

Barnsley Academy – (Year 10) (Combined science) Curriculum Overview 2023-24

Autumn Term			Spring Term			Summer Term		
	Class Focus	Homework		Class Focus	Homework		Class Focus	Homework
Week 1	C1 - Elements and Compounds Mixtures Distillation		Week 1	Components RP Thermistors and LDR Electricity in the home Appliances and power Appliances and energy		Week 1	B4- Photosynthesis RP photosynthesis LF photosynthesis (HT) Aerobic respiration Anaerobic respiration	
Week 2	Chromatography (Practical) Atomic structure Development of the atom Isotopes Electronic structure		Week 2	National grid CTG P2 – EOUA C3 -Mr and balancing equations		Week 2	Metabolism CTG EOUA P4 – Atoms and isotopes	
Week 3	Periodic table development Group 1 Group 7 Displacement CTG EOUA		Week 3	Moles and Avogadro's HT Reacting masses Concentration Limiting reactants		Week 3	History of atom Nuclear decay Half life Properties and uses Irradiation and contamination	
Week 4	B1 – comparison of cells Microscopes Required practical plant and animal cells Specialised cells	C1 mini revision quiz	Week 4	CTG C3 – EOUA B3 - Diseases Bacteria and viruses		Week 4	CTG P4 – EOUA C5 Exo and Endo Energy changes Energy level diagrams	
Week 5	Diffusion Exchange surfaces Osmosis Osmosis RP		Week 5	Fungi and protist Human defence Vaccinations Antibiotics and drugs CTG		Week 5	Bond calculation (HT) CTG P4 EOUA	
Week 6	Active transport Genes and cell cycle Stem cells CTG		Week 6	B3 – EOUA P3 – particle model Calculating density and RP Internal energy		Week 6	Revision for end of year exam	
Week 7	EOUA B1 P1 – Energy transfers GPE Kinetic energy Elastic potential		Week 7	SLH Motion in gases CTG P3- EOUA		Week 7		
Week 8	Power Efficiency SHC SHC – practical		Week 8	C4 Redox reactions Metals and acids Reactivity Metal oxides		Week 8		
Week 9	Using energy resources CTG EOUA C2 – Ionic bonding and writing formula		Week 9	Metals carbonates and acids Making salts RP Strong and weak acids (H) Electrolysis		Week 9		
Week 10	Properties of ionic compounds Covalent bonding Diamond and graphite Metallic bonding		Week 10	Electrolysis of AL Electrolysis of solution CTG EOUA		Week 10		

Week 11	CTG C2 EOJA B2 – Food test practicals Digestive enzymes					Week 11		
Week 12	Digestion and absorption Enzymes and temperature Enzymes and PH – practical Lungs					Week 12		
Week 13	Blood and blood vessels Heart Heart dissection (if available) Heart disease Lifestyle and disease					Week 13		
Week 14	Cancer Plant tissue Plant transport CTG B2 - EOJA					Week 14		
Week 15	P2 – current and charge Ohms law Resistance in wire RP Series circuit and parallel circuit							
Assessment			Assessment			Assessment		