Life On Land Learning Organiser – Year 6 Autumn 1 – Is the Amazon the lungs of the world?

Prior Learning (What we already know?)

To have a knowledge of ocean animals and adaptation.

To learn about the creatures that live in in the seas and oceans To recognising the global context of challenges for local fisheries and how this affects fishermen's livelihoods

To have a knowledge of the impact of humans on the ocean, marine pollution and marine disasters, and how these can be mitigated (e.g. through international law).

To have a knowledge of different types of fishing and the livelihoods they support.

To make an exploration of traditional/indigenous knowledge and culture.

To know the basic premise of climate change and the role of the oceans in moderating our climate.

To understands the connection of many people to the sea and the life it holds, including the sea's role as a provider of food, jobs and exciting opportunities.

New Learning

To have an understanding of forest ecosystems, freshwater ecosystems, ecosystem health and consequences of human impact. To understand the importance of biodiversity and threats to biodiversity, habitat loss; concept of endangered species.

To understand ecology: competition, predator-prey, community dynamics, energy flow through food webs, dispersal and ranges. Specific ecosystems – local and global native ecosystems and also human-made ones, e.g. managed forestry plantations

To understand threats to biodiversity: habitat loss, deforestation, fragmentation, invasive species and overexploitation (caused by unsustainable production and consumption practices, unsustainable technologies, etc.)

To understand the dangers of extinction: Individually endangered species, how extinction is forever, the long time needed to form species, and the six mass extinctions

To understand climate change and biodiversity, ecosystems as carbon sinks, disaster risk reduction and ecosystems (ecosystems as a natural barrier to natural hazards)

To understand soil and its formation and structure

To understand desertification, deforestation and efforts to combat them

New Skills

- Analyse impacts and risks associated with biodiversity loss and ecosystem degradation.
- Beginning to apply systems thinking to understand ecosystem interdependencies (e.g. deforestation leads to habitat loss).
- The learner is able to argue for the conservation of biodiversity on multiple grounds including ecosystems services and intrinsic value.
- The learner is able to question the dualism of human/nature and realizes that we are a part of nature and not apart from nature.
- To participating in school gardening

Key Questions

Why is biodiversity important?

What is an ecosystem (local, global, human-made)?

What are the threats to biodiversity?

What are the consequences of extinction?

What is desertification and deforestation?

What human behaviours are causing some animals to become extinct?



Vocabulary.

Forest ecosystem, freshwater ecosystem, human impact, biodiversity, habitat loss, endangered species, ecology, predator, prey, food webs, deforestation, fragmentation, overexploitation, extinction, desertification.

Key Facts

Biodiversity is all the different kinds of life you'll find in one area; the variety of animals, plants, fungi, and even micro-organisms like bacteria that make up our natural world. Each of these species and organisms work together in ecosystems, like an intricate web, to maintain balance and support life. For example, a pond ecosystem may consist of a pond habitat, inhabited by aquatic plants, microorganisms in the mud at the bottom, fish in the water and a heron on the bank.

If one part of an ecosystem is changed, this may affect other living things in the ecosystem. For example, if a disease suddenly wipes out the plants in a pond, it might affect the fish and heron because they have less food to eat.

Extinction of a particular animal or plant species occurs when there are no more individuals of that species alive anywhere in the world - the species has died out. This is a natural part of evolution. Today human intervention is also causing rapid extinction. Hunting, habitat destruction and the over exploitation of wildlife means that many different types of plants and animals are being pushed to the edge of extinction.

Key Resources

https://www.wwf.org.uk/learn/love-nature/biodiversity

https://www.bbc.co.uk/bitesize/topics/zbnnb9q/articles/z2pqfcw

https://www.bbc.co.uk/bitesize/articles/zkxjnrd

Can I do this....?

- Can I explain why biodiversity is important?
- Can I explain the threats to biodiversity?
- Can I explain the consequences of human impact on ecosystems?
- Can I name some different types of ecosystems?
- Can I explain how the different parts of an ecosystem work together?
- Can I explain the dangers of extinction?
- Can I give examples of how certain human behaviours are causing some animals/plants to become endangered?
- Can I give examples of sustainable / unsustainable production and consumption practises?
- Can I explain soil formation?