

Harting C of E Primary School - Science



Topic: LIVING THINGS AND THEIR HABITATS

Year 4

Autumn 1

Important Information

LIFE PROCESSES

There are 7 things that ALL living things do. We call these LIFE PROCESSES.

All plants and animals, including humans, do these.

We can remember them with the help of MRS GREN!



GROUPING ANIMALS

We can group animals into 5 different categories based on their characteristics.















We can also group animals based on the types of food they eat.









We can also group animals based on whether they have a backbone (spine) or not.

Vertebrates	Invertebrates
dog	slug
cat	snail
human	butterfly
lion	spider
bird	crab
shark	bee
tiger	jellyfish

ENVIRONMENTS

How can environments change? Habitats can change throughout the year and this can have an effect on the plants and animals living there. Humans can have positive effects on the environment, e.g. nature reserves, but instead often damage it.

People-made Threats to the Environment:

*air pollution from cars, e.g. carbon monoxide, and the burning of fossil fuels.

* water pollution through industrial waste and farm fertilisers that can pollute rivers and streams.

*rubbish - plastic and household waste ends up on the streets, in the sea or in rubbish dumps, destroying habitats and wildlife.

TOP TAKEAWAYS

After studying this topic, you should be able to:

*recognise that living things can be grouped in a variety of ways;

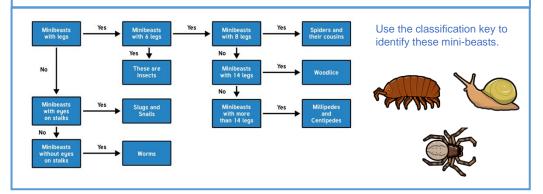
*explore and use classification keys to help group;

*identify and name a variety of living things in their local and wider environment;

*recognise that environments can change and that this can sometimes pose dangers to living things.

CLASSIFICATION KEYS

Classification keys usually have statements or questions that describe some of the features or characteristics. The answer is either YES or NO. Your answer will then take you to another question or statement or living thing. Here is an example.



amphibian	An animal that is born in the water but develops lungs and lives on land later in its life.
bird	A type of animal that has wings and is born from a hard-shelled egg.
carnivore	A living thing that just eats meat.
characteristic	A feature or quality.
classification	To categorise or group something.
excretion	To dispose of waste.
environment	All the physical surroundings on earth including everything living and non-living.
fish	A type of animal that lives in water and has scales, bill and fins.
group	Sorting things based on their similarities.
growth	To get bigger.
herbivore	A living thing that just eats plants.
invertebrate	An animal that does not have a backbone.
mammal	A type of warm-blooded animal that has a backbone, fur on its body and usually drinks milk from its mother as a baby.
movement	To change position.
nutrition	The process of taking food into the body and absorbing nutrients.
omnivore	A living thing that eats both plants and meat.
reproduce	To create more of the same species.
reptile	A type of animal that is cold-blooded and has scaly skin.
respiration	Taking in gas and breathing out another (breathing in humans).
sensitivity	Using your senses (see, smell, hear, touch and taste).
vertebrate	An animal with a backbone.

Year 4

Progression of skills in Science

Ask relevant questions and use an understanding of different types of scientific enquiries to best answer them.

Set up simple practical enquiries, comparative and fair tests.

Make systematic, careful observations and where appropriate, take accurate measurements using standard units, using a range of equipment including thermometers and data loggers.

Gather, record, classify and present data in a variety of ways to help answer questions.

Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.

Report on findings from enquiries, including oral and written explanations displays or presentations of results and conclusions.

Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.

Identify differences, similarities or changes related to simple scientific ideas and processes.

Use straightforward scientific evidence to answer questions or to support findings.