

Yr10 Summer Double Science Revision

To be able to complete this summer revision task you must have set up your my GCSE account using the code given to you at parents evening. If you are not sure about this please contact Mrs Norris (pnorris@johncolet.co.uk).

You need to watch the videos and make notes about what it is teaching you. It would be a good idea to have a folder to keep your notes together (or you can get an extra exercise book from Science). You should then have a go at the exam paper questions which go with each video. You do not have to print the questions you can just write your answers on paper. Don't forget to self-assess your answers using the markscheme on the website. Remember to use the traffic light tool on the website to let your teacher know how you confident you are with each topic.

These are all the topics you have covered so far in Science, so you do not have to complete it all by the end of the summer holiday - but you should have by the Year 11 mock exams in December. You might already be able to tick some off from your revision this year.

Summer holiday target

Gold target: 36 videos and their notes (2 videos per science per week).

Silver target: 18 videos and their notes (1 video per science per week).

Bronze target: 6 videos and their notes (1 video per week).

If it is difficult for you to access the internet you can revise a topic from the revision guide, the target for this is you should have completed revision notes for at least 6 topics by the end of the summer holiday.

You need to bring your folder or book of notes and answers with you in September.

Biology

JC Topic Name	Paper Number	Combined kerboodle textbook chapter	my-GCSEscience videos	Notes made?	Mark on exam questions?
Communicable Diseases	Bio 1	B5 and B6	Preventing the spread of pathogens		
			Viral, bacterial, fungal and protist diseases		
			Immunity and vaccination		
			Fighting diseases with drugs		
Heart and lifestyle disease	Bio 1	B4 (4.1-4.5), B7	Cardiovascular disease		
			The circulatory system		
			Health and risk factors		

Cell structure	Bio 1	B1	Eukaryotic and prokaryotic cells		
			Specialised cells		
			Microscope and magnification 1 + 2		
			Culturing microorganisms		
Cell division	Bio 1	B2	Chromosomes and mitosis		
			Stem cells		
Plant tissues	Bio 1	B4 (4.6-4.9)	Transpiration in plants		
			Organisation in plants		
Transport in cells	Bio 1	B1	Diffusion		
			Osmosis		
			Active transport		
Digestive system	Bio 1	B3	An introduction to enzymes		
			Enzymes in the digestive system		
Bioenergetics	Bio 1	B8 and B9	Photosynthesis		
			Investigating the rate of photosynthesis		
			The rate of photosynthesis - limiting factors		
			Respiration and metabolism		
			The effect of exercise on the body		
Homeostasis and hormones	Bio 2	B11	Controlling body temperature		
			Adrenaline and Thyroxine		
			Controlling blood glucose		
			Maintaining water and nitrogen balance		
			Hormones in human reproduction		
Reproduction	Bio 2	B12	Genetic inheritance		
			Asexual vs sexual reproduction and meiosis		

			DNA and the genome		
			Inherited disorders - polydactyly		
			Inherited disorders - Cystic fibrosis		
			Screening for genetic disorders		
The nervous system	Bio 2	B10	The nervous system		
Classification	Bio 2	B14 (14.9 and 14.10 only)	Classification and evolutionary trees		
Adaptations and interdependence	Bio 2	B15	Communities and interdependence		
			Adaptations		
			Measuring the distribution of organisms		
Organisation of an ecosystem	Bio 2	B16	Cycling in ecosystems		
Biodiversity	Bio 2	B17	Human impact on the environment		

Chemistry

JC Topic Name	Paper Number	Combined kerboodle textbook chapter	my-GCSEscience videos	Notes made?	Marks on exam questions?
The periodic table	Chem 1	C1 and C2	Atoms, elements, compounds, mixtures		
			Separating mixtures		
			Scientific models of atoms		
			Atomic structure		
			Relative atomic mass		
			Electronic structure		
			The periodic table		
			Group 0 - The noble gases		

			Group 1 - The alkali metals		
			Group 7 - The halogens		
Metals and reactivity	Chem 1	C5	The reactivity of metals		
			Displacement reactions		
			Extracting metals		
Bonding	Chem 1	C3	Ionic bonding		
			Covalent bonding		
			Metallic bonding		
			Solids, liquids and gases		
Structures	Chem 1	C3	Properties of ionic, covalent and metallic structures		
			Giant covalent structures		
			Graphene and fullerenes		
Reactions of acids	Chem 1	C5	Reactions of acids		
			Making salts		
			The pH scale and neutralisation		
			Strong and weak acids		
Fuels and feedstocks	Chem 2	C9	Crude oil and alkanes		
			Combustion of hydrocarbons		
			Cracking		
			Alkenes		
The atmosphere	Chem 2	C11	The Earth's atmosphere		
			The greenhouse effect and global warming		
			Atmospheric pollutants		
			Potable water		
Life cycle assessment	Chem 2	C12	Life cycle assessment		
Purity	Chem 2	C10	Purity and formulations		
			Gas tests		

		Chromatography		
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Physics

JC Topic Name	Paper Number	Combined kerboodle textbook chapter	my-GCSEscience videos	Notes made?	Marks on exam questions?
Conservation and dissipation of energy	Phys 1	P1	Energy changes in a system		
			Power		
			Conservation and dissipation of energy		
			Power and energy transfers		
			Work done and energy transfer		
			Forces and elasticity		
Energy transfer by heating	Phys 1	P1			
National and global energy resources	Phys 1	P3	National and global energy resources		
			The national grid		
Domestic uses and safety	Phys 1	P5	Domestic uses and safety		
Particle model	Phys 1	P6	Density		
			Solids, liquids and gases		
			Specific heat capacity and specific latent heat		
			Particle model and pressure		
Atomic structure and radiation	Phys 1	P7	Atoms and isotopes		
			The development of the model of the atom		
			Radioactive decay		
			Half-life		
			Radioactive contamination		

			Background radiation		
Magnets	Phys 2	P13	Magnetism		
Motion	Phys 2	P9	Distance and displacement, speed and velocity		
			Distance-time graphs		
			Acceleration		
			Velocity-time graphs		
			Falling objects		
Forces 2	Phys 2	P10	Newton's laws of motion		
			Forces and braking		
			Momentum 1		
			Momentum 2		
Waves	Phys 2	P11	Transverse and longitudinal waves		
			Properties of waves		
			Reflection of waves		