



Science Curriculum Plan Overview

Year 8				
Term	Topic	Learning	How can parents' best support	Key Vocabulary
Autumn 1	Food and Digestion	Balanced diets Digestion Nutrients in our food	Look at nutritional guidance on food packaging. Promote a healthy diet and healthy swaps in your diet.	nutrition, healthy diet, protein, fats, carbohydrates, vitamins, minerals, Eat well plate, 5 a day, malnutrition,
	Breathing and Respiration	Breathing and water sports Gas exchange Fitness	Discuss the importance of fitness and the effect it has on your body. Revise the topic using BBC bitesize http://www.bbc.co.uk/education/guides/zq349j6/revision	breathing, respiration, oxygen, carbon dioxide, gas exchange, lactic acid, aerobic, anaerobic,
	Human Reproduction	Changes during Puberty The menstrual cycle		menstruation, ovulation, egg, sperm, oestrogen, progesterone, fertilisation, embryo
Assessment:		End of unit test		
Autumn 2	Variation- Adaptations	Identifying differences.	Watch Nature shows on iplayer eg Dynasties BBC iPlayer - Dynasties BBC iPlayer - Planet Earth - 1. From Pole to Pole	variation, genetic, environmental, genes, DNA, chromosomes, adaptation, survival of the fittest, sexual reproduction, asexual reproduction, cloning, genotype, phenotype, familial, traits, species
	Biodiversity	How animals adapt to a range of environments		
	Inheritance	Why we need to maintain it.	Discuss family traits or similarities passed down. Look at past generations and identify dominant features.	
			How characteristics are passed on.	
Assessment:		End of unit test		

Spring 1	The Periodic Table- Metals and non-metals Energy	What is it? Physical and chemical trends. How it is organised. What it tells us. Where energy comes from.	Discuss what things are made of. Think about what could be used instead. Think about the advantages and disadvantages of using natural and man made materials. Discuss where we get our energy from?	periods, trends, physical characteristics, chemical characteristics, mass number, atomic number, protons, electrons, neutrons, Mendeleev, strong, sonorous, malleable, ductile, shiny, solar, kinetic, gravitational
Assessment:	End of unit review			
Spring 2	Types of Reactions. Global Warming Recycling	Recall reactions in everyday activities eg burning fuel How global warming is affecting our planet. The importance of recycling.	BBC iPlayer - Greta Thunberg: A Year to Change the World BBC iPlayer - Climate Change: Ade on the Frontline BBC iPlayer - Celebrity Supply Teacher - Series 2: 9. Hugh Fearnley-Whittingstall - Science	combustion, carbon dioxide, fossil fuels, pollution, smog forest fires, flooding, extinction, coastal erosion, coastal flooding, river flooding, extreme weather events, habitat loss Reduce waste, reduce land pollution, reduce impact on the environment.
Assessment:	End of unit review			
Summer 1	Forces and Motion Electricity and Magnetism	What is a force? Examples of contact and non-contact forces. How electricity is generated and everyday uses of electricity	http://www.bbc.co.uk/education/guides/zwwmxnb/revision http://www.bbc.co.uk/education/guides/zttfyrd/revision http://www.bbc.co.uk/education/guides/z3g8d2p/revision	gravity, magnetism, electrostatic, drag, air resistance, upthrust, friction, thrust, Fleming, National Grid, transformer, Faraday, Power, Watts, North pole, South Pole, Attract, Repel, Magnetic field line

Assessment:	End of unit review			
Summer 2	Work Heating Waves	How work is done? How heat travels. Longitudinal and transverse waves.	BBC iPlayer - Absolute Genius with Dick and Dom	forces, conduction, convection, radiation, amplitude, wavelength