



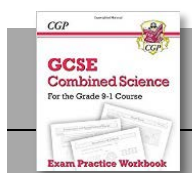
Step 1 What do I need to know?

- Understand the key terms associated with ecology
- Understand what factors both plants and animals compete for
- Understand the knock on effect a change in population of an organism causes for the rest of the food web.

Step 2 How do I find out about it?

Revision Guide Page		Web Links
		 Interdependence Interdependence
Higher	Pg. 83-86	
Foundation	Pg. 83-86	
Triple Biology	Pg. 106-109	

Step 3 What can I do to help me learn it?



Complete the relevant questions in your CGP Science Workbook

Higher	Pages 78-82
Foundation	Pages 69-72
Triple Biology	Pages 105-109

TASK 1- Define the following words;

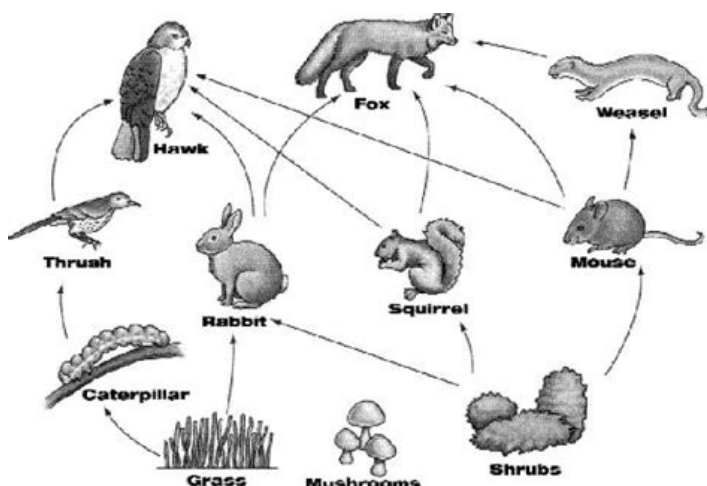
Habitat/Population/Community/Abiotic/Biotic/Ecosystem

TASK 2-

- State all the resources plants compete for.
- State all the resources animals compete for.
- State which of these factors are biotic and which are abiotic.

Task 3- A virus is causing the decrease in the population of squirrels. Suggest the outcome for the following.

- What may happen to the population of; hawks, mouse and shrubs
- How might a introduced apex predator affect this food chain.

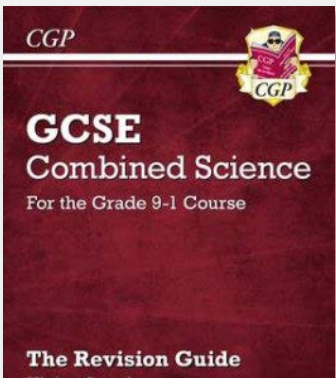






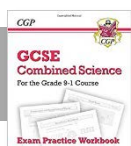
Step 1 What do I need to know?

- Describe how to use a quadrat
- Estimate numbers of species using collect data of average number of organisms and area of sampling
- Describe the difference between quadrat and transect sampling
- Identify the limitations of both methods of sampling

Step 2 How do I find out about it?

Revision Guide Page		Web Links
		 Experimental methods using quadrats and transects  Required Practical Sampling using quadrats and transect
Higher	Pg. 87-88	
Foundation	Pg. 87-88	

Step 3 What can I do to help me learn it?



Complete the relevant questions in your CGP Science Workbook

Higher

Pages 83-84

Foundation

Pages 73-74

TASK 1- Write a method for using a Quadrat to estimate the number of daisies in a field.

TASK 2- Explain why estimating the population of an organism using a quadrat may not be a true estimate of the population.

TASK 3- Describing how sampling using a transect will allow the show the effect of abiotic factors on different species.

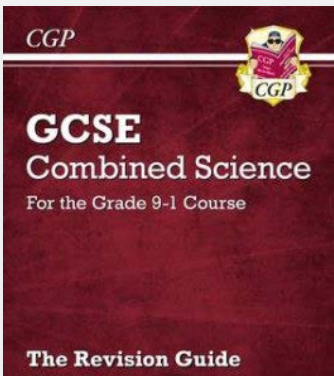


TASK 4- Describe a method for sampling the different seaweeds that grown on a rocky beach



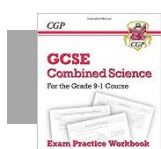
Step 1 What do I need to know?

- Explain the importance of the carbon and water cycles to living organisms.
- All materials in the living world are recycled to provide the building blocks for future organisms.
- Explain the role of microorganisms in cycling materials through an ecosystem
- Give reasons as to why it is important we don't pollute water sources

Step 2 How do I find out about it?

Revision Guide Page		Web Links
		 Carbon Cycle Water Cycle  Carbon Cycle Water Cycle
Higher	Pg. 89-90	
Foundation	Pg. 89-90	

Step 3 What can I do to help me learn it?



Complete the relevant questions in your CGP Science Workbook

Higher

Pages 85-86

Foundation

Pages 75-76

TASK 1- Describe how living things are involved in the constant cycling of carbon.

TASK 2- Draw and Label the carbon cycle showing how carbon from the atmosphere as Carbon dioxide enters the cycle and how it is returned to the atmosphere.

TASK 3- Draw and label a diagram of the water cycle and describe all the processes.

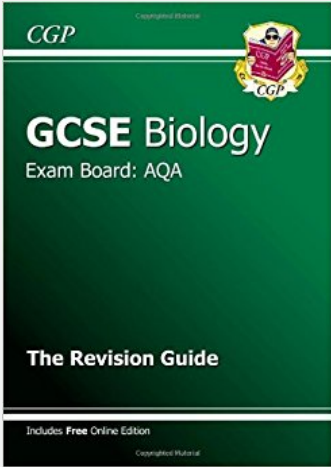


TASK 4- Describe using your knowledge of the carbon cycle how plants and animals survive in a sealed biosphere.



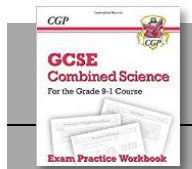
Step 1 What do I need to know?

- Understand different way in which biology processes are used and manipulated to produce a useful product.
- Explain how bacteria can be engineered to produce human insulin.
- Explain how crops can be genetically modified.

Step 2 How do I find out about it?

Revision Guide Page	Web Links
	 Biotechnology  Biotechnology
Triple Biology	Pg. 124

Step 3 What can I do to help me learn it?



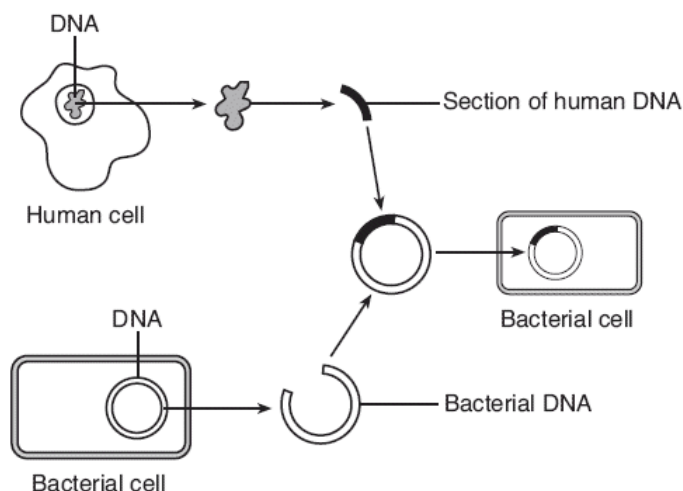
Complete the relevant questions in your CGP Science Workbook

Higher	
Foundation	
Triple Biology	Page 125

TASK 1- Explain how mycoprotein is developed from fungi.

TASK 2- Use the diagram to fully explain, step by step how bacteria can be engineered to produce human insulin. Give reference to the specific enzymes used.

TASK 3- evaluate the use of GM crops. Fully explain how they are developed and consider the benefits of GM crops and why others may disagree.

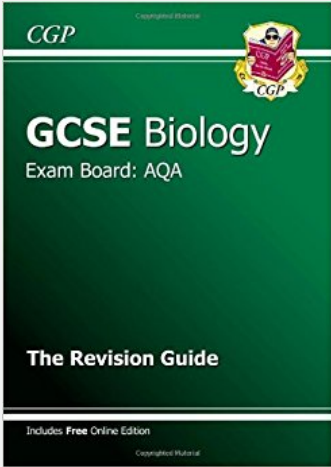






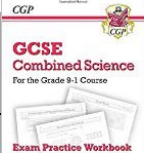
Step 1 What do I need to know?

- Understand what factors affect decay
- Understand how biogas generators use decay
- Set up an investigation into the effect temperature has on decay.

Step 2 How do I find out about it?

Revision Guide Page	Web Links
	 Decomposition  Decomposition
Triple Biology	Pg. 114-115

Step 3 What can I do to help me learn it?

	<p>Complete the relevant questions in your CGP Science Workbook</p>	Higher	
		Foundation	
		Triple Biology	Pg. 114-115

TASK 1- State four factors that impact the rate of decay. Explain how each impacts the rate of which decay occurs.

TASK 2- Explain how biogas is produced through decay. Give reference to the type of respiration that occurs.

TASK 3- Write a method that will investigate the effect temperature has on the rate of decay. Ensure you highlight the control, dependent and independent variables.