

Subject	Year	Term
Biology	13	1 (& term 3 of Year 12)
Topic		
Studying Populations		
Content (Intent)		
<b>Prior Learning (Topic) Year 12: Biodiversity &amp; Classification; Year 10: B7 Ecology</b>		
<ul style="list-style-type: none"> <li>• Populations key terms &amp; definitions</li> <li>• Use of quadrats</li> <li>• Use of transects</li> <li>• Processing data to include Correlation Co-efficient or Spearmann’s Rank, Student’s T-test, recap of standard deviation.</li> <li>• Mark-release-recapture</li> <li>• Human populations</li> <li>• Factors affecting population size – abiotic and biotic, including predation, competition</li> <li>• Succession</li> <li>• Conservation</li> </ul>		
<b>Future Learning (Topic) Year 13: Energy, Ecosystems &amp; Nutrient cycles</b>		
How will knowledge and skills be taught? (Implementation)	How will your understanding be assessed & recorded (Impact)	
<p>Demos</p> <p>How to use quadrats</p> <p>How to use transects</p> <p>How to use abiotic factor meters</p> <p>Practical work</p> <p>Sampling using quadrats</p> <p>Sampling using transects</p> <p>Required practical 12</p> <p>Sampling using mark-release-recapture</p> <p>Written</p> <p>Class notes</p> <p>Past paper questions in class</p> <p>Past paper questions in homeworks</p> <p>Write-ups of required practical 12</p>	<p>- 4 x standard homeworks (Grade given. Written &amp; verbal feedback. Response expected.)</p> <p>-1 x end of topic test (Grade given. Verbal feedback to class and individuals.)</p> <p>- Assessment of CPAC skills from the practical (both written and practical) as detailed on the practical sheets.</p>	
How can parents help at home?		
<p>Look at the topic specific resources on the VLE</p> <p>Use appropriate youtube channels: cognito, freesciencelessons, Crash Course Biology.</p> <p>Encourage students to use the textbook issued.</p>		

Take an interest! Ask your children what they have learnt and be curious about their learning.

### Helpful further reading/discussion

#### Reading

New Scientist  
Biological Science Review  
Magazine  
The Biologist Magazine –  
Royal Society of Biology  
Royal Society of Biology blog

#### Vocabulary Lists

*Quadrat, transect,  
abundance, percentage  
cover, abiotic factors, biotic  
factors, predation,  
interspecific competition,  
intraspecific competition,  
succession, conservation.*

#### Careers Links

Ecologist  
Environmental Scientist  
Biological Scientist  
Conservation  
Land management