Remarkable Rainforests

Knowledge Organiser for Years 3 and 4, Autumn Term (Even Year) 2026-27

AUTUMN 1 KEY QUESTION
Why are rainforests so important to our planet, and what happens if we lose them?

AUTUMN 2 KEY QUESTION
Who were the ancient Maya and what have we learnt from them?

Rainforests are hot, wet forests that grow near the Equator. They cover only a small part of the Earth's land, yet they are home to more than half of all the world's kinds of plants and animals. This term we explore where rainforests are, what lives in each layer, how people live there and why rainforests are under threat. We follow the journey of chocolate from a cacao pod in the rainforest to a bar in our shops, and travel back in time to meet the ancient Maya, who lived in the rainforests of Central America and were the first to turn cacao into a drink.

What we will know and remember

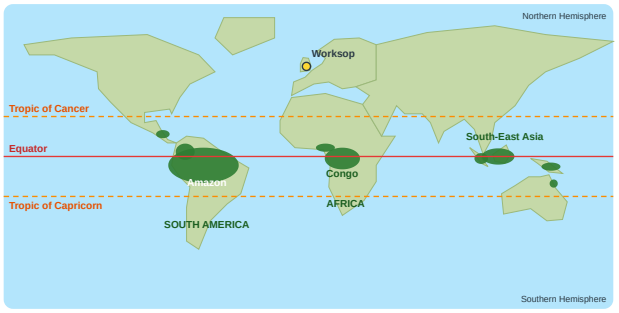
Geography: Remarkable Rainforests
Autumn 1 and 2

1. To know where rainforests are found in the world, locating South America, the Equator, the tropics and both hemispheres.
2. To know the climate and rainfall of the Amazon and how it compares with the weather in Worksop.
3. To know the layers of the rainforest and the plants and animals found in each.
4. To know how the Yanomami live in the rainforest and how their lives compare with our own.
5. To know how the rainforest connects to our lives through trade and fair trade, why it is under threat (deforestation), and what is being done to protect it.

History: The Ancient Maya
Autumn 2

1. To know when and where the Maya civilisation existed and where it fits on a timeline.
2. To know how the Maya built and grew a powerful and successful civilisation using the land around them.
3. To know how Maya society was organised and ruled (hierarchy; roles within the family).
4. To know what Maya artefacts tell us about how they lived, and how reliable this evidence is.
5. To know how Maya life compared with Britain at the same time, and why the civilisation declined.

Where are the rainforests?



Tropical rainforests grow in a belt around the Equator, between the Tropic of Cancer and the Tropic of Capricorn. Simplified map.

1/2+
of the world's kinds of plants and animals live in rainforests

9
countries share the Amazon, the largest rainforest on Earth

About 1/5
of all the river water flowing into the world's seas comes from the Amazon river

Over 2 m
of rain falls in parts of the Amazon each year - it is wet all year round

Amazon vs Worksop

The Amazon is hot and wet all year. Manaus, a city in the middle of the Amazon in Brazil, gets more than three times as much rain as Worksop.



Approximate yearly figures.

Why are rainforests so important?

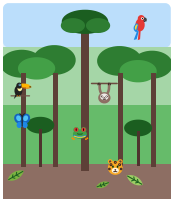
Oxygen
Trees release oxygen and soak up carbon dioxide

Water
They make rain clouds and feed huge rivers

Medicines
Many medicines come from rainforest plants

Wildlife
Millions of kinds of animals and plants live there

The layers of the rainforest



Emergent layer
The tallest trees poke out above the rest, up to about 60 metres high. Eagles, macaws and bats live here.

Canopy
A thick roof of leaves that catches most of the sunlight. Toucans, sloths and monkeys live here.

Understorey
Dark, warm and damp, with young trees and big leaves. Tree frogs, snakes and jaguars live here.

Forest floor
Very little light reaches the ground. Fallen leaves rot quickly. Leafcutter ants, insects and tapirs live here.

The Yanomami: living in the rainforest

The Yanomami people live in the Amazon rainforest in Brazil and Venezuela. They have lived there for thousands of years and know how to use the forest without destroying it.

	Yanomami	Us in Worksop
Home	A shabono shared by many families	Houses and flats for one family
Food	Hunting, fishing, gathering and small gardens of bananas and cassava	Shops and supermarkets
Water	Rivers and streams	Taps
Learning	Children learn forest skills from their families	Children go to school

Why are rainforests under threat?

Deforestation means cutting down or burning forests. Every year, huge areas of rainforest are cleared.

Cattle farms
Land cleared for cows

Crops
Soya and palm oil

Logging
Trees cut for wood

Mining and roads
Digging for gold and metals

How can we help protect them?

Governments, charities, local people and shoppers can all make a difference.

Protected areas
Parks where trees cannot be cut

Fair trade
Farmers get a fair price

Recycle paper
Fewer trees cut down

Plant trees
Help forests grow back

From bean to bar: the journey of chocolate

Chocolate is made from the beans of the **cacao tree**, which only grows in hot, wet places close to the Equator. Its pods grow straight out of the trunk!

1. **Harvest** — Ripe pods are cut from cacao trees.
2. **Ferment** — Beans are scooped out and covered with leaves for about a week.
3. **Dry** — Beans dry in the sun for several days.
4. **Ship** — Sacks of beans travel by ship to factories around the world.
5. **Roast** — Beans are roasted to bring out the chocolate flavour.
6. **Grind** — The insides are ground into a thick paste called cocoa mass.
7. **Mix** — Sugar and milk are added and mixed until smooth.
8. **Mould** — Liquid chocolate is poured into moulds and cooled into bars.

More than half
of the world's cocoa is grown in two West African countries: Cote d'Ivoire (Ivory Coast) and Ghana

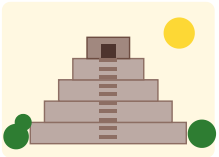
Fair trade
A Fairtrade mark means the cocoa farmers were paid a fair price for their beans

DT: Design a chocolate bar (Autumn 1)

- To know how to research and review a variety of chocolate bars.
- To know what makes a chocolate bar wrapper appeal to a target audience.
- To know how to design and make a unique chocolate bar for a target audience.
- To know how to make a wrapper, then analyse the work and identify improvements.

The ancient Maya

The Maya lived in the rainforests and highlands of Central America, in what is now southern Mexico, Guatemala, Belize, Honduras and El Salvador. They built great stone cities, studied the stars and invented their own writing and number system. Many Maya people still live in the region today.

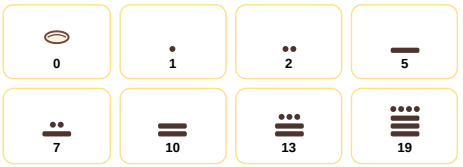


Maya cities had huge stepped pyramids with temples on top.



Maya society: each city-state was ruled by a king.

Maya numbers



A dot means 1, a bar means 5 and a shell means 0. The Maya were one of the first peoples to use zero.

Maya and Britain: a timeline

c.2000 BC	First Maya farming villages.
AD 43	Britain: the Romans invade.
c.AD 250-900	The Classic Maya period: great cities such as Tikal grow powerful.
c.AD 410	Britain: the Romans leave and the Anglo-Saxons arrive.
c.AD 800-900	Many southern Maya cities are abandoned.
1500s	Spanish invaders arrive in Central America.

Red dates are events in Britain.

Why did Maya cities decline?

- Long droughts made it hard to grow enough food.
- Too many people for the land to feed.
- Wars between rival city-states.
- Cutting down too much forest damaged the land.

The Maya and chocolate

- The Maya grew cacao and made a frothy, bitter chocolate drink, often with chilli.
- Cacao beans were so precious they were used like money.
- The Maya word for cacao was kakaw.

Science: animals, including humans

Skeletons and muscles (Autumn 1)

Support | **Protect** | **Move**

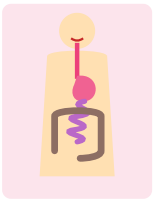
Muscles work in pairs: when one contracts (gets shorter), the other relaxes.
Humans have an endoskeleton inside the body. Insects have an exoskeleton on the outside.
We need the right nutrition from different food groups to stay healthy.

Teeth (Autumn 2)



Incisors	Canines	Molars
cut and bite	grip and tear	crush and grind

Digestion (Autumn 2)



- **Mouth** — Teeth chew, saliva softens.
- **Oesophagus** — Pushes food down.
- **Stomach** — Churns food with acid.
- **Small intestine** — Nutrients pass into the blood.
- **Large intestine** — Water is absorbed.

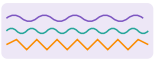
Art, music and PE

Art: Frida Kahlo (Autumn 2)



- To know about the work of Frida Kahlo.
- To know how to draw and paint rainforest leaves, flowers and animals in bold, vibrant colours.
- To know how symbolism can be used around a self-portrait.
- To know how to create a self-portrait surrounded by a rainforest scene with symbolic elements.

Music: Rainforest Soundscapes (Autumn 1)



- To know that timbre is the particular quality of a sound.
- To know that texture describes how many layers of sound are heard at once.
- Our big question: how can a class of instruments make an audience believe they are standing in the Amazon?

PE: Rainforest Dance (Autumn 2)



- To know how to perform South American and African dance styles in time.
- To know how to choreograph and perform with control, unison and expression.

Key vocabulary

rainforest A thick, tall forest in a hot place where it rains a lot.	**Equator** An imaginary line around the middle of the Earth.	**tropics** The hot area between the Tropic of Cancer and the Tropic of Capricorn.	**hemisphere** Half of the Earth: northern or southern.	**climate** The usual weather of a place over a long time.	**emergent** The tallest trees that rise above the canopy.
canopy The thick roof of leaves high above the ground.	**understorey** The dark layer below the canopy.	**forest floor** The ground layer, where fallen leaves rot.	**deforestation** Cutting down or burning forests.	**fair trade** Trading in a way that pays farmers a fair price.	**biodiversity** The huge variety of living things in a place.
cacao The tree whose beans are used to make chocolate.	**ferment** To leave food to change slowly, giving it flavour.	**target audience** The people a product is designed for.	**civilisation** A large, organised society with cities, laws and culture.	**city-state** A city that rules itself and the land around it.	**hierarchy** A system where people are ranked by importance.
artefact An object made by people in the past.	**glyph** A picture symbol used in Maya writing.	**skeleton** The frame of bones that supports the body.	**nutrition** The food and drink our bodies need to be healthy.	**digestion** How the body breaks down food.	**oesophagus** The tube that carries food from the mouth to the stomach.

Green: geography. Brown: chocolate and DT. Orange: history. Grey: science.

Bringing it to life

Cadbury World visit
We see how chocolate is made, from cacao bean to bar.

Rainforest fieldwork
We measure and record the weather in Worksop to compare with the Amazon.

Listening
Fanfarra (Brazil), Night Ferry and Bolero inspire our rainforest soundscapes.

Talk about it at home
Look at a chocolate wrapper together. Can you find a Fairtrade mark? Where did the cocoa come from?