

Willow Park Science - Long Term Plan – Science - Entry Level Certificate (KS3/4)



Cycle	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
1 2024-45	<u>AQA ELC Component 1:</u> <u>The Human Body</u> Animal cells, Tissues, organs and systems, human digestive system, Respiration, Lifestyle and health, Infectious diseases, the role of white blood cells, Medicinal drugs, the nervous system, Hormonal control, Hormones can be used to control fertility. TDA: reaction time, microbiology		<u>AQA ELC Component 3:</u> <u>Elements, Mixtures & Compounds</u> Atoms and elements, Elements and compounds, States of matter, Forms (allotropes) of carbon, Mixtures, Chromatography, Metals and ores, Properties of metals, Alloys, Plastics TDA: Chromatography, Filtering particles		<u>AQA ELC Component 6:</u> <u>Electricity, Magnets & Waves</u> Current in a circuit, DC and AC. Current, plug, Energy transfer in electrical appliances, Magnets, Electromagnets and solenoids, Longitudinal and transverse waves, Wave properties, the electromagnetic spectrum, Uses of the electromagnetic spectrum TDA: Investigate which materials are the best electrical conductors.	
	<u>AQA ELC Component 5:</u> <u>Energy</u> Radioactivity, Changes in energy storage, Energy transfers and efficiency, Energy resources, Types of forces, Effects of forces, Speed, stopping distances, Reaction times and stopping distances, Weather conditions and Braking. Radiation. TDA: Efficient kettle, investigate factors that affect the rate of cooling of a container of water		<u>AQA ELC Component 4:</u> <u>Chemistry in the World</u> Acids and metal reactions, Neutralization, Energy and rate of reaction, Increasing the rate of a chemical reaction, Changes in Earth’s atmosphere, current atmosphere, Crude oil and fuels, Burning fuels, Human influences on the atmosphere, Water for drinking. TDA: Investigate the reactions of magnesium, zinc and iron with hydrochloric and sulfuric acids.		<u>AQA ELC Component 2:</u> <u>Environment, evolution and inheritance</u> Photosynthesis. Animals and plants adaptations, Food chains and webs, Decomposition and recycling, Competition, Environment-al changes, Pollution and the effects of human population growth, Evolution, natural and artificial selection, Sexual and asexual reproduction, Human genetics TDA: Bird beak, huddle, Pollution	<u>Folder Submission & Award</u>