

Remote Curriculum

Year 10 Science



How it Works:

1. Find the correct week commencing row.
2. Find today's day.
3. Chose a biology, chemistry or physics task listed for that day – hold ctrl and click the chosen link.
 - a. If you don't recognise the work, it appears too difficult or the link does not load;
 - i. Try another task – look at the previous/next lesson or look at other days to find something familiar – You won't run out of work.
4. Some lessons have links to PowerPoints and other resources beneath the video and/or Starter Quiz (LSQ)
5. Complete any starter quizzes
 - a. Write your answer down
 - b. Mark your answers and write down any corrections
6. Watch the videos and take notes.
7. Pause if/when instructed to do so to answer questions or respond.

Week Commencing	Week	Day	Biology Hold ctrl and click	Chemistry Hold ctrl and click	Physics Hold ctrl and click
2/9/24	A	Monday	Diseases	Three types of chemical reaction	Newton's Third Law
		Tuesday	Cardiovascular disease	Conservation of mass	
		Wednesday	Risk factors for non-communicable diseases	Balancing equations	Resultant forces and their effects
		Thursday	Cancer	Uncertainties in measurements: chemistry	
		Friday	Bacterial and viral diseases in humans: Salmonella and measles	Mass in a chemical reaction	
9/9/24	B	Monday	Fungal and protist diseases in humans	Why chemical reactions happen	Balancing
		Tuesday	Sexually transmitted infections	Metallic structure and properties	
		Wednesday	Plant diseases: TMV and rose black spot	Metal alloys	Force, mass and acceleration ($a = \Delta v/t$)
		Thursday	Non-specific defences of the human body against pathogens	Forming ions for ionic bonding	
		Friday	Immunity and vaccination	Giant ionic structures	
16/9/24	A	Monday	Evaluating the global use of vaccination	Determining ionic formulae	Terminal velocity (including graphical representation)
		Tuesday	Plant defences against disease	Ionic diagrams for binary ionic substances	
		Wednesday	Antibiotics	Properties of giant ionic structures	Stopping (and estimating stopping distances)
		Thursday	The effect of antimicrobial substances on bacterial growth: practical	Forming covalent bonds	
		Friday		Properties of covalent substances	

23/9/24	B	Monday	Development of new medicines	Bonding models	Power (P = W/t)
		Tuesday	Monoclonal antibodies	Separating mixtures (including formulations)	
		Wednesday	Breathing, respiration and gas exchange	Solutions	The energy of an object in a gravitational field (EP=mgh)
		Thursday	The human gas exchange system and breathing	Filtration	
		Friday	Estimating lung volume	Crystallisation	
30/9/24	A	Monday	Adaptations of the human lungs for gas exchange	Chromatography: paper	Stretching a spring practical
		Tuesday	Cellular respiration	Interpreting chromatograms	
		Wednesday	Aerobic cellular respiration	Chromatography: separating a mixture of inks	Stretching a spring analysis (F=ke)
		Thursday	Anaerobic cellular respiration in humans	Distillation: simple distillation	
		Friday	Anaerobic cellular respiration and fermentation in microorganisms	Distillation: fractional distillation	
7/10/24	B	Monday	001 Animal Cells (Eukaryotes)	123 Endothermic and Exothermic	041 The Model of the Atom
		Tuesday	006 Specialised Animal Cells 1	124 Energy Changes Practical	
		Wednesday	007 Specialised Animal Cells 2	125 Energy Diagrams	039 The Structure of the Atom
		Thursday	007 Mitosis and the Cell Cycle	127 Calculating the Rate of Reaction 128 Rates of Reaction from Graphs	
		Friday	135 Introduction to Disease	129 Effect of Temperature on Reaction Rate 131 Effect of Concentration on Reaction Rate	
14/10/24	A	Monday	024 Factors Effecting Health and Disease	132 Catalysts	088 Sub-Atomic Particles and Isotopes
		Tuesday	025 Lifestyle and Health	134 Equilibrium	
		Wednesday	136 Spread of Disease	190 Ionic Bonding	167 Metals
		Thursday	030 Pathogens	191 Ionic Structures	
		Friday	031 Communicable Diseases	192 Ionic Structures and Electrolysis	
21/10/24	B	Monday	032 First Line of Defence	118 Electrolysis 1	194 Metallic Structure and Properties
		Tuesday	033 Immune System	119 Electrolysis 2	190 Ionic Bonding
		Wednesday	034 Vaccination	120 Electrolysis Practical	191 Ionic Structures
		Thursday	068 Antibiotic Resistant Bacteria	121 Extracting Aluminium	064 Static Electricity – Attraction and Repulsion
		Friday	035 Drugs to Treat Diseases	019 Changes of State and Conservation of Mass	065 Investigating Static Charge
4/11/24	A	Monday	036 Drug Testing	213 Conservation of Mass	068 Electricity as an Energy Pathway
		Tuesday	137 Culturing Microorganisms	104 Reacting Masses	066 Building and Drawing Simple Circuits 1
		Wednesday	009 Stem Cells	103 Conservation of Mass and Moles	067 Building and Drawing Simple Circuits 2
		Thursday	116 Blood Groups and Transplants	130 Collision Theory	170 Energy Sources
		Friday	071 Genetic Engineering and Ethics	101 Understanding Chemical Reactions	171 Charges and Fields
11/11/24	b	Monday	185 Using Genetics: Cloning	102 Writing Chemical Word Equations	172 Current and Charge
		Tuesday	002 Plant Cells (Prokaryotes)	214 Chemical Formulae	175 Current and Charge Characteristics

		Wednesday	008 Specialised Plant Cells	101 Balancing Equations	176 Current and Charge Practical
		Thursday	027 Plant Tissues and Organs	215 Balancing Chemical Equations	173 Potential Difference and Resistance
		Friday	207 Tissue for Photosynthesis	216 Practicing Balancing Chemical Equations	154 Resistance
18/11/24	A	Monday	117 Transport in Plants	105 Deducing Balancing Numbers	174 Resistance Practical
		Tuesday	028 Transpiration	102 Molecular Mass	177 Light-Dependent Resistors and Thermistors
		Wednesday	029 Translocation	041 The Model of the Atom	178 Series Circuits
		Thursday	037 Introduction to Photosynthesis	039 The Structure of the Atom	155 Series Circuits and Kirchoff's Voltage Law
		Friday	206 Photosynthesis	088 Sub-Atomic Particles and Isotopes	179 Parallel Circuits
25/11/24	B	Monday	208 Investigating Photosynthesis 1	059 Metals and Non-Metals	156 Parallel Circuits and Kirchoff's Current Law
		Tuesday	209 Investigating Photosynthesis 2	167 Metals	180 Alternating Current
		Wednesday	038 Limiting Factors and Applications	098 Metallic Bonding	181 Electrical Power
		Thursday	210 Limiting the Rate of Photosynthesis	194 Metallic Structure and Properties	182 Electrical Current and Energy Transfer
		Friday	039 Light and the Rate of Photosynthesis	090 Group 1	183 Electrical Energy and kWh
2/12/24	A	Monday	077 Tropical Plants	108 Reactions of Metals with Oxygen	184 Cables and Plugs
		Tuesday	211 Storing Glucose 1	109 Reactivity of Metals	223 Motors
		Wednesday	212 Storing Glucose 2	110 Extracting Metals from Ores	041 The Model of the Atom
		Thursday	094 Introduction to Aerobic Respiration and Anaerobic Respiration	121 Extraction of Aluminium	
		Friday	041 Aerobic Respiration	168 Comparing Reactivity 1 169 Comparing Reactivity 2	039 The Structure of the Atom
9/12/24	B	Monday	042 Anaerobic Respiration	172 Comparing Reactivity 3	040 Describing Sub-Atomic Particles in the Atom
		Tuesday	096 Anaerobic Respiration in Yeast and Plants	170 Displacement Reactions 1	088 Sub-Atomic Particles and Isotopes
		Wednesday	097 Investigation into Rate of Fermentation in Yeast	171 Displacement Reactions 2	217 Relative Atomic Mass and Relative Molecular Mass
		Thursday	098 Invest into Rate of Fermentation in Yeast – Write Up	112 Acids and Metals	
		Friday	095 Anaerobic Respiration in Animals	115 Preparing a Salt	191 Radioactive Decay
16/12/24	A	Monday	040 Use of Glucose	103 The pH Scale	192 Half Lives
		Tuesday	043 Effects of Exercise on Respiration	104 Acids and Alkalis	
		Wednesday	099 Comparing Aerobic and Anaerobic Respiration	105 Neutralisation Reactions	193 Handling Radioactive Materials
		Thursday	045 Metabolism and the Liver	106 Neutralisation Consolidation	
		Friday		218 Moles 219 Moles Calculation	