

Please use the checklists as well as websites below to revise the topics for this year.

<https://www.bbc.co.uk/bitesize/examspecs/zpgcbk7> - Biology

<https://www.bbc.co.uk/bitesize/examspecs/z8xtmnb> - Chemistry

<https://www.bbc.co.uk/bitesize/examspecs/zsc9rdm> - Physics

<https://www.youtube.com/channel/UCBgvmal8AR4QIK2e0EfJwaA> - Primrose Kitten

[https://www.youtube.com/channel/UCqbOeHaAUXw9II7sBVG3\\_bw](https://www.youtube.com/channel/UCqbOeHaAUXw9II7sBVG3_bw) - Free science lessons

[https://www.youtube.com/channel/UC-TM-z1-tmX1iK\\_H4SxVhww](https://www.youtube.com/channel/UC-TM-z1-tmX1iK_H4SxVhww) - Required practicals

<https://www.aqa.org.uk/find-past-papers-and-mark-schemes> - AQA past papers

Searching for “AQA separate science revision” will help you to find more resources

## **Y10 AQA GCSE BIOLOGY**

### **Unit 3: Infection and response**

Communicable diseases	Communicable (infectious) disease		
	Viral diseases		
	Bacterial diseases		
	Fungal diseases		
	Protist diseases		
	Human defence systems		
	Vaccination		
	Antibiotics and painkillers		
	Discovery and development of drugs		
Monoclonal antibodies	Producing monoclonal antibodies		
	Uses of monoclonal antibodies		
Plant disease	Detection and identification of plant diseases		
	Plant defence responses		

### **Unit 5: Homeostasis and response**

Homeostasis	Homeostasis		
The human nervous system	Structure and function (The human nervous system for Trilogy)		
	The brain		
	The eye		
	Control of body temperature		
Hormonal coordination in humans	Human endocrine system		
	Control of blood glucose concentration		
	Maintaining water and nitrogen balance in the body		
	Hormones in human reproduction		
	Contraception		
	The use of hormones to treat infertility		
	Negative feedback		
Plant hormones	Control and coordination		
	Use of plant hormones		

## Unit 7: Ecology

Adaptations, interdependence and competition	Communities		
	Abiotic factors		
	Biotic factors		
	Adaptations		
Organisation of an ecosystem	Levels of organisation		
	How materials are cycles		
	Decomposition		
	Impact of environmental change		
Biodiversity and the effect of human interaction on ecosystems	Biodiversity		
	Waste management		
	Land use		
	Deforestation		
	Global warming		
	Maintaining biodiversity		
Trophic levels in an ecosystem	Trophic levels		
	Pyramids of biomass		
	Transfer of biomass		
Food production	Factors affecting food security		
	Farming techniques		
	Sustainable fisheries		
	Role of biotechnology		

## Y10 - AQA GCSE CHEMISTRY

### UNIT 3: Quantitative chemistry

Chemical measurements, conservation of mass and the quantitative interpretation of chemical equations	Conservation of mass and balanced chemical equations		
	Relative formula mass		
	Mass changes when a reactant or product is a gas		
	Chemical measurements		
Use of amount of substance in relation to masses of pure substances	Moles		
	Amounts of substances in equations		
	Using moles to balance equations		
	Limiting reactants		
	Concentration of solutions		
Yield and atom economy of chemical reactions	Percentage yield		
	Atom economy		
Using concentrations of solutions in mol/dm <sup>3</sup>	Using concentrations of solutions in mol/dm <sup>3</sup>		
Use of amount of substance in relation to volumes of gases	Use of amount of substance in relation to volumes of gases		

## **UNIT 4: Chemical changes**

Reactivity of metals	Metal oxides		
	The reactivity series		
	Extraction of metals and reduction		
	Oxidation and reduction in terms of electrons		
Reactions of acids	Reactions of acids with metals		
	Neutralisation of acids and salt production		
	Soluble salts		
	The pH scale and neutralisation		
	Titration		
Electrolysis	Strong and weak acids		
	The process of electrolysis		
	Electrolysis of molten ionic compounds		
	Using electrolysis to extract metals		
	Electrolysis of aqueous solutions		
	Representation of reactions at electrodes as half equations		

## **UNIT 8: Chemical analysis**

Purity, formulation and chromatography	Pure substances		
	Formulations		
	Chromatography		
Identification of common gases	Test for hydrogen		
	Test for oxygen		
	Test for carbon dioxide		
	Test for chlorine		
Identification of ions by chemical and spectroscopic means	Flame tests		
	Metal hydroxides		
	Carbonates		
	Halides		
	Sulfates		
	Instrumental methods		
	Flame emissions spectroscopy		

## **Y10 AQA GCSE PHYSICS**

### **Unit 4: Atomic structure**

Atoms and isotopes	The structure of an atom		
	Mass number, atomic number and isotopes		
	The development of the model of the atom		
Atoms and nuclear radiation	Radioactive decay and nuclear radiation		
	Nuclear equations		
	Half-lives and the random nature of radioactive decay		
	Radioactive contamination		
Hazards and uses of radioactive emissions and of background radiation	Background radiation		
	Different half-lives of radioactive isotopes		
	Uses of nuclear radiation		
Nuclear fission and fusion	Nuclear fission		
	Nuclear fusion		

## Unit 5: Forces

Forces and their interactions	Scalar and vector quantities		
	Contact and non-contact forces		
	Gravity		
	Resultant forces		
Work done and energy transfer	Work done and energy transfer		
Forces and elasticity	Forces and elasticity		
Moments, levers and gears	Moments, levers and gears		
Pressure and pressure differences in fluids	Pressure in a fluid		
	Pressure in a fluid 1		
	Pressure in a fluid 2		
	Atmospheric pressure		
Forces and motion	Describing motion along a line		
	Distance and displacement		
	Speed		
	Velocity		
	The distance-time relationship		
	Acceleration		
	Forces, accelerations and Newton's Laws of motion		
	Newton's First Law		
	Newton's Second Law		
	Newton's Third Law		
	Forces and braking		
	Stopping distance		
	Reaction time		
	Factors affecting braking distance 1		
	Factors affecting braking distance 2		
Momentum	Momentum is a property of moving objects		
	Conservation of momentum		
	Changes in momentum		