

## Subject sequencing overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	Particles & Cells, Tissues and Organs	Energy	Reproduction and Variation	Chemical reactions	Forces and motion	Ecological relationship and classification
	<ul style="list-style-type: none"> <li>- States of matter</li> <li>- Diffusion</li> <li>- Changes of state</li> <li>- Conservation of mass</li> <li>- Pure and impure substances</li> <li>- Separating mixture</li> <li>- Unicellular organisms</li> <li>- Plant cells</li> <li>- Animal cells</li> <li>- Specialised cells</li> <li>- Types of tissues</li> <li>- Organ systems</li> </ul>	<ul style="list-style-type: none"> <li>- Energy stores and transfers</li> <li>- Bunsen burner</li> <li>- Efficiency</li> <li>- Conduction</li> <li>- Convection</li> <li>- Insulation</li> <li>- Power and energy</li> <li>- Energy in food</li> <li>- Renewable and non-renewable energy sources</li> </ul>	<ul style="list-style-type: none"> <li>- Human reproductive system</li> <li>- Fertilisation</li> <li>- Gestation</li> <li>- Birth</li> <li>- Puberty and the menstrual cycle</li> <li>- Plant reproduction</li> <li>- Seed dispersal</li> <li>- Variation between species</li> </ul>	<ul style="list-style-type: none"> <li>- Indicators of chemical reaction</li> <li>- Oxidation</li> <li>- Acids and alkalis</li> <li>- pH scale</li> <li>- Metal and acid reactions</li> <li>- Neutralisation</li> <li>- Simple Titration</li> </ul>	<ul style="list-style-type: none"> <li>- What are Forces?</li> <li>- Representing Forces</li> <li>- Resultant Forces</li> <li>- Gravity</li> <li>- Weight</li> <li>- Pressure</li> <li>- Investigating speed</li> <li>- Factors affecting speed</li> <li>- Calculating speed</li> </ul>	<ul style="list-style-type: none"> <li>- Food chains and webs</li> <li>- Representing food chains</li> <li>- Decay</li> <li>- Impacts on food webs</li> <li>- Random Sampling</li> <li>- Estimating populations</li> <li>- Classifying living organisms</li> <li>- Adaptation</li> <li>- Natural selection</li> <li>- Evolution evidence</li> <li>- Biodiversity</li> </ul>
Year 8	Light and space	Atoms and the periodic table	Digestion and nutrition	Electricity and magnetism	Materials and the Earth	Plants and photosynthesis & Matter
	<ul style="list-style-type: none"> <li>- Light waves</li> <li>- The electrical and chemical effects of light</li> <li>- Reflection</li> <li>- Refraction</li> <li>- Vision</li> <li>- Colours</li> <li>- Filters</li> <li>- Gravity</li> <li>- Weight and mass</li> <li>- Universe</li> <li>- Seasons</li> </ul>	<ul style="list-style-type: none"> <li>- Elements</li> <li>- Atoms</li> <li>- The periodic table</li> <li>- Metals and non-metals</li> <li>- Compounds</li> <li>- Chemical formulae</li> <li>- Making compounds</li> <li>- Conservation of mass</li> <li>- Group 1</li> <li>- Group 7</li> <li>- Group 0</li> </ul>	<ul style="list-style-type: none"> <li>- Healthy Diet</li> <li>- Unhealthy diet</li> <li>- Energy release</li> <li>- Carbohydrates</li> <li>- Protein and fats</li> <li>- The digestive system</li> <li>- Adaptations of the small intestine</li> <li>- Enzymes</li> <li>- Effect of temperature on enzymes</li> </ul>	<ul style="list-style-type: none"> <li>- Circuits</li> <li>- Current and series circuits</li> <li>- Current and parallel circuits</li> <li>- Potential difference</li> <li>- Resistance</li> <li>- Static electricity</li> <li>- Magnetic fields</li> <li>- Magnetic forces</li> <li>- Electromagnets</li> </ul>	<ul style="list-style-type: none"> <li>- Structure of the Earth</li> <li>- Igneous rock</li> <li>- Sedimentary rock</li> <li>- Metamorphic rock and the rock cycle</li> <li>- Fossils</li> <li>- Crude oil</li> <li>- Earth's changing atmosphere</li> <li>- Carbon cycle</li> <li>- The greenhouse effect</li> <li>- Climate change</li> <li>- Types of material</li> <li>- Recycling resources</li> <li>- Mining and quarrying</li> </ul>	<ul style="list-style-type: none"> <li>- Plant Roots</li> <li>- Photosynthesis</li> <li>- Uses of Sugar</li> <li>- The leaf</li> <li>- Transport in plants</li> <li>- Plants and the atmosphere</li> <li>- Plants as food</li> <li>- Particle theory</li> <li>- Change of State</li> <li>- Density</li> <li>- Diffusion</li> <li>- Pressure in liquids</li> <li>- Hydraulics</li> <li>- Floating and sinking</li> <li>- Atmospheric pressure</li> </ul>

Year 9	Forces in action	Reactivity	Energetics and rates	Sound waves	Biological systems and processes	Start BTEC course
	<ul style="list-style-type: none"> <li>- Levers and Pivots</li> <li>- Moments and Balance</li> <li>- Work done</li> <li>- Simple Machines</li> <li>- Investigating Elastic Objects</li> <li>- Hooke's law</li> </ul>	<ul style="list-style-type: none"> <li>- Electron configuration</li> <li>- Ions</li> <li>- Chemical formulae</li> <li>- Symbol equations</li> <li>- Acids and metals</li> <li>- Acids and metal oxides</li> <li>- Making salts</li> <li>- Reactions of metal carbonates with acids</li> <li>- Neutralisation</li> <li>- Method writing</li> <li>- Hazard and Risk</li> <li>- Reactivity series</li> <li>- Metal ores</li> <li>- Displacement</li> <li>- Alloys</li> <li>- Producing a voltage</li> </ul>	<ul style="list-style-type: none"> <li>- What is a rate</li> <li>- Reaction rate graphs</li> <li>- Secondary data</li> <li>- The Effect of Concentration</li> <li>- The effect of surface area</li> <li>- Catalysts</li> <li>- Exothermic and Endothermic reactions</li> <li>- Combustion</li> <li>- Thermal decomposition</li> </ul>	<ul style="list-style-type: none"> <li>- Sound waves</li> <li>- Echoes and superposition</li> <li>- Pitch and frequency</li> <li>- Amplitude and volume</li> <li>- Speed of sound</li> <li>- The ear</li> <li>- Hearing and ultrasound</li> <li>- Sound devices</li> </ul>	<ul style="list-style-type: none"> <li>- Musculoskeletal system</li> <li>- Muscles</li> <li>- The respiratory system</li> <li>- Aerobic respiration</li> <li>- Breathing</li> <li>- Effects of exercise and respiration</li> <li>- Anaerobic respiration</li> <li>- Effects of smoking</li> <li>- Effects of alcohol</li> <li>- DNA</li> <li>- Inheritance</li> </ul>	<ul style="list-style-type: none"> <li>- Introduction to BTEC</li> <li>- Ways of working</li> <li>- Report writing</li> </ul>