

Subject	Year	Term
Science	10	3
Topic		
B7 Ecology		
Content (Intent)		
<p>Prior Learning: KS3 national curriculum and, 8B2 DNA and Inheritance, 7B2 Ecosystem and life processes</p> <ul style="list-style-type: none"> • Know what food chains are • Competition and interdependence in an ecosystem • Biotic and Abiotic conditions that affect biodiversity • Adaptations of plants and animals • Quadrats and transect sampling/ random and systematic sampling • Quadrat required practical • Carbon and water cycle • Decay and cycling of nutrients • Biodiversity and how we conserve • Effects of deforestation and uses of land • Global warming and its effect on biodiversity • Pollution, managing waste and their effects on biodiversity 		
<p>Future Learning: KS5 A level Biology and Environmental Science</p>		
How will knowledge and skills be taught? (Implementation)	How will your understanding be assessed & recorded (Impact)	
<p>Demos: random quadrat sampling demonstration</p> <p>Practical work: random quadrat sampling and a required practical. Measuring lichen biodiversity.</p> <p>Written: Notes and completed worksheets in exercise books. Written explanation for how to measure biodiversity using a quadrat and line transect.</p>	<p>- 2 x Standard Homework Tasks: Level given. Written feedback. Response expected.</p> <p>-1 x End of Topic Test: Level given. Verbal feedback to class and individuals.</p>	
How can parents help at home?		
<p>Look at B7 topic resources on the VLE and use the CGP KS4 Study Guide provided. Use appropriate YouTube channels [Cognito, PrimroseKitten, KhanAcademy, FuseSchool, AmoebaSisters, Freesciencelessons] and documentaries [TV series: David Attenborough BBC series, Take an interest! Be curious and ask your child about their learning.</p>		
Helpful further reading/discussion		
<p>Reading</p> <ul style="list-style-type: none"> • Wilding – Isabella tree • There Is No Planet B: A Handbook for the Make Or Break Years – Mike Berners-Lee • Adventures of a young naturalist – David Attenborough • A buzz in the meadow - Dave Goulson • Silent Spring - Rachel Carson • Ten Billion by Stephen Emmott 	<p>Vocabulary Lists</p> <p><i>Food web, producer, consumer, biotic, abiotic, adaptations, quadrat, transect, random, systematic, bias, cycle, decay, respiration, photosynthesis, deforestation, global warming, climate change</i></p>	<p>Careers Links</p> <p>Practical conservation Environmental policy Ecologist Botanical gardens curator Gardener Environmental survey/ research</p>

