

Year 4&5 Science - Living Things and Their Habitats

KEY VOCABULARY	
organisms	Another word that can be used to mean 'living things'
habitat	The specific area or place in which particular animals or plants may live
environment	An environment contains many habitats and these include areas where there are both living and non-living things.
endangered	A plant or animal where there are not many of their species left and scientists are concerned that the species may become extinct
extinct	When a species has no more members alive on the planet, it is extinct .
classification	This is where plants or animals are placed into groups according to their similarities.
vertebrates	Animals with a backbone
invertebrates	Animals without a backbone
specimen	A particular plant or animal that scientists study to find out about its species
characteristics	The distinguishing features or qualities that are specific to a species

Life Processes

To stay alive and healthy, all living things need certain conditions that let them carry out the seven **life processes**:

Movement	Growth
Respiration	Reproduction
Sensitivity	Excretion
	Nutrition

Plants and animals rely on the **environment** to give them everything they need. Therefore, when **habitats** change, it can be very dangerous to the plants and animals that live there.



Changes to an **environment** can be natural or caused by humans. Changes to an **environment** can have positive as well as negative effects. Here are some examples of things that can change an **environment**.

<i>Natural</i>	<ul style="list-style-type: none"> • earthquakes • storms • floods • droughts • wildfires • the seasons 	<i>Human-Made</i>	<ul style="list-style-type: none"> • deforestation • pollution • urbanisation • the introduction of new animal or plant species to an environment • creating new nature reserves
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FOOD CHAINS

Producer
Produced from an energy source (e.g. the sun) such as plants.



Consumer
Eats the producer. (Secondary consumers eat the primary consumer.)



Decomposer
Feeds by decomposing the remains of living things.



Predators hunt and eat other animals.
Prey are hunted by predators.



I am going to send a flood on the earth to destroy every living being. Everything on the earth will die, but I will make a covenant with you.

CHRISTIANITY - What is it like to follow God?

OUR LEARNING

The **Old Testament** tells the story of a particular group of people, the children of Israel known as the People of God – and their relationship with God.

- The People of God try to live in the way God wants, following his commands and worshipping him.
- They believe he promises to stay with them and Bible stories show how God keeps his promises.
- In the story of **Noah**, God sent the flood to bring good into the world and wipe out evil.
- After the flood, he promised to stick with people - even though people often make mistakes; God keeps on forgiving.
- The story shows that people have responsibilities given by God - part of being the People of God is trying to live by God's commands.
- When God gives rules in the Noah story, he is making his first **covenant**.
- The covenants show people correct beliefs, attitudes and behaviours that are appropriate for being in a caring relationship with God, but they also show what they can expect from God.
- In the same way as Noah, some Christians give up things to follow God because they believe that everyone can be one of the People of God.
- Christians try to follow God's directions in order to do this.

KEY VOCABULARY	MEANING
Bible	The Christian holy book, which is made up of two main parts: the Old Testament and the New Testament.
Old Testament	The first part of the Bible. Stories in the Bible which happened before Jesus was born. They often focus on the friendship between the main characters and God.
New Testament	The second part of the Bible. Stories about Jesus and his followers.
Ark	The ship built by Noah to save his family and two of every kind of animal from the Flood.
Covenant	An agreement, pact or promise.
People of God	A description in the Old Testament that applies to the Israelites and that in the New Testament applies to Christians.
Symbol	Something that represents or stands for something else.
Forgive	Stop feeling angry or resentful towards (someone) for an offence, flaw, or mistake.





Geography Knowledge Organiser - Year 4&5

Why is the Amazon rainforest important?

Location of Tropical Rainforests



Tropical Rainforests are found near the **equator**. The enormous amount of rain and tropical heat means that the conditions in the rainforest are humid and damp. These rainforests only cover 6% of the surface of the Earth but scientists believe that about 50% of the plant and animal species in the world live in them.

Rainforests are the oldest ecosystems on Earth and they are home to millions of people, plants and animals. There are two types of rainforest: **tropical** and **temperate**.



Rainforest Layers

Tropical rainforests are made up of four layers.

Emergent Layer

Canopy

Understorey

Forest Floor

The emergent layer consists of tree tops that poke up above the canopy. It receives plenty of sunlight but it is also windy and rainy. The layer is inhabited by birds, bats, butterflies and other insects, as well as some small monkeys, such as the Capuchin.

In the canopy, the leaves of the trees provide a 'roof' for the rainforest, blocking sunlight from reaching the layers below. There is a plentiful supply of nuts and fruit so many different animals live here (e.g. sloths which have a layer of green algae to act as camouflage).

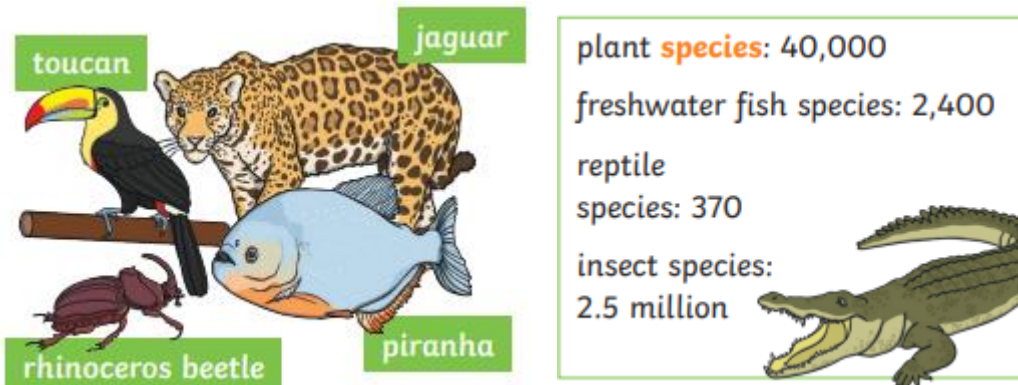
The understorey is warm and humid, and young trees and shrubs are found here. Insects thrive in this layer and many popular house plants, such as ferns, come from the understorey. Animals in this layer include jaguars, lizards, frogs and snakes.

The forest floor is very dark and hot. Decomposition takes place in this layer, with fungi and insects breaking down the decaying plants. Larger animals (e.g. giant anteater) live in this layer, as well as rodents and pigs.

Vocabulary

Word	Definition
climate	The weather and temperature usually found in an area.
deforestation	The destruction of trees over large areas.
environment	Everything in the world around us, which can affect our lives.
equator	An imaginary circle around Earth. It runs east and west halfway between the North and South poles.
humid	Having a high level of moisture in the air.
indigenous	A living thing that belongs naturally to an area.
logging	Felling and cutting trees.
species	A group of living things that the same main features and can breed with one another.
threat	Something that can cause harm to an animal, plant or habitat.
vegetation	The plant life growing in a certain area.
tropical	Somewhere that is warm all year round, but which has rainy seasons.
nocturnal	A nocturnal animal is one that is active at night and sleeps during the day.
temperate	A moderate climate which is not extremely hot or cold.

The plants of the Earth's rainforests produce most of the world's oxygen.



plant species: 40,000
 freshwater fish species: 2,400
 reptile species: 370
 insect species: 2.5 million



Indigenous People:

There are millions of people living in the rainforests of the world. These tribal people live a traditional way of life that has stayed relatively unchanged for hundreds of years. These tribes understand the rainforest and live in harmony with it. One of the largest tribes of the Amazon is the Yanomami.



Threats to the Rainforest:

Deforestation:

1. To clear space for farming: growing crops (soya beans and palm oil) and grazing land for beef cattle.
2. Chopping down trees for wood.
3. To build roads to mine for metal, gold and diamonds.
4. To dig for oil.
5. To flood areas to make dams and generate electricity.

