Moor House School & College Curriculum Map

SUBJECT: Science ***YEAR GROUP/PATHWAY: Year 11 Entry Level***			
Autumn 1	**Biology – Environment, Evolution & Inheritance**	**Biology – Environment, Evolution & Inheritance**	**Biology – Environment, Evolution & Inheritance**
Knowledge	Core: Photosynthesis	Core: Adaptations, Food Chains and Food Webs and Competition	Core: Decomposition, Environmental Changes and Pollution
Knowledge & Skills	Core – students to demonstrate understanding of: - The Sun as the source of energy and the role of plants in photosynthesis	Core – students to demonstrate understanding of: - Animals and plants may be adapted for survival in the conditions where they normally live - Describe the food chains in a food web and the links between species in the web - Competition in plants as animals	Core: students to demonstrate understanding of: - Process of decaying material - Recycling - Environmental changes altering plant and animals environments - Pollution and the effects of human population growth
Vocabulary	Photosynthesis	Interdependence Adaptation Habitat Predator Prey Producer Consumer Food Chain Food Web	Decay Pollution Recycle
Autumn 2	**Biology – Environment, Evolution & Inheritance**	**Biology – Environment, Evolution & Inheritance**	
Knowledge	Core: Evolution	Core: Reproduction and Genetics	
Knowledge & Skills	Core – students to demonstrate understanding of: - Darwin's theory of natural selection - Artificial selection	Core – students to demonstrate understanding of: - Sexual vs asexual reproduction - Human genetics	
Vocabulary	Natural Selection Artificial Selection Evolution	Sexual Reproduction Asexual Reproduction Genetics	
Spring 1	**Chemistry – Chemistry in our World**	**Chemistry – Chemistry in our World**	**Chemistry – Chemistry in our World**

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Knowledge	Core: pH Interpretation	Core: Rates of reaction	Core: Earth's Atmosphere
Knowledge & Skills	Core – students will demonstrate understanding of: - Acid and Alkali's - Neutralisation reactions	Core – students will demonstrate understanding of: - Factors that affect rates of reactions - Energy in a reaction - Increasing the rate of a chemical reaction	Core – students will demonstrate understanding of: - Changes in our earth's atmosphere - Our current earth's atmosphere - Human influence on the earth's atmosphere
Vocabulary	Reactions, Alkali, Acids, Neutralisation	Energy, Temperature, Rate of Reaction, Concentration, Endothermic, Catalyst, Exothermic	Atmosphere

Spring 2	**Chemistry – Chemistry in our World**	**Chemistry – Chemistry in our World**	[redacted]
Knowledge	Core: Fossil Fuels	Core: Water	
Knowledge & Skills	Core – students will demonstrate understanding of: - Crude oil and fuels - Burning fuels	Core – students will demonstrate understanding of: - Water for drinking	
Vocabulary	Fuel, Burning Fuels, Crude Oil, Distil, Fractional Distillation	Potable water, Sterilise	
Summer 1	**Physics – Electricity, Magnetism and Waves**	**Physics – Electricity, Magnetism and Waves**	**Physics – Electricity, Magnetism and Waves**
Knowledge	Core: Electricity	Core: Magnetism	Core: Waves
Knowledge & Skills	Core – students to demonstrate understanding of: - Current in a circuit	Core – students to demonstrate understanding of: - Magnet properties	Core – students to demonstrate understanding of: - Longitudinal vs. transverse waves

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	- Alternating and direct currents - Wiring a plug - Energy transfer in electrical appliances - Useful vs. Wasted Energy	- Electromagnets and solenoids	- Wave properties - The electromagnetic spectrum - Uses of the electromagnetic spectrum
Vocabulary	Electricity Current Circuit Alternating current Useful energy Direct current Earth wire Live wire Neutral wire Fuse box Wasted energy	Permanent magnet Induced magnetic Electromagnet Solenoid	Longitudinal waves Transverse waves Amplitude Wavelength Electromagnetic spectrum Peak Trough
Summer 2			
Knowledge			
Knowledge & Skills			
Vocabulary			