

Science Year 7

Year 7 is part of Key Stage 3, in Science. The course starts with an introductory module that introduces learners to the laboratory apparatus, how to work safely and how to collect data. Pupils are then taught a series of Biology, Chemistry and Physics topics. To maximise the opportunity for pupils to use limited practical equipment, the modules are not taught all at the same time. All pupils will study every module but they may not be in the order presented below.

TERM	UNIT	WHAT WILL YOU BE LEARNING?	ARE YOU PREPARED FOR LEARNING?
1	Introduction Module B7.1 – All about cells	 The microscope Different types of plant and animal cell Diffusion Unicellular organisms 	Your exercise book will be clearly presented and all work will be complete. Practical work will be written up and evidence of
2	C7.1 – Particles and their behaviour P7.1 - Forces	 The particle model States of matter Melting, freezing and boiling Changes of state Diffusion Gas Pressure What are forces Squashing and stretching Friction Streamlining Gravity 	Practical work will be kept in your exercise book. You will come to lesson with stationery, books and relevant homework.
3	B7.2 – Structure and function of body systems	 Balanced and unbalanced forces Systems of the body The working lung The skeleton 	

	C7.2 – Elements, Atoms and Compounds	 How joints allow movement What is an element What is an atom What is a compound What is a chemical formula 	
4	P7.2 – Sound B7.3 - Reproduction	 Sound travels as waves Sound is a type of energy Loudness and pitch Detecting sounds / structure of the ear Measuring how loud sounds are Echoes and ultrasound Flowers as the organ of plant reproduction Pollination and fertilisation Germination and seed dispersal Adolescence Male reproductive system Female reproductive system. Fertilisation and implantation Development of a foetus Contraception 	
5	C7.3 – Chemical Reactions	 Chemical reactions Word equations Burning fuels Thermal decomposition Conservation of mass Exothermic and endothermic reactions 	

	P7.3 - Light	 Luminous sources and how light travels in straight lines. Transparent, translucent and opaque Reflection Refraction Lenses The eye Colour 	
6	C7.4 – Acids and Alkalis	 What are acids and alkalis Indicators and pH Neutralisation Making salts 	

At the end of each module students are set revision exercises to complete before taking a test.

At the end of each section there will be a synoptic test covering all material studied.

At the end of the year there will be an examination on all material studied so far.