**UNIT OVERVIEW:** Module 6 | **Ecosystems**

**ENQUIRY:** What is the role of Mutualistic relationships within an Ecosystem?

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| **Unit intention:** *In KS4 you would have learnt the unit Ecology, now you will be looking at energy flow and efficiency in the ecosystem and the impact of biotic and abiotic factors. In future you can use this module to explore the degrees of biomedical science, natural sciences and environmental sciences at university.*  |
| **Success criteria:** | 🗸 | X |
| 1. Know that ecosystems are dynamic systems that range in size and are influenced by both biotic and abiotic factors
2. Be able to give named examples of biotic and abiotic factors for a variety of ecosystems of different sizes (e.g. rock pool, a playing field and a large tree)
3. Understand how biomass is transferred through ecosystems and the efficiency of transfer through trophic levels
4. Know how biomass transfers between trophic levels can be measured.
5. Know how human activities can manipulate the transfer of biomass through ecosystems.
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| **Unit summative and formative assessment details:** Formative assessment – factual re-call questions at the start of every lessonSummative assessments – at the end of every unit  |
| **Home Learning (What and how often):** flip learning set every lesson. Seneca is set online  |
| **Topic Sequence**1. Ecosystems
2. Transfer of biomass
3. Nitrogen cycle
4. Carbon cycle
5. Succession
6. Sampling methods

7.Revision & End of unit assessment  | **Recommended reading:** <http://www.histologyguide.org/Slide_Box/Slide_Box.html><http://www.saps.org.uk/secondary/teaching-resources/871-medicines-and-drugs-from-plants-trumps-card-game>HPA Recommended biological dictionary: <http://www.biologyreference.com/>**Places to visit:**Natural History MuseumHorniman MusuemCentre of the cell |

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| **Success criteria** – Have you met them? Show your evidence in the boxes below. |
| **1.** |
| **2.** |
| **3.** |
| **4.** |
| **5.** |
| **6.** |
| **How will you improve your work?** |

**End of Unit EVALUATION**