Subject	Science	Year	7
Term	**Autumn 1**	**Spring 1**	**Summer 1**
Unit of learning	**Movement and Cells**	**Human Reproduction and ecosystems**	**Solids, Liquids, and gases (particles)**
Intent	Life processes Organs Tissues Microscopes Cells Organ systems Transplants Fitness Muscles, breathing and blood The skeleton and moving Drugs Assessment/DIRT task	How do animals reproduce sexually? Reproductive organs Becoming pregnant Gestation and birth What happens during puberty and adolescence? How can studying reproduction help endangered species? Variation Adaptation Effects of the environment How do organisms affect their habitats? Food chains Assessment/DIRT task	How are solids, liquids and gases different? What is the particle theory of matter? Brownian motion Diffusion Air pressure Waste What kind of particles are found in air? Earths elements Metals and non metals Compounds Chemical reactions Assessment/DIRT task
Term	**Autumn 2**	**Spring 2**	**Summer 2**
Unit of learning	**Energy and electricity**	Mixtures and separation/Acids and alkalis	**Light and Sound**
Intent	Energy from food Energy transfers and stores Where do fuels come from? What other energy resources are available? Which energy should we use? How can we use less fossil fuel? How do we measure electricity? Series and parallel circuits Changing the current Using electricity safely World without electricity Assessment/DIRT task	Assessment/DIRT task Mixtures Solutions Evaporation Chromatography Distillation Safe drinking water Hazards and chemicals and home Indicators Acidity and Alkalinity Neutralisation How can we make use of neutralisation? Assessment/DIRT task	How are different sounds made? How does sound travel? How can we detect sounds? How do humans and animals use sounds? Comparing waves Animals and noise Revision of year 7 content Assessment/DIRT task
Rationale:	Follows national curriculum and builds on prior knowledge from KS2. Biology, Chemistry and Physics topics covered to ensure solid foundations for KS4. Regular opportunities to recall and revisit prior knowledge and skills to ensure students know more and remember more.		

MUSIC STUFF EDUCATION

Music Stuff SOW (Long-Term)

Subject	Science	Year	8

Term	Autumn 1	Spring 1	Summer 1
Unit of learning	**Food and nutrition**	**Plant and their reproduction/Unicellular organisms**	**The periodic table/metals and their uses**
Intent	Food and advertising Nutrients Uses of nutrients Weighting and bias Balanced diets Digestion How does food get into the blood? Packaging and the law Assessment/DIRT task	Classification and biodiversity Types of reproduction Pollination Fertilisation and dispersal Germination and growth Unicellular or multicellular Microscopic fungi Bacteria Protoctists Decomposers and carbon How do we know what caused the black death? Assessment/DIRT task	Fireworks and dalton's atomic model Chemical properties How are elements arranged in the periodic table? Investigating burning magnesium Physical trends/Chemical trends Should fireworks be banned? What makes metals useful? Corrosion Metals and water Metals and acids Alloys Assessment/DIRT task
Term	**Autumn 2**	**Spring 2**	**Summer 2**
Unit of learning	**Earth Structure and Atmosphere**	**Light/Energy transfers**	**Earth and Space**
Intent	Rocks and their uses How are igneous and metamorphic rocks formed? Weathering and erosion Sedimentary rocks Theories in geology Materials in the earth Living in danger Burning fuels Oxidation Fire safety Air pollution Global warming Reducing pollution Assessment/DIRT task	Light on the move Ray diagrams Reflection Refraction Cameras and eyes Colour Living in extremes Temperature changes How is energy transferred by heating? How can we control energy transfers? Power and efficiency Paying for energy and keeping warm Assessment/DIRT task	The solar system Seasons What is the earths magnetic field? How does gravity affect the solar system? What is beyond our solar system? Studying space Revision of year 8 content Assessment/DIRT task
Rationale:	Follows national curriculum and builds on prior knowledge from KS2. Biology, Chemistry and Physics topics covered to ensure solid foundations for KS4. Regular opportunities to recall and revisit prior knowledge and skills to ensure students know more and remember more.		

Subject	Science	Year	9
Term	**Autumn 1**	**Spring 1**	**Summer 1**
Unit of learning	**Genetics and evolution/Plant growth**	**Materials and reactivity**	**Chemistry**
Intent	Environmental variation Inherited variation How is genetic information stored – DNA Genes and extinction Natural selection Recreating animals Reactions in plants Plant adaptations Plant products Growing crops What problems can farming cause? Organic farming Assessment/DIRT task	Materials of the future Ceramics Polymers Composite materials Problems with materials Recycling materials Material failures/Demolition Types of explosion Reactivity Energy and reactions Displacement Extracting metals Should explosives be banned? Assessment/DIRT task	Separating substances Chemical reactions Physical and chemical The periodic table Earth and atmosphere Ions Energy transfers Rates of reaction Chemical equations
Term	**Autumn 2**	**Spring 2**	**Summer 2**
Unit of learning	**Forces and motion/Force fields and electro magnets**	**Biology`**	**STEM Project**
Intent	Forces and movement Energy for movement How do we calculate speed How do we draw and interpret distance time graphs? Turning forces What other simple machines make it easier to turn things? Mission to Mars Static electricity Current electricity Resistance Electro-magnets Humans in space Assessment/DIRT task	Cells, systems and movement Other organ systems Reproduction and health Energy and ecosystems Genetics and evolution Animal smuggling Teeth Threat from disease Diseases Control systems Testing medicines Ecology Why is surface area: volume ration important Combatting pandemics	Crest bronze award
Rationale:	Follows national curriculum and builds on prior knowledge from KS2 and year 7 and 8. Biology, Chemistry and Physics topics covered to ensure solid foundations for KS4. Regular opportunities to recall and revisit prior knowledge and skills to ensure students know more and remember more.		