



## Year 10 - Science Trilogy Subject checklist

Subject	Year	Term	Teacher 1																																																																																																																							
Combined Science Trilogy	Year 10	Term 1 -28hrs	<table border="1"> <thead> <tr> <th>Big picture</th> <th>Topic</th> <th>Subject Learning Checklist</th> <th>Trilogy RP</th> </tr> </thead> <tbody> <tr> <td rowspan="2">4.2 Organisation</td> <td rowspan="2">4.2.3 Plant tissues, organs and systems</td> <td>4.2.3.1 Plant tissues and organs</td> <td></td> </tr> <tr> <td>4.2.3.2 Plant organ systems</td> <td></td> </tr> <tr> <td rowspan="6">4.4 Biogenesis</td> <td rowspan="3">4.4.1 Photosynthesis</td> <td>4.4.1.1 Photosynthetic reaction</td> <td></td> </tr> <tr> <td>4.4.1.2 Rate of photosynthesis</td> <td>Bio RP5</td> </tr> <tr> <td>4.4.1.3 Uses of glucose from photosynthesis</td> <td></td> </tr> <tr> <td rowspan="3">4.4.2 Respiration</td> <td>4.4.2.1 Aerobic and anaerobic respiration</td> <td></td> </tr> <tr> <td>4.4.2.2 Response to exercise</td> <td></td> </tr> <tr> <td>4.4.2.3 Metabolism</td> <td></td> </tr> <tr> <td rowspan="10">4.3 Infection and response</td> <td rowspan="10">4.3.1 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Metabolism		4.3 Infection and response	4.3.1 Communicable diseases	4.3.1.1 Communicable (infectious) diseases		4.3.1.2 Viral diseases		4.3.1.3 Bacterial diseases		4.3.1.4 Fungal diseases		4.3.1.5 Protist diseases		4.3.1.6 Human defence systems		4.3.1.7 Vaccination		4.3.1.8 Antibiotics and painkillers		4.3.1.9 Discovery and development of drugs		5.9 Chemistry of the atmosphere	5.9.1 The composition and evolution of the Earth's atmosphere	5.9.1.1 The proportions of different gases in the atmosphere		5.9.1.2 The Earth's early atmosphere		5.9.1.3 How oxygen increased		5.9.1.4 How carbon dioxide decreased		5.9.2 introduction	5.9.2.2 Human activities which contribute to an increase in greenhouse gases in the atmosphere		5.9.3 Common atmospheric pollutants and their sources	5.9.3.1 Atmospheric pollutants from fuels		5.9.3.2 Properties and effects of atmospheric pollutants		5.9.2 Carbon dioxide and methane as greenhouse gases	5.9.2.1 Greenhouse gases		5.9.2.3 Global climate change			5.9.2.4 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Teacher 2	4.5 Homeostasis and response	4.5.1 Homeostasis	4.5.1 Importance of homeostasis	
		4.5.2 The human nervous system	4.5.2 Structure and function	Bio RP6
		4.5.3 Hormonal coordination in humans	4.5.3.1 Human endocrine system	
			4.5.3.2 Control of blood glucose concentration	
			4.5.3.3 Hormones in human reproduction	
			4.5.3.4 Contraception	
		<b>4.5.3.5 The use of hormones to treat infertility (HT ONLY)</b>		
		<b>4.5.3.6 Negative feedback (HT ONLY)</b>		
	4.6 Inheritance, variation and evolution	4.6.1 Reproduction	4.6.1.1 Sexual and asexual reproduction	
			4.6.1.2 Meiosis	
			4.6.1.3 DNA and the genome	
			4.6.1.4 Genetic inheritance	
4.6.1.5 Inherited disorders				
4.6.1.6 Sex determination				
4.6.2 Variation and evolution		4.6.2.1 Variation		
		4.6.2.2 Evolution		
		4.6.2.3 Selective breeding		
		4.6.2.4 Genetic engineering		
	4.6.3.1 Evidence for evolution			
	4.6.3.2 Fossils			
	4.6.3.3 Extinction			
	4.6.3.4 Resistant bacteria			
4.6.4 Classification of living organisms	4.6.4 Classification of living organisms			
6.5. Forces and motion	6.5.4.1 Describing motion along a line	6.5.4.1.1 Scalar and vector quantities		
		6.5.4.1.1 Distance and displacement		
		6.5.4.1.2 Speed		
		6.5.4.1.3 Velocity		
		6.5.4.1.4 The distance time relationship		
		6.5.4.1.5 Acceleration		
	6.5.4.2 Forces, accelerations and Newton's laws of motion	6.5.4.2.1 Newton's first law		
		6.5.4.2.2 Newton's second law	Phy RP19	
		6.5.4.2.3 Newton's third law		
	6.5.4.3 Forces and braking	6.5.4.3.1 Stopping distance		
6.5.4.3.2 Reaction time				
6.5.4.3.3 Factors affecting braking distance 1				
6.5.4.3.4 Factors affecting braking distance 2				
6.6 Waves	6.6.1 Waves in air, fluids and solids	6.6.1.1 Transverse and longitudinal waves		
		6.6.1.2 Properties of waves	Phy RP20	
	6.6.2 Electromagnetic waves	6.6.2.1 Types of electromagnetic waves		
		6.6.2.2 Properties of electromagnetic waves 1	Phy RP21	
		6.6.2.3 Properties of electromagnetic waves 2		
		6.6.2.4 Uses and applications of electromagnetic waves		
6.7 Magnetism and electromagnetism	6.7.1 Permanent and induced magnetism, magnetic forces and fields	6.7.1.1 Poles of a magnet		
		6.7.1.2 Magnetic fields		
	6.7.2 The motor effect	6.7.2.1 Electromagnetism		
		<b>6.7.2.2 Fleming's left hand rule (HT ONLY)</b>		
	<b>6.7.2.3 Electric motors (HT ONLY)</b>			