Denton Community College

Departmental Curriculum Map

Subject: Science Year Group: 11

	Unit 1	Unit 2	Unit 3 COMBINED	Unit 3 TRIPLE	Unit 4
Topics	1. Homeostasis and Response 2. Inheritance, Variation and Evolution 3. Ecology	1. Atomic Structure (Physics) 2. Forces 3. Waves 4. Magnetism	**RETEACH** **Recap Year 10**	*1. Separate Biology* *2. Separate Chemistry* *3. Separate Physics*	**STRUCTURED REVISION**
What will students do during this unit?	1. Recap Y9 Reproduction Contraception IVF *The eye & brain* *Controlling temperature, water & nitrogen* *Plant hormones & germination* 2. Recap Y9 Cell division Reproduction Genetic engineering Variation Evolution Fossils & Extinction *Protein synthesis* *Speciation* *Cloning*	1. Recap Y9 Atomic model Nuclear equations Half life *Uses of radiation background radiation* *Fission & fusion* 2. Recap Y9 Motion graphs Stopping Newton's laws Elasticity Momentum Resolving vectors 3. Types of wave Wave speed & PAG EM spectrum & uses Radiation PAG Using light	1. Recap Physics Paper 1 2. Recap Chemistry Paper 1 3. Recap Chemistry Paper 2 4. Recap Biology Paper 1	*1. Cultivating microbes* *Monoclonal antibodies* *2. Atom economy & percentage yield* *Titrations* *Alkenes, alcohols, carboxylic acids & polymers* *Chemical tests and instrumental methods* *Corrosion* *Alloys* *Ceramics & composites* *Haber process* *3. Insulation*	1. Required Practical revision 2. Biology Unit 1 revision 3. Chemistry Unit 1 revision 4. Physics Unit 1 revision 5. Biology Unit 2 revision 6. Chemistry Unit 2 revision 7. Physics Unit 2 revision

	3. Recap Y9 Feeding relationships Sampling Nutrient cycles Biodiversity *Food security* *Trophic levels* *Decomposition*	4. Magnet properties & fields Electromagnets Fleming LH rule & motors *Speakers & microphones* *Generators* *Transformers*		*Pressure* *Moments* *Using light PAG* *Using sound* *Visible light & lenses* *Black body radiation* *Space*	
When will students be assessed?	Bi-weekly test	Bi-weekly test	Bi-weekly test	Bi-weekly test	Bi-weekly test
How will students be assessed?	Each topic will be assessed at an appropriate time using a key piece	Each topic will be assessed at an appropriate time using a key piece	Each topic will be assessed at an appropriate time using a key piece	Each topic will be assessed at an appropriate time using a key piece	Each topic will be assessed at an appropriate time using a key piece
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	Revision Period 6 revision sessions each fortnight	Revision Period 6 revision sessions each fortnight	Revision Period 6 revision sessions each fortnight	Revision Period 6 revision sessions each fortnight	Revision Period 6 revision sessions each fortnight
Links to the National Curriculum	**WORKING SCIENTIFICALLY** ● The development of scientific thinking ● Experimental skills and strategies ● Analysis and evaluation	**WORKING SCIENTIFICALLY** ● The development of scientific thinking ● Experimental skills and strategies ● Analysis and evaluation	**WORKING SCIENTIFICALLY** ● The development of scientific thinking ● Experimental skills and strategies ● Analysis and evaluation ● Vocabulary, units, symbols and nomenclature	**WORKING SCIENTIFICALLY** ● The development of scientific thinking ● Experimental skills and strategies ● Analysis and evaluation	**WORKING SCIENTIFICALLY** ● The development of scientific thinking ● Experimental skills and strategies ● Analysis and evaluation

	● Vocabulary, units, symbols and nomenclature **SUBJECT CONTENT** ● Coordination & control ● Evolution, inheritance & variation ● Ecosystems	● Vocabulary, units, symbols and nomenclature **SUBJECT CONTENT** ● Atomic structure ● Forces ● Forces & motion ● Wave motion ● Magnetism & electromagnetism	**SUBJECT CONTENT** ● All Biology content ● All Chemistry content ● All Physics content	● Vocabulary, units, symbols and nomenclature **SUBJECT CONTENT** ● Coordination & control ● Evolution, inheritance & variation ● Ecosystems ● Chemical changes ● Chemical analysis ● Energy ● Atomic structure ● Forces ● Forces & motion ● Wave motion ● Magnetism & electromagnetism ● Space	● Vocabulary, units, symbols and nomenclature **SUBJECT CONTENT** ● All Biology content ● All Chemistry content ● All Physics content

Separate Science content only