

Scheme of Learning: Ecosystems & Interdependence

Topic Sequence:

1	2	3	4	5	6	7	8	9
Acids & Alkalis	Motion & Pressure	Photosynthesis & Respiration	Metals & Materials	Waves	Inheritance & Evolution	Earth & Atmosphere	Space	Ecosystems & Interdependence

Topic Overview:

The national curriculum requirements for this topic are to cover the following:

- the interdependence of organisms in an ecosystem, including food webs and insect pollinated crops
- the importance of plant reproduction through insect pollination in human food security.
- how organisms affect, and are affected by, their environment, including the accumulation of toxic materials.

Lesson Sequence:

Starting with how animal and plants are adapted to their environments to help them compete, we move onto food webs and predator prey cycles. Then look at how organisms affect, and are affected by, their environment, including the accumulation of toxic materials and our dependence on them for our food security. We include a lesson on sampling techniques as a foundation for later KS4 work.

Sequence of Lessons:

1	Competition in Animals
2	Competition & Adaptation in Plants
3	Adaptation in Animals
4	Food Webs
5	Predator Prey Cycles
6	Bioaccumulation
7	Sampling Techniques
8	Food Security
9	Assessment Lesson

Resources:

1	n/a
2	n/a
3	Polar adaptation comprehension activity
4	Ocean food webs cut & stick
5	Predator Prey Graphs
6	Sorting sheet and video questions
7	Quadrats and trundle wheel
8	Food security comprehension activity
9	In folder

Supportive Reading:

Comprehension activity	Polar adaptations L3 and Food Security L8
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Assessment:

Knowledge:	20 question multiple choice knowledge test
Application of Knowledge:	Extended written answer describing sampling techniques.