

Science – Year 4 – Life on Land – Why is biodiversity important?

Prior Learning (What we already know?):

- Ask simple questions and recognise that they can be answered in different ways including use of scientific language from the national curriculum
- Use simple equipment to observe closely including changes over time
- Communicate ideas, what he/she does and finds out in a variety of ways.
- Perform simple comparative tests
- Identify, group and classify
- Use observations and ideas to suggest answers to questions noticing similarities, differences and patterns
- Gather and record data to help in answering questions including from secondary sources of information

New Learning:

- To know plants and animals can be grouped according to their characteristics
- To know classification keys can be used to identify plants and animals
- To know humans can have a positive and a negative effect on an environment e.g. deforestation, melting ice-caps

New Skills:

- Ask relevant questions (use 5 types of scientific enquiries to answer them)
- Set up simple comparative and fair tests
- Make systematic and careful observations (take accurate measurements using standard units, use thermometers and data loggers)
- Gather, record, classify and present data in a variety of ways to help in answering 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/changes related to simple scientific ideas/processes
- Use straightforward scientific evidence to answer questions or to support findings

Key Questions:

What food chains can you recall in the Amazon local area?

What conclusion can you draw about deforestation in the Amazon?

What information would you use to support the view that the Polar Regions are changing?

Why do you think it's important to document what we find in habitats?

Key Facts:

MRS GREN – Movement, Respiration, Sensitivity, Growth, Reproduction, Excretion, Nutrition

There are; 5500 species of mammal, **10 400** species of bird, **10 000** species of reptile, **7300** species of amphibian, **33 000** species of fish, **1 305 000** kinds of invertebrate

Invertebrates are classified into these groups – insects, annelids, protozoa, crustaceans, molluscs, arachnids, echinoderms

Key Resources:

<https://www.bbc.co.uk/bitesize/topics/zxjj6sg/articles/z9cbcwx>

<https://www.bbc.co.uk/bitesize/topics/zn22pv4/articles/z8mbqhv#:~:text=Invertebrates%20are%20animals%20that%20don,a%20backbone%20inside%20their%20body.>

Can I do this?

- Can recognise that living things can be grouped in different ways
- Can use classification keys to identify unknown plants and animals
- Can give examples of how an environment may change both naturally and due to human impact, and can pose danger to living things
- Can keep a careful record of living things found in different habitats throughout the year (diagrams, tally charts etc.)



Vocabulary:

Environment, flowering, nonflowering, plants, animals, vertebrates, fish, amphibians, reptiles, mammals, invertebrate, human impact, nature reserves, deforestation.