

## BIOLOGY REVISION LIST

Topic	Sub-topic	Content	Covered
Cells & Cell Functions		Plant and animal cells Functions of the cell parts Using a microscope and preparing slides Specialised cells Cells, tissues and organs Organs and organ systems Fertilisation in humans & flowering plants	
	Movement	Skelton Joints and muscles The role of the heart and circulation	
	Breathing & Respiration	The role of the lung structure Aerobic respiration Transportation of products and reactants	
	Nutrition	Balanced diet Digestion Absorption and egestion The role of food	
	Reproduction	Changes during adolescence. The human reproductive system in males & females. The menstrual cycle. Gametes and fertilisation. The zygote, genes and characteristics of the parents. Development of the fetus in the uterus. The role of the placenta. What happens at birth?	
	Health	The effects of alcohol, solvents & other drugs. Positive effects of exercise and healthy eating. Bacteria and viruses. Natural defences, immunisations and medicines.	
Plants	Nutrition & growth	The process of photosynthesis. Word equation for photosynthesis. Requirements for plant growth. The role of root hairs.	
	Respiration	Aerobic respiration in plants. The balance between respiration & photosynthesis. The carbon cycle.	
Living Things in Their Environment	Adaptation and Competition	Protecting the environment Habitats Adaptation to daily & seasonal changes Factors affecting population size	
	Feeding Relationships	Food chains and webs Accumulation of toxins in food chains	
Variation, Classification & Inheritance	Variation	Environmental & inherited causes of variation.	
	Classification	Taxonomic groups Using keys to identify the grouping of a specimen.	
	Inheritance	What is inherited? Selective breeding.	

### CHEMISTRY REVISION LIST

Topic	Sub-topic	Content	Covered
Classifying Materials	Solids, Liquids and Gases	Melting point, boiling point & density Particle theory, changes of state Gas pressure and diffusion Atoms and molecules	
	Elements, Compounds and Mixtures	Elements and the periodic table Properties of elements and grouping Formation of compounds Formulae and word equations Mixtures and air as an example Separation techniques	
Changing Materials	Physical Changes	Physical changes & conservation of mass Solutes, solvents and solutions – dissolving Solubility & variation of solubility Water, it's testing and abundance in nature Relating changes of state to energy transfers	
	Geological Changes	Physical weathering of rocks Formation of rocks Rock types	Not Examined
	Chemical Reactions	Chemical changes & conservation of mass The Bunsen Burner Word equations for chemical reactions Recognising chemical change Chemical changes in everyday situations Burning of fossil fuels & its effects The key chemical reactions Tests for O <sub>2</sub> and CO <sub>2</sub>	
Patterns of Behaviour	Metals	Reaction of metals with oxygen, water, acids & oxides of other metals. Displacement reactions. The Reactivity Series. Uses of metals due to their properties & reactivity.	
	Acids & Bases	Indicators for classifying solutions as acid, neutral or alkali. The pH scale. Neutralisation and salt formation. Everyday applications of neutralisation. Acids in the environment. Limestone & chemical weathering.	

### PHYSICS REVISION LIST

Topic	Sub-topic	Content	Covered
Electricity & Magnetism	Circuits	Current and voltage Series and parallel circuits Circuit components and symbols Constructing circuits Measuring current and voltage AND / OR circuits and truth tables Energy transfers in circuits	
	Magnetic Fields	Poles of a magnet The field around a bar magnet The Earth's magnetic field Test for a magnet	
	Electromagnets	Magnetic field due to a current carrying wire and coil How to examine the field from a current in a coil Constructing an electromagnet Uses of electromagnets	
Forces	Force and linear motion	Types of force and their affects on objects Balanced and unbalanced forces Speed and its measurement The gravitational force of attraction Frictional forces and their effects	
	Force & rotation	Levers and simple machines. The principle of moments.	
	Force & pressure	Relationship between force, area and pressure. Pressure & its application.	
Light and Sound	The behaviour of Light	Luminous sources of light. The way light travels. How we see non-luminous objects. Reflection of light at plane surfaces. Refraction of light. Dispersion of white light. The effect of colour filters.	
	Hearing	How we hear sounds. The effect of loud sounds on the ear.	
	Vibration & sound	Comparison of light & sound. Relationship between loudness and amplitude. Relationship between pitch and frequency.	
The Earth & Beyond	The Solar System	Movement of the Earth around the Sun Day and Night Seasons Eclipses of the Sun and Moon Positions of the planets in the solar system The orbits of planets around the Sun Orbits and gravity The Sun and stars as light sources Artificial satellites	
Energy	Energy Resources	The variety of energy resources. Renewable & non-renewable energy resources. Energy measured in Joules. The Sun – the ultimate source of energy. Generating electricity.	
	Conservation of energy	The distinction between temperature and heat. The different forms of energy. How energy is transferred. The Law of Conservation of Energy.	