



		Year 76 lessons per fortnight		
	Wk	Topic	Learning Content	Assessment
Autumn	1	Lab Safety	Describe how to safely work in a lab practical	
	2		Explain how to correctly use a Bunsen burner	Bunsen Burner Licence
	3		To describe how to work scientifically	
			Vocabulary:	
			Hazard, risk, equipment, method, analysis, evaluation, hypothesis	
	4	Particles & Properties		
	5		Apply the particle model when considering states of matter.	Extended Writing
	6		Explain diffusion.	
	7		Connect gas pressure to the particle model.	End of Topic Test
			Vocabulary:	
			Particle, element, atom, mixture, compound, periodic table, diffusion, concentration, pressure,	
	8	Cells and Organisation		
	9		Recognise specialised cells under a microscope.	
			Explain how uni-cellular organisms are adapted.	
	10		Describe how to use a microscope	Extended Writing
			Apply ideas of cells & their adaptations.	
	11		Explain how the skeleton relates to its function & movement.	
	12		Explain why some organisms need organ systems.	
			Vocabulary: Skeletal, muscle, tendon, ligament, antagonistic, relax, contract, organism, mitochondria, membrane, nucleus, vacuole, cytoplasm, surface area, nutrients, minerals	
	13			
	14			
	15			End of Topic Test
Spring	1	Forces	Explain balanced & unbalanced forces	
	2		Discover the effects of forces	Extended Writing
	3		Discover how friction & drag affect an object, including factors that affect the size of frictional or drag forces.	
	4		Vocabulary: aerodynamic, downforce, equilibrium, friction, contact non-contact	End of Topic Test
	5	Elements	Identify substances that are elements	
	6		Define atom, element & compound	
			Compare properties of atom, element & compounds	
			Link behaviour of atoms to properties of a substance	
			Vocabulary: Atoms, element, compound, formula, mass	
	7	Human and Plant Reproduction	Know the organs of female & male that are involved.	
	8		Explain how a foetus develops.	Extended Writing
			Consider changes as a child grows into adulthood.	
	9		Describe causes of low fertility.	
			Identify parts of the flower & link their structure to their function.	
	10		Describe plant reproduction.	
	11		Explain why seed dispersal is important.	
	12		Vocabulary: Penis, vagina, ovary, testis, adolescence, fertilisation, foetus, contractions, cervix., carpel, anther, stigma, style, stamen, pollen, ovum, ovary, fertilisation, pollination	End of Topic Test
Summer	1	Sound & light	Explain how sound is made, transmitted, absorbed & reflected.	
	2		Explain how light is made, transmitted, absorbed & reflected.	
			Investigate how light passes through transparent materials: reflection & dispersion.	
	3		Vocabulary: Transmit, absorb, reflect, refract, disperse, opaque, translucent, transparent.	Extended Writing
	4			
	5		*This term includes Space delivered as an Independent Learning Project*	End of Topic Test
	6	Chemical Reactions	Litmus & UI as indicators.	
	7		Identify the best indicator.	Extended Writing
			Explain neutralisation reactions.	
	8		Investigate exothermic & endothermic reactions	End of Topic Test
			Vocabulary:	
			Acid, alkali, neutralisation, acidic, alkaline, sulphuric, hydrochloric, litmus, universal indicator	
	9	Space	Describe the structure and components of the Solar System.	
	10		Explain how the Earth's rotation and orbit cause day, night, and seasons.	
	11		Identify and describe the phases of the Moon and how eclipses occur.	End of Topic Test
	12		Vocabulary:	
			Solar System, day and night, seasons, Moon phases, eclipses	

		Year 86 lessons per fortnight	
	Topic	Learning Content	Assessment
The Periodic Table		Know how symbols & atomic numbers are used in the Periodic Table.	
		Describe some properties of metals & non-metals	Extended Writing
		Interpret data to describe properties of Group 1	
		Use patterns to predict properties of Group 0,1 & 7	
Health &Lifestyle		Vocabulary: Reactivity series, alkali metals, transition metals. Group, period, reactive	End of Topic Test
Health &Lifestyle		Describe healthy & unhealthy diets.	
		Describe adaptations in the digestive system.	
		Calculate the energy requirements of people	Extended writing
		Explain why testing food for starch, lipids, sugars & protein is important	
Electricity & Magnetism		Describe the dangers associated in drug use & alcohol	
		Vocabulary: Enzyme, protein, lipid, sugar, starch, recreational, alcohol, small intestine, villi	End of Topic Test
Electricity & Magnetism		Investigate, voltage, current & resistance in a circuit.	
		Calculate resistance.	
		Investigate the strength of electromagnets.	
		Examine & construct electrical energy transfers diagrams.	Extended Writing
Separation Techniques		Vocabulary: Resistance, ohms, electromagnet, core, repeatability, dissipated, transfer. positive charge, negative charge, attract, repel.	
			End of Topic Test
Separation Techniques		Investigate mixtures, solutions, solubility, filtration, evaporation, distillation & chromatography.	
		Vocabulary: solution, solvent, solute, chromatogram, chromatography, dissolve, pure, solubility	
			End of Topic Test
Energy		Describe how an object’s temperature changes over time when heated or cooled.	
		Define the three forms of heat transfer	Extended Writing
		Explain how a method of thermal insulation works.	
		Vocabulary: Increase, decrease, line graph, curve, latent heat, radiation, convection, conduction, insulation, energy transfer	End of Topic Test
Ecosystem Processes			
		Describe predator prey cycles	
		Using food webs & chains, explain effects of environmental changes.	
		Describe the process of respiration & photosynthesis	
		Compare anaerobic & aerobic respiration	Extended Writing
		Vocabulary: Energy, respiration, photosynthesis, mitochondrion, food chain, interdependence	
Metals & Materials			
		Describe what happens when metals react with acids	
		Explain the test for hydrogen gas.	
		Compare the reactions of different metals with oxygen	
		List some uses of ceramics	
		Distinguish between polymers, ceramics and composites	
Adaptation & Inheritance		Vocabulary: ceramic, metal, ore, polymer	
		This term includes The Earth delivered as an Independent Learning Project	End of Topic Test
Earth and Atmosphere		Explain the causes of extinction & natural selection.	
		Consider the theories of survival of the fittest	
		Describe the adaptations of common animals	Extended Writing
		Explain how different adaptations supports the survival of animals in different environments	
Earth and Atmosphere		Vocabulary: Inherit, traits, characteristics, genes, deoxyribonucleic acid, fertilisation, adaptations, Darwin, survival of the fittest, natural selection.	End of Topic Test
Earth and Atmosphere		Describe the composition and structure of the Earth's atmosphere.	
		Explain how human activities contribute to air pollution and climate change.	End of Year Assessment/ GL
		Understand the carbon cycle and its role in maintaining Earth's balance.	
		Vocabulary:	
Earth and Atmosphere		atmosphere, air pollution, climate change, carbon cycle, greenhouse gases	

