	Principles of hormonal control	142	
	B11.2	The control of blood glucose levels	144	
	B11.3	Treating diabetes	146	
	B11.4	The role of negative feedback	148	
	B11.5	Human reproduction	150	
	B11.6	Hormones and the menstrual cycle	152	
	B11.7	The artificial control of fertility	154	