



Denton Community College 2022/23

Departmental Curriculum Map

Subject: Science

Year Group: 9



	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Topics	<ol style="list-style-type: none"> Cells Atoms & Substances Energy 	<ol style="list-style-type: none"> Organisation Electricity Particle Model 	<ol style="list-style-type: none"> Bioenergetics Chemical Reactions & Energetics 	<ol style="list-style-type: none"> Waves Genetics Pure & Impure 	<ol style="list-style-type: none"> Forces Ecosystems Earth & Atmosphere Magnetism
What will students do during this unit?	<ol style="list-style-type: none"> Plant, animal & bacterial cell structure Cell specialisation Microscopes Molecule movement Atomic structure Separating mixtures Periodic table Ions Energy stores & Transfers Power Efficiency Energy resources 	<ol style="list-style-type: none"> Organisation Digestive system Food tests Circulatory System Plant tissues Circuits Charge, current & potential difference Mains electricity The national grid Particle model Density Changes of state 	<ol style="list-style-type: none"> Photosynthesis Respiration Exercise & metabolism Metal reactions Reactivity pH & neutralisation Endo/exothermic reactions 	<ol style="list-style-type: none"> Types of wave Wave speed Electromagnetic waves Light DNA Variation Selective breeding Classification Purity Gas tests Chromatography 	<ol style="list-style-type: none"> Types of forces Gravity Work done Speed Acceleration Communities Biotic/abiotic factors Adaptations Biodiversity The atmosphere Greenhouse effect Climate change & carbon footprint Pollution Magnet properties & fields Electromagnets
When will students be assessed?	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:

How will students be assessed?	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
Key Vocabulary	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
Homework opportunities to broaden or deepen student knowledge	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
Links to the National Curriculum	<p>WORKING SCIENTIFICALLY</p> <ul style="list-style-type: none"> Scientific attitudes Experimental skills and investigations Analysis and evaluation Measurement <p>SUBJECT CONTENT</p> <ul style="list-style-type: none"> Cells and organisation Atoms, elements and compounds Pure and impure substances The periodic table Energy 	<p>WORKING SCIENTIFICALLY</p> <ul style="list-style-type: none"> Scientific attitudes Experimental skills and investigations Analysis and evaluation Measurement <p>SUBJECT CONTENT</p> <ul style="list-style-type: none"> Cells and organisation Nutrition and digestion Gas exchange systems Electricity and electromagnetism The particulate nature of matter Matter 	<p>WORKING SCIENTIFICALLY</p> <ul style="list-style-type: none"> Scientific attitudes Experimental skills and investigations Analysis and evaluation Measurement <p>SUBJECT CONTENT</p> <ul style="list-style-type: none"> Gas exchange systems Material cycles and energy Chemical reactions Energetics 	<p>WORKING SCIENTIFICALLY</p> <ul style="list-style-type: none"> Scientific attitudes Experimental skills and investigations Analysis and evaluation Measurement <p>SUBJECT CONTENT</p> <ul style="list-style-type: none"> Waves Reproduction Inheritance, chromosomes, DNA and genes Pure & impure substances 	<p>WORKING SCIENTIFICALLY</p> <ul style="list-style-type: none"> Scientific attitudes Experimental skills and investigations Analysis and evaluation Measurement <p>SUBJECT CONTENT</p> <ul style="list-style-type: none"> Motion & forces Relationships in an ecosystem Earth & atmosphere Magnetism