

SEMI FORMAL PLUS from Sept 25

Science	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7 AQA activate	8.1 - Movement Name major organs and some roles What are bones and their function? Muscles and their role Dissect chicken - to understand bones and muscles.	8.2 - Cells (Organisms) -Observing cells using a microscope. -Plant and animal cell components. -Similarities and differences between plant and animal cells. -Types of specialised cells.	5.1 - Particle model (Matter) -The particle modELS. -Properties of different materials - arrangement and movement of particles. -Properties of solids, liquids and gases.	9.1 - Interdependence (Ecosystems) -Food chains/webs transfer of energy. -Factors that affect population of species and toxic materials. -Importance of pollinators. -Differences of ecosystems, community, habitat, environment and niche. -Resources animals and plants compete for.	1 - Speed (Forces) -Introduction to forces. Unit of forces (Newton) - Balanced and unbalanced - force diagrams -Links between speed and journey times -Calculate speed from distance - time graphs Investigation: Making, testing and measuring the distance of bottle rockets. 1.2 - Gravity (Forces) -What is gravity? -Value of gravity on Earth and on the moon. -Differences between mass and weight. -Objects staying in orbit. Investigation: Creating and testing parachutes with different variables.	9.2 - Plant reproduction (Ecosystems) -Locate the plant's reproductive system. -Link the structures of the flower to their functions. -Methods of pollination. -Process of fertilisation and germination. -Types of seed dispersal. -Seeds adaptations to their method of dispersal. Investigation: Germinating seeds with different variables. Dissecting a lily into parts.
Year 8 AQA activate	10.2 - Human reproduction (Genes) -Adolescence -Reproductive systems -Fertilisation and implantation	4.1 - Sound (Waves) -Sound waves and speed -Loudness and amplitude -Frequency and pitch -The ear and hearing Investigation:	4.2 - Light (Waves) -Light -Reflection -Refraction -The eye and vision -Colour Investigation:	8.4 - Digestion (Organisms) -Nutrients -Food tests -Unhealthy diet -Digestive system -Bacteria and enzymes in digestion	1.3 - Contacted forces (Forces) -Friction and drag -Squashing and stretching -Turning forces Investigation:	6.1 - Acids and Alkalis (Reactions) -Chemical reactions -Acids and alkalis -Indicators and pH -Acid strength -Neutralisation -Making salts

	<ul style="list-style-type: none"> -Development of a fetus -The menstrual cycle 	Use a decibel meter to explore a range of sounds.	Creating a spectrum of light using a prism	Investigation: Testing a range of different foods for nutrients.	Testing Hooke's law, extension of a spring and the force. 1.4 - Pressure (Forces) -Pressure in gases -Pressure in liquids -Stress in solids Investigation: Testing expansion of air in marshmallows.	Investigation: Creating and testing a range of plant indicators in acid and alkali solutions. 6.2 - Metals and non-metals (Reactions) -Elements -Chemical reaction of metals and non metals. -Metals and acids. -Metals and oxygen -Metals and water -Metal displacement reactions Investigation: Testing a range of metals in hydrochloric acid. Observing potassium in water.
Year 9 AQA activate	10.3 - Evolution (Genes) -Natural selection -Charles Darwin -Extinction	10.4 - Inheritance (Genes) -Inheritance -DNA	3.4 - Heating and cooling (Energy) -Energy and temperature -Energy transfer: particles -Energy transfer: radiation and insulation Investigation: Testing how energy is transferred a range of substances.	9.4 - Photosynthesis (Ecosystems) -Photosynthesis -Leaves -Investigating photosynthesis -Plant minerals Investigation: Collecting oxygen produced by pondweed. Testing leaves for starch.	2.3 - Magnetism (Electromagnets) -Magnets and magnetic fields Investigation: Creating a magnetic field using a magnet and iron fillings.	7.3 - Climate (Earth) -Global warming -The carbon cycle -Climate change