Home-School Learning Collaboration – KS3 Science

Topics in this cycle:	Taught:	Year Group:
Interdependence	Spring 2	8

Key knowledge/concepts to be learnt ('Tell me about….')	Websites/blogs/YouTube links and further reading to deepen and consolidate learning
• **What are food chains and food webs?** State what food chains and food webs are. Describe what food chains and food webs show. Combine food chains to forma food web. • **What causes disruption to food chains and food webs?** State factors that affect the population of a species. Explain how toxic materials can accumulate in a food web and the effect on different populations. Explain the importance of insect pollinators to food supplies. • **What is an ecosystem?** State what is meant by ecosystem, community, habitat, environment and niche. Describe how different organisms co-exist within an ecosystem. • **What do plants and animals compete for?** State what animals and plants compete for. *Describe the interaction between predator and prey populations.	**Notes:** Food chains and food webs Food chains and webs - Ecosystems and habitats - KS3 Biology – BBC Bitesize - BBC Bitesize Changes to food webs Changes to food webs - Ecosystems and habitats - KS3 Biology - BBC Bitesize - BBC Bitesize **Videos:** What are ecosystems? Ecosystems | Biology – Life Lessons - YouTube Key terms from the ecosystem's unit explained. KS3 and common Entrance Environment and Interdependence key terms - YouTube Food chains and food webs. Food Chains & Food Webs | Ecology & Environment | Biology | FuseSchool - YouTube

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Key Vocabulary and Definitions To Be Learnt	
Food chain	Part of a food web, starting with a producer and ending with a top predator. This diagram shows the transfer of energy between organisms.
Producer	Green plant or algae that makes its own food using sunlight by the process of photosynthesis.
Consumer	Animal that eats other plants or animals.
Prey	An animal that is eaten by another animal.
Predator	An animal that eats other animals.
Food web	A diagram that shows how food chains in an ecosystem are linked.
Decomposers	Organisms that break down dead plant and animal material so nutrients can be recycled back to the soil or water.
Interdependence	The way in which living organisms depend on each other to survive, grow, and reproduce.
Population	Group of the same species living in an area.
Bioaccumulation	The build-up of toxic chemicals inside organisms in a food chain.
Ecosystem	The living things in a given area and their non-living environment.
Community	The collection of different types of organism present in an ecosystem.
Habitat	The area in which an organism lives.
Environment	The surrounding air, water, and soil where an organism lives.
Niche	A particular place or role that an organism has in an ecosystem.

What Will The Assessment Look Like?

Extended writing – Explain in detail how the different niches occupied by three organisms in a habitat mean that organisms can co-exist.

End of Unit test: 25 minutes/25 marks

- Short answer questions
- Extended writing
- 3 marks for SPAG

Family Learning Opportunities

Worksheets, videos and other resources on interdependence and beyond to stretch pupil.

Ecology and interdependence teaching resources | the science teacher

Collaborative learning opportunity with videos, notes and a quiz.

Outdoor Education - Wild Animal Showdown! (google.com)

Outdoor activity ideas for the family to explore food chains and interdependence in the great outdoors.
Home | National Trust