**Combined– Paper 1 - Biology – Higher tier**

* **Cell Biology**
	+ Parts of cells and their functions
	+ Comparing different types of cells
	+ Mitosis and the cell cycle
	+ Stem cells and differentiation
* **Organisation**
	+ Hierarchy of organisation
	+ Circulatory system & non-communicable diseases
	+ Blood
	+ Cancer
	+ Enzymes involved in digestion
	+ RP - Food tests
	+ RP – pH and amylase
* **Communicable diseases**
	+ Animal and plant diseases
	+ Antibiotics
* **Bioenergetics**
	+ RP – Photosynthesis

**Combined– Paper 2 – Chemistry & Physics – Higher tier**

**Chemistry**

* **Atomic structure & the periodic table**
	+ Metals and non-metals
	+ G1 and G7
	+ Balancing equations
	+ Bohr’s model of the atom
* **Bonding, structure and properties of matter**
	+ Ions and ionic bonding
	+ Giant covalent structures, giant metallic structures and fullerenes
	+ Bonding in polymers

**Physics**

* **Energy**
	+ Global energy resources
	+ RP - SHC
* **Electricity**
	+ Electricity calculations involving current, resistance, potential difference and power
	+ National grid

**Combined– Paper 1 - Biology – Foundation tier**

* **Cell Biology**
	+ Magnification calculations
	+ Diffusion
	+ Mitosis and the cell cycle
	+ Stem cells and differentiation
* **Organisation**
	+ Hierarchy of organisation
	+ Blood
	+ Plant organs and tissues
	+ Smoking
	+ Digestive system and enzymes
	+ RP - Food tests
* **Communicable diseases**
	+ Animal and plant diseases and their treatments
* **Bioenergetics**
	+ RP – Photosynthesis

**Combined– Paper 2 – Chemistry & Physics – Foundation tier**

**Chemistry**

* **Atomic structure & the periodic table**
	+ Structure of the atom
	+ G1
	+ Periodic table
	+ Changes of state
	+ Dot and cross diagrams
	+ Conservation of mass
* **Bonding, structure and properties of matter**
	+ Ions and ionic bonding
	+ Bonding in simple molecules
	+ Giant covalent structures

**Physics**

* **Energy**
	+ Calculating Ep, Ee
	+ Changes in energy stores
	+ Energy dissipation
	+ RP - SHC
* **Electricity**
	+ Circuit symbols
	+ Electricity calculations involving current, resistance, potential difference and power
	+ V/I characteristics