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)*		

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	Eurkaryotic 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		
Food production	Bio 2	B18 (18.10-18.12 only)	*Sustainable food production (triple only)*		
The nervous system	Bio 2	B10	The nervous system		
			The brain (triple only)		
			The eye (triple only)		

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

Chemistry

JC Topic Name	**Paper Number**	**Triple 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		
			The transition elements (triple only)		
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		
Nanoscience	Chem 1	C3	*Nanoparticles (triple only)*		
Reactions of acids	Chem 1	C5	Reactions of acids		
			Making salts		
			The pH scale and neutralisation		
			Titrations (triple only)		
			Strong and weak acids		
Exo and endothermic reaction	Chem 1	C7	Exothermic and endothermic reactions		
			Reaction profile diagrams		
			Calculating energy changes		
Using materials	Chem 2	C15	*Using materials (triple only)*		
			Alternative methods for extracting metals (triple only)		
			Corrosion and rusting (triple only)		
Fuels and feedstocks	Chem 2	C9	Crude oil and alkanes		
			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)		
			Condensation polymerisation (triple only)		
Alkenes, alcohols and polymers	Chem 2	C10 and C11	*Biological polymers (triple only)*		
			Purity and formulations		
			Gas tests		
Purity	Chem 2	C12	Chromatography		

Physics

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

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		
Static electricity	Phys 1	P4.1	*Static electricity (triple only)*		
			Electric fields (triple only)		
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		
			Hazards and uses of radiation (triple only)		

			Nuclear fission and fusion (triple only)		
EM waves	Phys 2	P13	Electromagnetic waves 1		
			Electromagnetics waves 2		
Light	Phys 2	P14	*Light (triple only)*		
			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*		
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	P12	Transverse and longitudinal waves		
			Properties of waves		
			Reflection of waves		
			Sound waves (triple only)		
			Waves for detection and exploration (triple only)		