



**Denton Community College**  
**Departmental Curriculum Map**

**Subject: Science**

**Year Group: 8**



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
<b>Topics</b>	1. Photosynthesis and Respiration 2. Chemical Reactions 2 3. Motion & Pressure	1. Organisation 2. Separating Mixtures 3. Electricity	1. Health 2 2. Earth and the Atmosphere 1 3. Magnetism	1. Ecosystems and Interdependence 2. Science Week 3. Earth Science 4. Waves 2	1. Reproduction 2. Energy
<b>What will students do during this unit?</b>	1. Aerobic and anaerobic respiration. Photosynthesis, testing for starch, Photosynthesis and light intensity investigation 2. Forces, speed, speed & velocity time graphs, Pressure in liquids and gases, moments 3. Oxidation, catalysts, displacement reactions, thermal decomposition,	1. Circulatory system Plant tissues, Movement of substances in a plant 2. Circuits, Static electricity, Voltage 3. Mixtures, Pure and impure substances, Chromatography, Extracting rock salt, Distillation	1. Health, drugs, diet and disease. Pathogens and infection 2. Magnets, magnetism, Magnetic fields Electromagnets 3. Atmosphere, changes to the atmosphere, Greenhouse effect, Global warming	1. Food chains & webs, predator-prey relationships, accumulation of toxins, Insect pollination 2. Light, reflection, refraction, detecting sound, sound and energy transfer, Loudness and pitch 3. Structure of the earth, igneous, metamorphic, sedimentary, rock cycle	1. Hormones, menstrual cycle, contraception. 2. Energy in food, power ratings, energy transfer, fuels, energy resources, fuel use and cost

	conservation of mass				
<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 unit test: Summer term 1
<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 year's learning
<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>	<p><b>WORKING SCIENTIFICALLY</b></p> <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> <p><b>SUBJECT CONTENT</b></p> <ul style="list-style-type: none"> <li>Cellular respiration</li> <li>Motion &amp; forces</li> <li>Pressure in fluids</li> <li>Chemical reactions</li> </ul>	<p><b>WORKING SCIENTIFICALLY</b></p> <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> <p><b>SUBJECT CONTENT</b></p> <ul style="list-style-type: none"> <li>Cells and organisation</li> <li>Electricity and electromagnetism</li> <li>Pure &amp; impure substances</li> </ul>	<p><b>WORKING SCIENTIFICALLY</b></p> <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> <p><b>SUBJECT CONTENT</b></p> <ul style="list-style-type: none"> <li>Gas exchange systems</li> <li>Material cycles and energy</li> <li>Health</li> <li>Magnetism</li> <li>Earth &amp; atmosphere</li> </ul>	<p><b>WORKING SCIENTIFICALLY</b></p> <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> <p><b>SUBJECT CONTENT</b></p> <ul style="list-style-type: none"> <li>Relationships in an ecosystem</li> <li>Sound waves</li> <li>Light waves</li> <li>Energy in waves</li> </ul>	<p><b>WORKING SCIENTIFICALLY</b></p> <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> <p><b>SUBJECT CONTENT</b></p> <ul style="list-style-type: none"> <li>Reproduction</li> <li>Energy</li> </ul>

--	--	--	--	--	--