## **Science Scheme of Work**



Year 4 – Dangers to living things (Living things and their habitat)	
Links made with	English – persuasive writing about pollution (plastic or oil)
other subjects	
The BIG Question	Are living things in danger?
The BIG Outcome	Informative piece of writing outlining the dangers and what is causing them
Science objectives	- recognise that environments can change and that this can sometimes pose dangers to
(link to NC)	living things
( 35 115)	- construct and interpret a variety of food chains, identifying producers, predators and
	prey
Prior knowledge	Children already know:
What prior knowledge is	EYFS – Understanding the world - Children know about similarities and differences in
needed for children to be	relation to places, objects, materials and living things. They talk about the features of
successful in this unit?	their own immediate environment and how environments might vary from one
	another. They make observations of animals and plants and explain why some things
	occur and talk about changes.
	Yr 2 – Habitats (living things and their habitats)
Future learning	This unit gives prior knowledge to:
Consider the conceptual	Yr 6 – Classifying living things (living things and their habitats)
knowledge within a	
subject that pupils need	
for future learning not just the recall of facts but	
the importance of	
concepts	
Science strands	Related Enquiry Questions
	Classifying
	Not relevant
	Observing over time
	- Observe living things in their local environment at different times of the year
	Pattern Seeking
	Not relevant
	Comparative testing
	Not relevant
	Researching
	- Research global environmental issues and their impact on living things.
Vocabulary/	environment, habitat, human impact, positive, negative, migrate, hibernate
Glossary	herbivore, carnivore, omnivore, producer, predator, prey, food chain
Knowledge	The knowledge that children will learn and remember:
(see italics for knowledge	
to remember)	1. Living things live in a habitat which provides an environment to which they are
	suited (Year 2 learning).
	2. These environments may change naturally e.g. through flooding (Examples in
	Bradford or Yorkshire
	https://www.thetelegraphandargus.co.uk/news/19374454.15-000-new-trees-
	<u>keighley-reduce-river-aire-flood-risk/</u> ), fire, earthquakes (California) etc.
	3. Humans also cause the environment to change. This can be in a good way (i.e.
	positive human impact, such as setting up nature reserves) (above link planting
	trees)
	4. Can change in a bad way (i.e. negative human impact, such as littering).
	(Building in local area on flood plain or globally deforestation)
	5. These environments also change with the seasons; different living things can be
	found in a habitat at different times of the year.



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	<ul> <li>6. Living things can be classified as producers, predators and prey according to their place in the food chain.</li> <li>7. To know an example of a food chain with 3 or 4 animals in</li> </ul>
SEND expectations	<ol> <li>Living things live in a habitat which provides an environment to which they are suited and they can change on their own</li> <li>Humans also cause the environment to change both good and bad.</li> <li>These environments also change with the seasons; different living things can be found in a habitat at different times of the year.</li> <li>Living things can be classified as producers, predators and prey according to their place in the food chain.</li> </ol>
Common	Some children may think:
misconceptions	<ul> <li>the death of one of the parts of a food chain or web has no or limited consequences on the rest of the chain</li> <li>there is always plenty of food for wild animals</li> <li>animals are only land-living creatures</li> <li>animals and plants can adapt to their habitats, however they change</li> <li>all changes to habitats are negative.</li> </ul>