



Science Curriculum Plan Overview

Year 9-AQA Entry Level Certificate				
Term	Topic	Learning	How can parents' best support	Key Vocabulary
Autumn 1	Biology	<p>Cells, Tissue and Organs</p> <p>How our bodies defend themselves</p> <p>How our bodies are controlled</p>	<p>Watch "How the body Works" programme from the BBC which can be found on Youtube.</p> <p>Discuss pro's and con's of organ transplants.</p> <p>Biology Revision BBC bitesize</p>	<p>Brain, eye, liver, testes, ovaries, stomach, heart, kidney, lungs, white blood cells, red blood cells, plasma, platelets, oesophagus, small intestine, large intestine, pancreas, enzymes, amylase lipase, protease, respiration, carbon dioxide, oxygen, water, glucose, balanced diets, nutrition, cancer, obesity, antibiotics, virus, bacteria, drug trials, virus, bacteria, white blood cells, toxin, sensory, motor, sense, organ, effector, relay neurons, spine, spinal cord, brain, oestrogen, testosterone, contraception,</p>
Assessment:	Externally set assessment and practical assignment			
Autumn 2	Chemistry	<p>Atoms, Elements and Compounds</p> <p>Properties of compounds</p> <p>Separating mixtures</p> <p>Metals and Alloys</p>	<p>Discuss compounds that we use every day and how they react.</p> <p>Discuss why we use materials for specific jobs.</p> <p>Chemistry revision BBC bitesize</p>	<p>Atom, elements, compounds, proton, neutron electron, shells, mixture, distillation, chromatography, filter, sieve, decant strong, shiny, sonorous, reactive, unreactive, rust alloys, mixtures, properties, steel mixture, distillation, chromatography, filter, sieve, decant</p>

				strong, shiny, sonorous, reactive, unreactive, rust alloys, mixtures, properties, steel monomer, polymers, plastic, properties, waterproof, malleable, resistant, flexible physical properties, melting point, atomic structure, density, energy, vibrations
Assessment:	Externally set assessment and practical assignment			
Spring 1	Physics	Energy Forces The structure of Matter	Discuss electrical devices in the home and how useful they are. Discuss use of Energy in our homes and how we pay for it. Physics Revision BBC bitesize	Wind, solar, biogas, hydroelectric, Kinetic, Thermal, elastic, gravitational potential, Efficiency, dissipated Energy, Fire, central, heating, movement of heat, insulation. Contact, Non contact, Magnetic, Air resistance, Friction tension, push, pull, Twist, gravitational, Electrostatic, work Time, distance, speed, Stopping distance, thinking distance, braking distance, compare different speeds, common speeds, rules of the road, Reaction times. Heat, thermal energy, insulators, conductor,

				Thermometer, melting point, freezing point, Bonds
Spring 2	Biology	Environment Evolution Inheritance	Watch "How the body Works" Monday 9pm BBC1. Discuss how they have grown and relate topics covered to your own experiences. Biology Revision BBC bitesize	variation, genetic, environmental, genes, DNA, chromosomes, adaptation, survival of the fittest, sexual reproduction, asexual reproduction, cloning, genotype, phenotype, familial, traits, species
Assessment:	Externally set assessment and practical assignment			
Summer 1	Chemistry	Chemical Reactions Rates of reaction Our Atmosphere Fuels	Discuss the advantages and disadvantages of the fuels we use. Discuss how they may affect our atmosphere. Chemistry revision BBC bitesize	Surface area, concentration, temperature, 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:	Externally set assessment and practical assignment			
Summer 2	Physics	Electricity Magnetism Waves Electromagnetic Spectrum	Discuss how we pay for and calculate our energy bills. identify the use of magnets in everyday life.	Fleming, National Grid, transformer, Faraday, Power, Watts, North pole, South Pole,

			Physics Revision BBC bitesize	Attract, Repel, Magnetic field line, Gamma Ray, X-ray, Ultraviolet, Visible Light, Infrared, Microwave, Radio Wave
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