

Lifecycles

Using the information provided on the lifecycle of a butterfly, create either a power point or information leaflet displaying the different stages of the lifecycle of a butterfly. Use diagrams and plenty of colour to compliment the information you are displaying. If you choose to complete a power point, you may also use special effects, pictures and video clips if you feel they are useful.

Butterfly Life Cycle

All butterflies have "complete metamorphosis." To grow into an adult they go through 4 stages: egg, larva, pupa and adult. Each stage has a different purpose - for instance, caterpillars need to eat a lot, and adults need to reproduce. Depending on the type of butterfly, the life cycle of a butterfly may take anywhere from one month to a whole year.



Figure 1. Butterfly Eggs on a Leaf

The First Stage: The Egg

A butterfly starts life as a very small egg. If you look close enough you can sometimes actually see the tiny caterpillar growing inside of it. Some butterfly eggs may be round, cylindrical or oval and some may be ribbed while others may have other features. The egg shape depends on the type of butterfly that laid the egg.

Butterfly eggs are usually laid on the leaves of plants, so if you are searching for these very tiny eggs, you will have to take some time and examine quite a few leaves in order to find some.

The Second Stage: The Larva (Caterpillar)

When the egg finally hatches, a butterfly does not emerge. In the butterfly's life cycle, there are four stages and this is only the second stage. Butterfly larvae are actually what we call caterpillars. Caterpillars do not stay in this stage for very long and mostly, in this stage, all they do is eat.

When the egg hatches, the caterpillar will start its work and eat the leaf they were born onto. It is really important the mother butterfly lays her eggs on the type of leaf the caterpillar will eat – each caterpillar type likes only certain types of leaves. Since they are tiny and cannot travel to a new plant, the caterpillar needs to hatch on the kind of leaf it wants to eat.



Figure 2. Butterfly Caterpillar

Caterpillars need to eat and eat so they can grow quickly. When a caterpillar hatches from the egg, they are extremely small. When they start eating, they instantly start growing and expanding. Their skin does not stretch, so they grow by "molting" (shedding the outgrown skin) and this happens several times while it grows.

The Third Stage: Pupa (Chrysalis)

The pupa stage is one of the most dramatic stages of a butterfly's life. As soon as a caterpillar is grown to its full length/weight, they form themselves into a pupa, also known as a chrysalis. From the outside of the pupa, it looks as if the caterpillar may just be resting, but the inside is where all the change is. Inside of the pupa, the caterpillar is rapidly changing.



Figure 3. Caterpillar Becoming a Chrysalis

Caterpillars are short, stubby and have no wings at all. Within the chrysalis the old body parts of the caterpillar undergo a remarkable transformation, called 'metamorphosis', to become the beautiful parts that make up the butterfly that will emerge. Tissue, limbs and organs of a caterpillar have all been changed by the time the pupa is finished, and is now ready for the final stage of a butterfly's life cycle.

The Fourth Stage: Adult Butterfly

Finally, after the caterpillar has finished forming and changing inside the pupa, an adult butterfly can emerge. When the butterfly first releases itself from the chrysalis, the wings are soft and folded against its body. This is because the butterfly had to fit all its new parts inside the pupa.

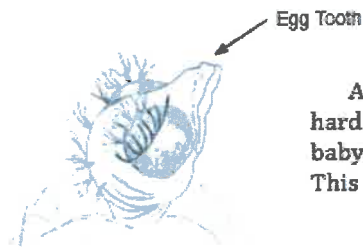
As soon as the butterfly has rested after coming out of the chrysalis, it will pump blood into the wings in order to get them working and flapping – then they can fly. Usually within a three or four-hour period, the butterfly will master flying and will search for a mate in order to reproduce.



Figure 4. Butterfly Emerging from a Chrysalis

When in the fourth and final stage of their lives, adult butterflies are constantly seeking to reproduce and when a female lays their eggs on some leaves, the butterfly life cycle will start all over.

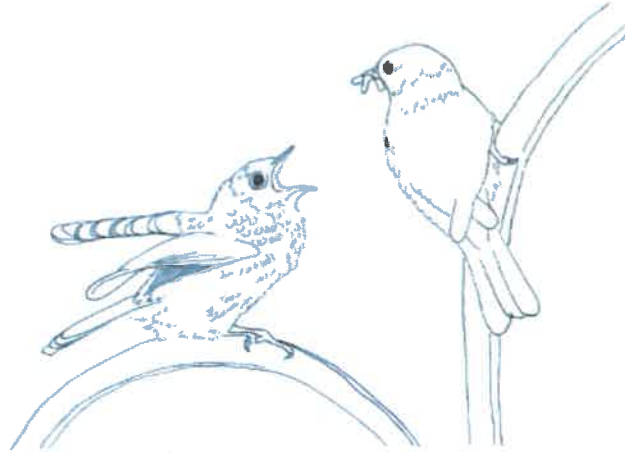
A Bird's Life Cycle



A bird life begins within an egg. A special hard structure called the **egg tooth** forms on the baby bird's beak to help it break the egg shell. This special tooth drops off a few days later.

A baby bird that has just hatched is called a **hatchling**. While the hatchling is growing in the nest and being fed by its parents we call it a **nestling**. When a nestling grows its flight feathers and is ready to leave the nest it takes its first flight or **fledges**. We call a bird that has just fledged a **fledgling**.

A fledgling has fluffy down feathers and is often fed by its parents for several weeks more. Its flight feathers continue to grow and its wing muscles get stronger. When a fledgling or **juvenile** has finished growing it becomes a **mature** or adult bird.



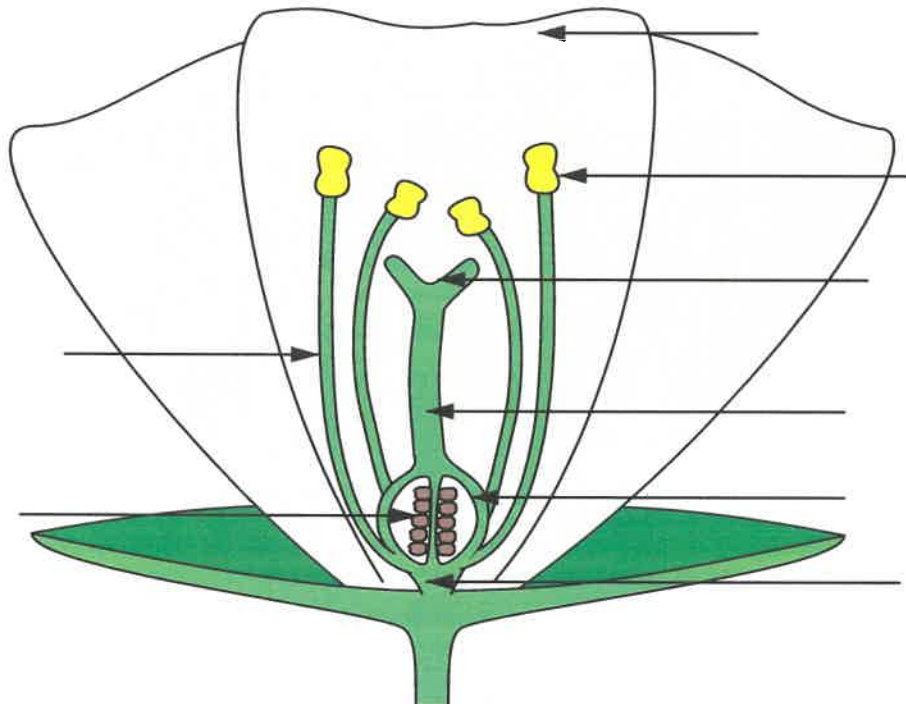
An adult bird attracts a mate, builds a nest and raises young to start the cycle all over again. Some birds migrate or travel long distances as part of their life cycle. Other birds stay in one area throughout the seasons.

Lifecycles (part 2)

Using the information above, as well as your own research. Illustrate the lifecycle of a bird. What are the similarities and differences compared to the lifecycle of a butterfly? How many tier 3 words can you include?

Parts of a flower

Using either the internet or books, label the different parts of a flower. When you have labelled them on the diagram below, write a description of what each part does.

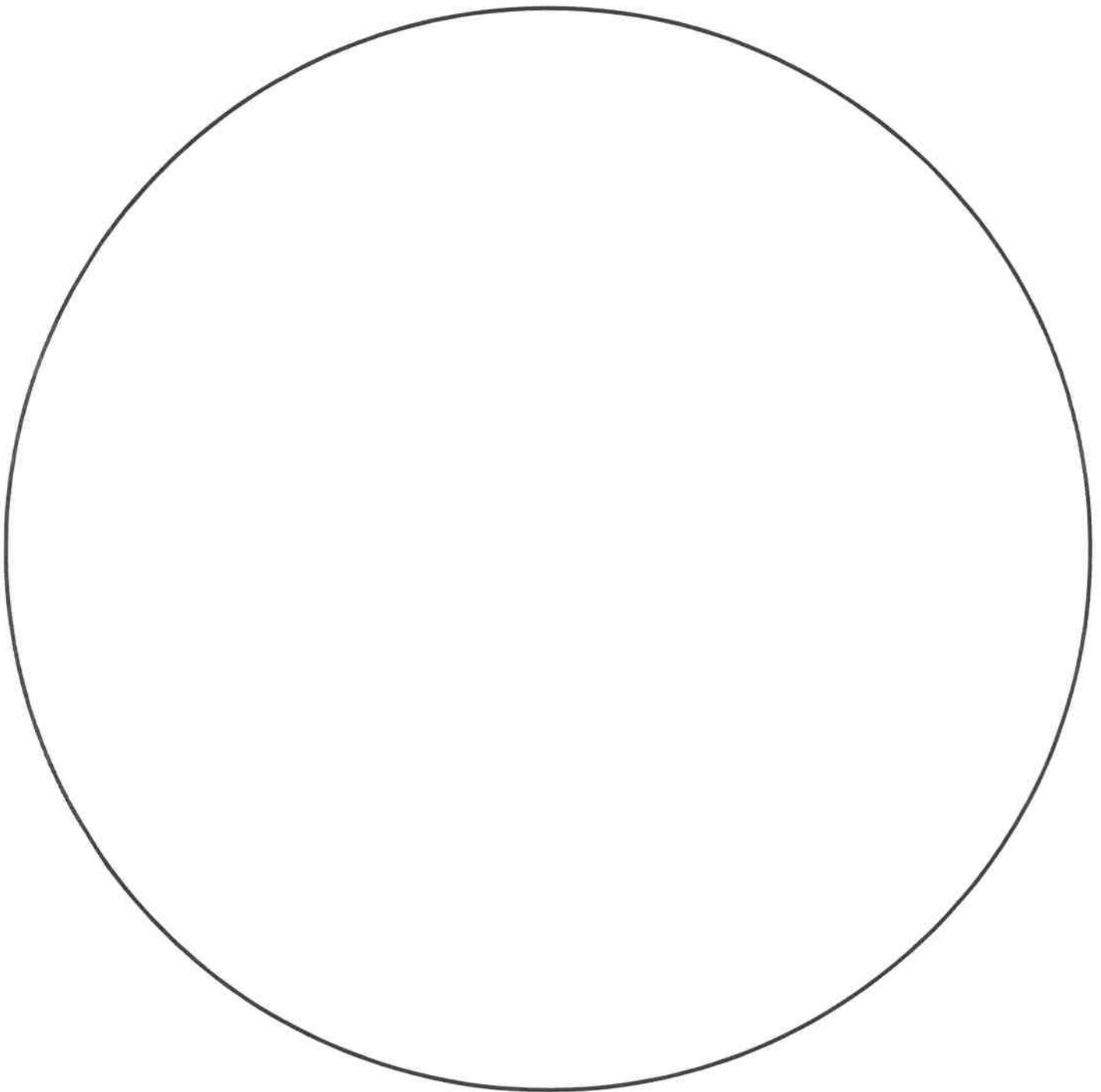


Life Cycles Research

Choose an animal and find out about its life cycle. Think about how many stages its life cycle has, and split up the circle below so that it has a section for each stage of the life cycle. Draw and describe each stage.

Name of animal: _____

Type of animal (mammal, amphibian...): _____



Date _____

Name _____

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Brazil and South America

L.O:

- To learn to locate and label Brazil and its neighbouring countries.
- To learn to locate and label 3 Brazilian cities.



Use an atlas or globe to help you.

Your task:

Find Brazil, label it then finish labelling its neighbouring countries.

Extension - Now can you label the other South American countries? Don't forget capital letters!

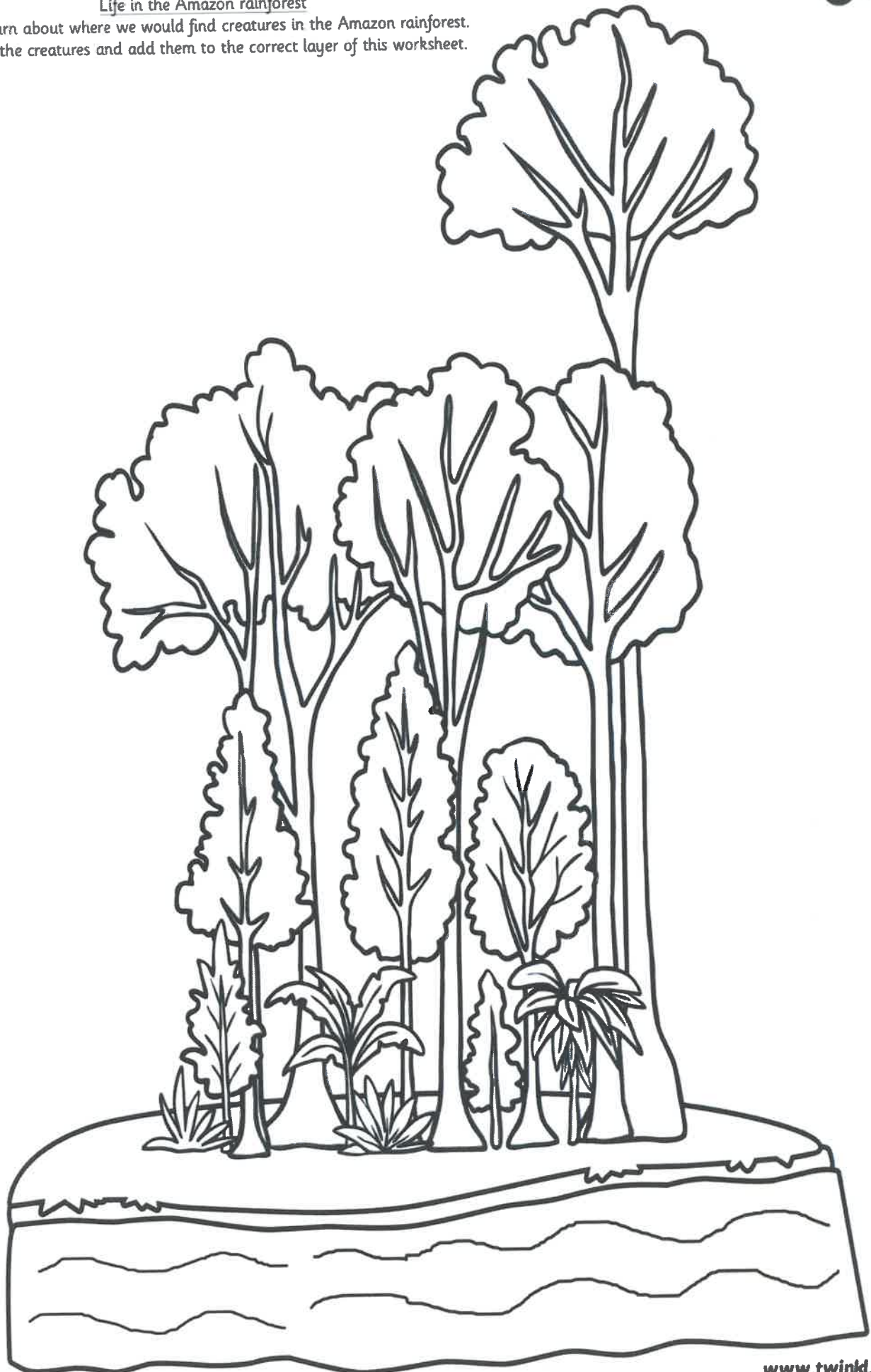
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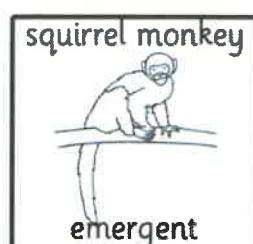
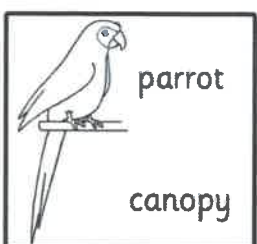
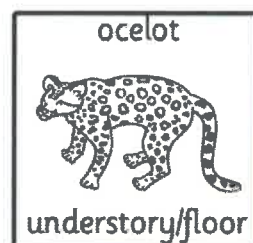
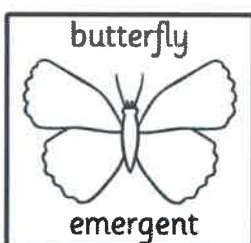
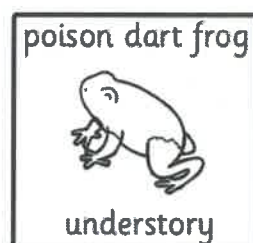
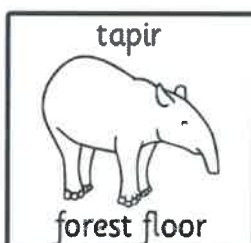
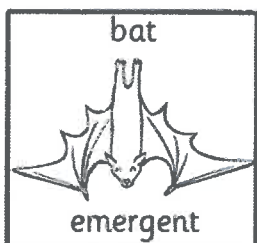
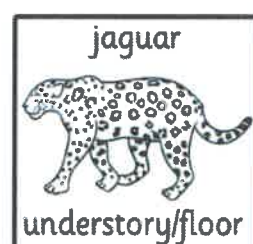
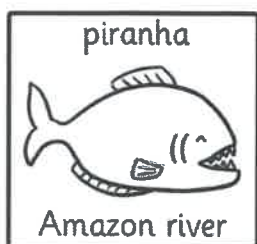
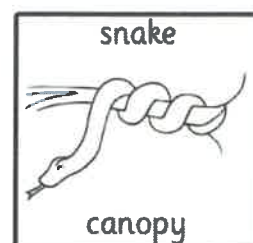
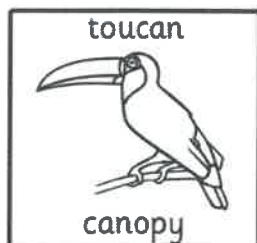
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Life in the Amazon rainforest

L.O To learn about where we would find creatures in the Amazon rainforest.
Cut out the creatures and add them to the correct layer of this worksheet.



Cut out the creatures and add them to the correct layer of the rainforest worksheet.



England and Brazil Comparison Study

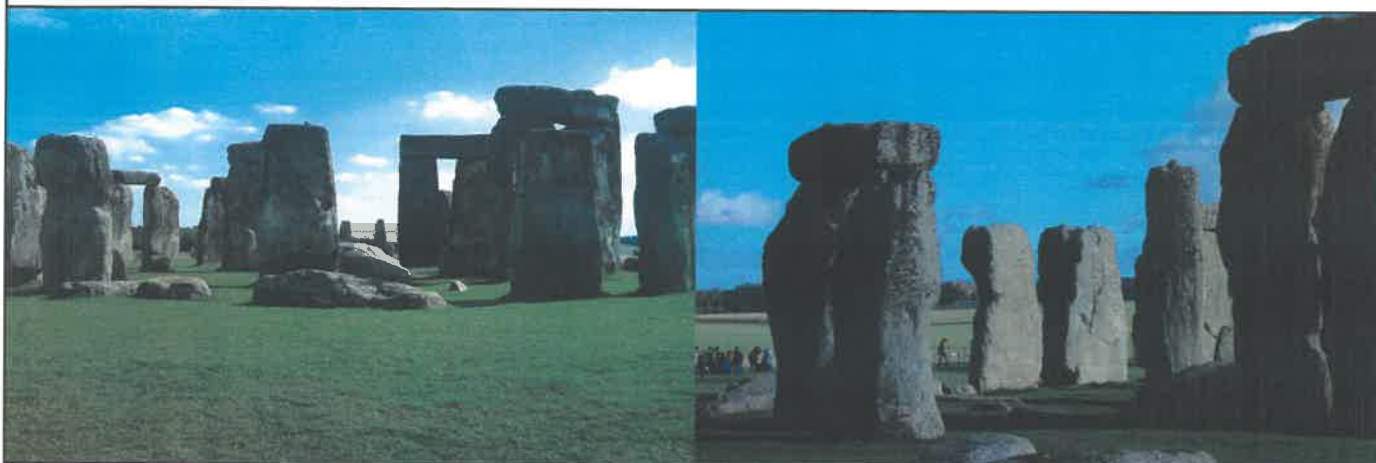


Place knowledge: I can understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom and a region within South America.

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England and Brazil: Places of Interest

Famous English Landmark: Stonehenge



- Stonehenge stands majestic near Salisbury in the county of Wiltshire and began its long history in 3000BC and probably started as a burial ground. No one is really sure why Stonehenge was built but some historians believe that it may have been a site for burials, healing, ceremonies, or as a temple to the Sun.
- In around 2500BC, the familiar stone circle was created. The larger stones around the outside are called the Sarsen Stones, the largest of which weighs about 35 tonnes!
- The smaller stones in the centre came from Wales and are called the bluestones.

Famous Brazilian Landmark:

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England and Brazil: Places of Interest

The Highest Point in England: Scafell Pike



- It is the highest mountain in England, standing at 978m (3,209 ft.) above sea level, in the Lake District in Cumbria.
- Scafell Pike is an igneous rock formation , which was formed more than 450 million years ago.
- It takes about 2-3 hours to walk the quickest way to the summit via the Wasdale Head route, where you can then appreciate the spectacular 360 degree views.

Highest Point in Brazil:

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England and Brazil: Places of Interest

Famous English Building: Windsor Castle



- Windsor Castle is the world's oldest and largest inhabited castle and has been the family home of many British kings and queens for nearly 1,000 years (including today by Her Majesty, Queen Elizabeth II.)
- William the Conqueror started building Windsor Castle in 1070 and took 16 years to finish.
- On 20th November 1992, The Great Fire at Windsor took 15 hours and 1.5million gallons of water to put out. This was part of Queen Elizabeth II's 'Annus Horribilis'.

Famous Brazilian Building:

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England and Brazil: People of Interest

Famous English Leader: Sir Winston Churchill



- Sir Winston Churchill was British Prime Minister twice and saw Britain through the Second World War.
- His wartime speeches are famous. Here's a extract from one of them: "We shall defend our Island, whatever the cost may be; we shall fight on the beaches, we shall fight on the landing grounds, we shall fight in the fields and in the streets, we shall fight in the hills; we shall never surrender..."
- He was born in 1874 and died in 1965 and was an MP for over 60 years! He is such a famous political figure that there is a statue of him in the House of Commons and new MPs rub his foot before making their first speech.

Famous Brazilian Leader:

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England and Brazil: People of Interest

Patron Saint of England: Saint George



- St. George is the Patron Saint of England and his Saint's Day is 23rd April each year.
- Other countries also have St. George as their Patron Saint including: Aragon, Catalonia, Ethiopia, Georgia, Greece, Lithuania, Palestine, Portugal, and Russia, as well as the cities of Amersfoort, Beirut, Bteghrine, Cáceres, Ferrara, Freiburg, Genoa, Ljubljana, Gozo, Pomorie, Qormi, Lod and Moscow.
- St. George has a mythical tale attached to him where he slayed a dragon to save a princess from being eaten by it. But legend has it that really he was a Roman soldier from Turkey around 280AD to 303AD.

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Patron Saint of Brazil:

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England and Brazil: People of Interest

Famous English Sportsperson: David Beckham



- He was born in 1975 in London and is one of the world's most famous footballers.
- He has played for Manchester United, England, Real Madrid and L.A. Galaxy. People also say that he has really popularised football in the USA (where they call it 'soccer').
- David Beckham has also had a huge amount of media attention off the pitch including his marriage to Victoria from the Spice Girls and very large sponsorship and advertising deals. Reports say that he is worth hundreds of millions of pounds!

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Famous Brazilian Sportsperson:

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England and Brazil: People of Interest

Famous English Actress: Helena Bonham-Carter



- Helena Bonham-Carter is an English actress who has appeared in many films, some of which has won her awards, including a BAFTA and an Oscar nomination.
- You may know her from playing Bellatrix Lestrange in the Harry Potter series of films (2007-11), the Red Queen in Alice Through the Looking Glass (2016) or Mrs Bucket in Charlie and the Chocolate Factory (2005).
- She was born in 1966 and now lives in London. She also has a CBE for her services to drama.

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Famous Brazilian Actress:

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England and Brazil:

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