



# Denton Community College 2022/23

## Departmental Curriculum Map

### Subject: Science

### Year Group: 8



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
<b>Topics</b>	<ol style="list-style-type: none"> <li>1. Photosynthesis and Respiration</li> <li>2. Separating mixture</li> <li>3. Motion and pressure</li> </ol>	<ol style="list-style-type: none"> <li>1. Cells and Organisation</li> <li>2. Acids and Alkali</li> <li>3. Waves</li> </ol>	<ol style="list-style-type: none"> <li>1. Chemical reactions 2</li> <li>2. Electricity</li> <li>3. Physical and Chemical reactions</li> </ol>	<ol style="list-style-type: none"> <li>1. Earth Science</li> <li>2. Magnetism</li> <li>3. Earths atmosphere</li> </ol>	<ol style="list-style-type: none"> <li>1. Reproduction</li> <li>2. Energy</li> </ol>
<b>What will students do during this unit?</b>	<ol style="list-style-type: none"> <li>1. Aerobic and Anaerobic respiration. Photosynthesis and investigating photosynthesis</li> <li>2. Mixtures, Pure and impure substances. Distillation, Chromatography, Extracting rock salt.</li> <li>3. Forces. Speed. Distance time graphs, Speed time graphs. Pressure in liquids and gases.</li> </ol>	<ol style="list-style-type: none"> <li>1. Heart. Blood Vessels, Components of the blood. Breathing system and plant tissues.</li> <li>2. Acids and Alkali, Indicators, Making salts. Acids and Metals.</li> <li>3. Waves, detecting sound. Sound and energy transfer. Loudness and pitch</li> </ol>	<ol style="list-style-type: none"> <li>1. Oxidation, Catalyst, Displacement reactions, Thermal decomposition. Conservation of mass</li> <li>2. Static, Current, Voltage. Series and Parallel circuits. Measuring current and Voltage.</li> <li>3. Physical and chemical changes. Dissolving. Investigating the effects of temperature and solubility.</li> </ol>	<ol style="list-style-type: none"> <li>1. Composition of the Earth's Structure. Formation and properties of Sedimentary, Metamorphic and Igneous rocks. Rock Cycle.</li> <li>2. Magnets and Magnetism. Magnetic fields, Electromagnets. Uses of electromagnets and Investigating the strength of electromagnets</li> <li>3. Earth's atmosphere, Evolution of the Earth's atmosphere.</li> </ol>	<ol style="list-style-type: none"> <li>1. Hormones. Menstrual cycle. Contraception</li> <li>2. Energy types, Store and transfers. Energy efficiency. Energy in food. Fossil Fuels and Renewables</li> </ol>

				Greenhouse effect, Global warming	
<b>When will students be assessed?</b>	End of unit test: Autumn term 1	End of unit test: Autumn term 2	End of unit test: Spring term 1	End of unit test; Spring term 2	End of Year test:
<b>How will students be assessed?</b>	Each topic will be assessed at an appropriate time using a key piece An end-of-unit exam will be completed after all 3 topics have been taught	Each topic will be assessed at an appropriate time using a key piece An end-of-unit exam will be completed after all 3 topics have been taught	Each topic will be assessed at an appropriate time using a key piece An end-of-unit exam will be completed after all 3 topics have been taught	Each topic will be assessed at an appropriate time using a key piece An end-of-unit exam will be completed after all 3 topics have been taught	Each topic will be assessed at an appropriate time using a key piece An end-of-year exam will be completed to assess the learning from September
<b>Key Vocabulary</b>	See medium term plans & student exercise books	See medium term plans & student exercise books	See medium term plans & student exercise books	See medium term plans & student exercise books	See medium term plans & student exercise books
<b>Homework opportunities to broaden or deepen student knowledge</b>	One weekly task linked to topics covered in class	One weekly task linked to topics covered in class	One weekly task linked to topics covered in class	One weekly task linked to topics covered in class	One weekly task linked to topics covered in class

<b>Links to the National Curriculum</b>	<b>WORKING SCIENTIFICALLY</b> <ul style="list-style-type: none"> <li>● Scientific attitudes</li> <li>● Experimental skills and investigations</li> <li>● Analysis and evaluation</li> <li>● Measurement</li> </ul>	<b>WORKING SCIENTIFICALLY</b> <ul style="list-style-type: none"> <li>● Scientific attitudes</li> <li>● Experimental skills and investigations</li> <li>● Analysis and evaluation</li> <li>● Measurement</li> </ul>	<b>WORKING SCIENTIFICALLY</b> <ul style="list-style-type: none"> <li>● Scientific attitudes</li> <li>● Experimental skills and investigations</li> <li>● Analysis and evaluation</li> <li>● Measurement</li> </ul>	<b>WORKING SCIENTIFICALLY</b> <ul style="list-style-type: none"> <li>● Scientific attitudes</li> <li>● Experimental skills and investigations</li> <li>● Analysis and evaluation</li> <li>● Measurement</li> </ul>	<b>WORKING SCIENTIFICALLY</b> <ul style="list-style-type: none"> <li>● Scientific attitudes</li> <li>● Experimental skills and investigations</li> <li>● Analysis and evaluation</li> <li>● Measurement</li> </ul>
	<b>SUBJECT CONTENT</b> <ul style="list-style-type: none"> <li>● Gas exchange systems</li> <li>● Photosynthesis</li> <li>● Cellular Respiration</li> <li>● Pure and Impure substances</li> <li>● Describing motion</li> <li>● Forces</li> <li>● Pressure in Fluids</li> <li>● Forces and Motion</li> </ul>	<b>SUBJECT CONTENT</b> <ul style="list-style-type: none"> <li>● Gas exchange systems</li> <li>● Chemical reactions</li> <li>● Observed waves</li> <li>● Sound waves</li> </ul>	<b>SUBJECT CONTENT</b> <ul style="list-style-type: none"> <li>● Chemical reactions</li> <li>● Current electricity</li> <li>● Static electricity</li> </ul>	<b>SUBJECT CONTENT</b> <ul style="list-style-type: none"> <li>● Earth and Atmosphere</li> <li>● Magnetism</li> </ul>	<b>SUBJECT CONTENT</b> <ul style="list-style-type: none"> <li>● Reproduction:</li> <li>● Energy changes and transfers</li> <li>● Energy changes and transfers</li> </ul>