

Key Vocabulary for Spring Term Overviews

Subject: Combined Science		Year Group: 10	
Key Learning Points/End Points	Key Vocabulary		
Biology: Genetics and Natural selection To understand how sexual reproduction leads to genetic variation and explain how genetic variation is the key to evolution through natural selection.	Meiosis Sexual reproduction Nucleotide Genetic variation Dominant allele Recessive allele Punnett square	Inheritance Mutation DNA extraction Classification Kingdoms Domains Selective breeding	Genetic engineering Restriction enzymes Ligase enzymes Natural selection Pentadactyl limb Antibiotic resistance
Chemistry: Bonding, Types of substance and Electrolytic processes To understand how different substances are formed through ionic bonding, covalent bonding and metallic bonding. To be able to describe the process of electrolysis and its applications.	Lattice structure Delocalised electrons Ions Electrostatic attraction Electron shells Covalent bonds Simple covalent structures	Allotropes of carbon Ionic bonds Ionic lattices Dot and cross diagram Electrolysis Electrodes Anode	Cathode Oxidation Reduction Redox reactions Half-equations Ore Displacement
Physics: Forces and Motion To understand how motion can be calculated and represented graphically. To be able to apply knowledge of Newtons first three Laws to describe the interactions of different forces.	Vectors Scalars Distance time graphs Velocity time graphs Resultant force Magnitude	Newton's first Law Balanced forces Unbalanced forces Gravitational field strength Newton's second Law Momentum	Action/reaction force Force-fields Stopping distance Thinking distance Braking distance Safety mechanisms