Yr10 Summer Triple 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 a 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	Triple kerboodle textbook chapter	my-GCSEscience videos	Notes made?	Mark achieved on exam questions?
			Preventing the spread of pathogens		
			Viral, bacterial, fungal and protist diseases		
			Immunity and vaccination		
			Fighting diseases with drugs		
			Monoclonal antibodies (triple only)		
Communicable Diseases	Bio 1	B5 and B6	Plant diseases and defence responses (bio only)		

			Cardiovascular disease	
lleed and lifestile		D4 (4.4	The circulatory system	
Heart and lifestyle disease	Bio 1	B4 (4.1- 4.5), B7	Health and risk factors	
			Eurkaryotic and prokaryotic cells	
			Specialised cells	
			Microscope and magnification 1 + 2	
Cell structure	Bio 1	B1	Culturing microorganisms	
			Chromosomes and mitosis	
Cell division	Bio 1	B2	Stem cells	
		B4 (4.6-	Transpiration in plants	
Plant tissues	Bio 1	4.9)	Organisation in plants	
			Diffusion	
			Osmosis	
Transport in cells	Bio 1	B1	Active transport	
			An introduction to enzymes	
Digestive system	Bio 1	В3	Enzymes in the digestive system	
			Photosynthesis	
			Investigating the rate of photosynthesis	
			The rate of photosynthesis - limiting factors	
			Respiration and metabolism	
Bioenergetics	Bio 1	B8 and B9	The effect of exercise on the body	
Food production	Bio 2	B18 (18.10- 18.12 only)	Sustainable food production (triple only)	
			The nervous system	
The negrous			The brain (triple only)	
The nervous system	Bio 2	B10	The eye (triple only)	

Classification	Bio 2	B15 (15.9 and 15.10 only)	Classification and evolutionary trees	
			Communities and interdependence	
			Adaptations	
Adaptations and interdependence	Bio 2	B16	Measuring the distribution of organisms	
			Cycling in ecosystems	
			Rates of decomposition (triple only)	
Organisation of an ecosystem	Bio 2	B17	Trophic levels in an ecosystem (triple only)	
			Impact of environmental change (triple only)	
Biodiversity	Bio 2	B18	Human impact on the environment	

Chemistry

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

			Group 1 - The alkali metals	
			Group 7 - The halogens	
			The transition elements (triple only)	
			The reactivity of metals	
Metals and			Displacement reactions	
reactivity	Chem 1	C5	Extracting metals	
			Ionic bonding	
			Covalent bonding	
			Metallic bonding	
Bonding	Chem 1	СЗ	Solids, liquids and gases	
			Properties of ionic, covalent and metallic structures	
'			Giant covalent structures	
Structures	Chem 1	C3	Graphene and fullerenes	
Nanoscience	Chem 1	C3	Nanoparticles (triple only)	
			Reactions of acids	
			Making salts	
			The pH scale and neutralisation	
			Titrations (triple only)	
Reactions of acids	Chem 1	C5	Strong and weak acids	
			Exothermic and endothermic reactions	
Exo and			Reaction profile diagrams	
endothermic reaction	Chem 1	C7	Calculating energy changes	
			Using materials (triple only)	
			Alternative methods for extracting metals (triple only)	
Using materials	Chem 2	C15	Corrosion and rusting (triple only)	
Fuels and			Crude oil and alkanes	
feedstocks	Chem 2	C9	Combustion of hydrocarbons	

			Cracking	
			Alkenes	
			The Earth's atmosphere	
			The greenhouse effect and global warming	
			Atmospheric pollutants	
The atmosphere	Chem 2	C13	Potable water	
Life cycle assessment	Chem 2	C14	Life cycle assessment	
			Measuring rates of reaction	
			Interpreting rate graphs	
			Factors affecting rates of reaction	
Rates of reaction	Chem 2	C8	Collision theory and activation energy (including catalysts)	
			Alcohols (triple only)	
			Carboxylic acids (triple only)	
			Addition polymerisation (triple only)	
Allyanaa alaabala		C10 and	Condensation polymerisation (triple only)	
Alkenes, alcohols and polymers	Chem 2	C10 and	Biological polymers (triple only)	
			Purity and formulations	
			Gas tests	
Purity	Chem 2	C12	Chromatography	

Physics

		Triple Kerboodle		
		textbook		
JC Topic Name	Number	chapter	my-GCSEscience videos	

			Energy changes in a system	
			Power	
			Conservation and dissipation of energy	
			Power and energy transfers	
Conservation and dissipation of			Work done and energy transfer	
energy	Phys 1	P1	Forces and elasticity	
Energy transfer by heating	Phys 1	P1		
National and global energy			National and global energy resources	
resources	Phys 1	P3	The national grid	
Domestic uses and safety	Phys 1	P5	Domestic uses and safety	
			Static electricity (triple only)	
Static electricity	Phys 1	P4.1	Electric fields (triple only)	
			Density	
			Solids, liquids and gases	
			Specific heat capacity and specific latent heat	
Particle model	Phys 1	P6	Particle model and pressure	
			Atoms and isotopes	
			The development of the model of the atom	
			Radioactive decay	
			Half-life	
			Radioactive contamination	
			Background radiation	
Atomic structure and radiation	Phys 1	P7	Hazards and uses of radiation (triple only)	

			Nuclear fission and fusion (triple only)	
			Electromagnetic waves 1	
EM waves	Phys 2	P13	Electromagnetics waves 2	
			Light (triple only)	
Light	Phys 2	P14	Lenses (triple only)	
Magnets	Phys 2	P15	Magnetism	
Moments levers and gears	Phys 2	P8	Moments, levers and gears	
Pressure	Phys 2	P11	Pressure and pressure differences in fluids	
			Distance and displacement, speed and velocity	
			Distance-time graphs	
			Acceleration	
			Velocity-time graphs	
Motion	Phys 2	P9	Falling objects	
			Newton's laws of motion	
			Forces and braking	
			Momentum 1	
Forces 2	Phys 2	P10	Momentum 2	
			Transverse and longitudinal waves	
			Properties of waves	
			Reflection of waves	
			Sound waves (triple only)	
Waves	Phys 2	P12	Waves for detection and exploration (triple only)	