

# How to Make an Amazon Rainforest in a Shoebox

Create your own 'biome in a box'.

You may also like to include labels to describe the different layers.

## You will need:

- shoebox (adult size)
- paintbrush
- green and brown paint (blue paint is optional)
- fallen leaves/different shades of green crêpe paper
- ruler
- brown paper/card
- green string/green pipe cleaners
- colouring pens/pencils
- natural objects e.g. pebbles, stones, twigs, dried leaves
- sticky tape
- scissors
- glue
- animal templates (optional)



We hope you find the information on our website and resources useful. The activities set out in this resource are potentially hazardous. The activities are not suitable for all children and adult supervision may be required for some of the activities. It is your responsibility to assess whether the children in your care are able to safely carry out the activities and whether the children require adult supervision. You are responsible for carrying out proper risk assessments on the activities and for ensuring that activities can be carried out safely. We are not responsible for the health and safety of your group or environment so, insofar as it is possible under the law, we cannot accept liability for any loss suffered by anyone undertaking the activity or activities referred to or described in this resource. It is also your responsibility to ensure that those participating in the activity are fit enough to do so and that you or the organisation you are organising for has the relevant insurance to carry out the physical activity. If you are unsure in any way, we recommend that you take guidance from a suitably qualified professional.

## What To Do

1. Begin by painting the inside of your shoebox. Paint the lid and sides green and paint the base of your box brown. You may want to add the Amazon river too.
2. Wait for the paint to dry.
3. Measure the height of your box from the base to the top of the open lid. Then, use this measurement when drawing tree templates on the brown paper/card. (These will be the tallest trees and will form the emergent layer.)
4. Carefully, cut out the trees and stick them to the back of your box.
5. Scrunch up different shades of green crêpe paper to create the leaves or alternatively use real, fallen leaves and stick them to the trees. (You could also stick leaves across the top edge of your box.)
6. Create the trees for the canopy layer. These should be made slightly smaller but need to form a roof over the plants below.
7. Create the smaller trees and plants using large, fallen leaves, such as ferns, for the understorey layer. Alternatively, to make your own ferns cut out individual leaves from plain paper or crêpe paper. Then, tie them together using string or sticky tape to form a bouquet.
8. Add these smaller trees and plants to your box to form the understorey layer.
9. Collect some objects from nature including small stones, twigs and dried leaves and stick them in place on the base of your box to create the forest floor.
10. Use green string or green pipe cleaners to create vines. Twist them around your trees and stick them from one side of the box to the other using sticky tape.
11. Draw your own rainforest animals (or use the templates included). Stick them in the correct part of your rainforest scene. You may even have some rainforest animal figures that you would like to include.



# The Layers of the Amazon Rainforest

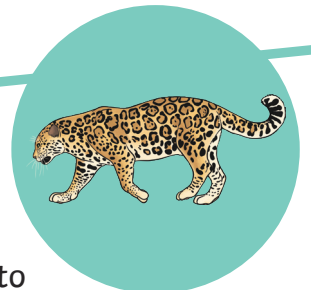


## Emergent Layer

Usually broad-leaved, evergreen hardwood trees can be found here. You might see birds, such as harpy eagles and macaws. Butterflies and some species of bats also live in this layer.

## Canopy Layer

Trees in this layer usually have smooth, oval, pointed leaves. Trees in this layer form a roof over the plants below. Many animals live in this layer as there is plenty of food. For example, red-eyed tree frogs, sloths, emerald tree boa, toucans and monkeys.

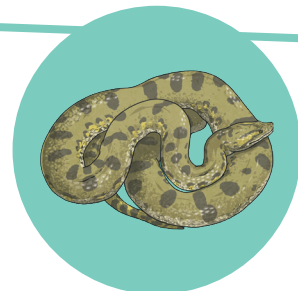


## Understorey Layer

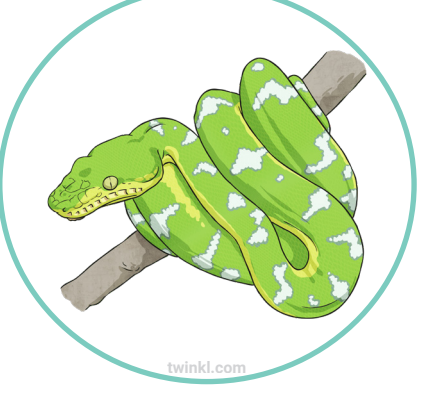
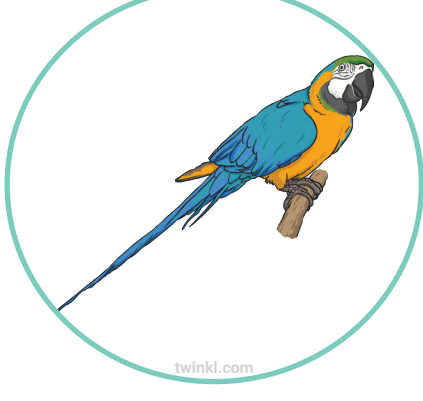
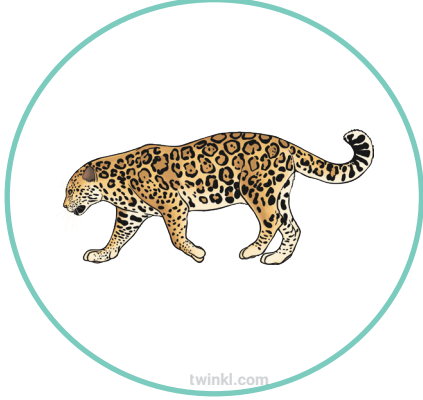
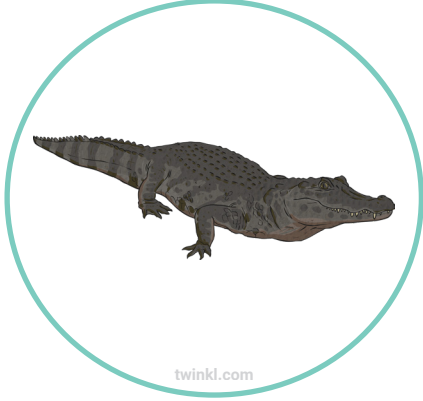
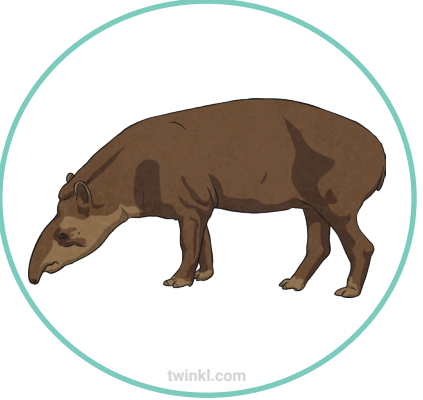
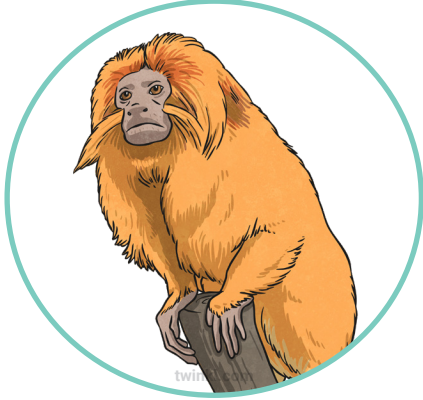
Trees in this layer don't grow any taller than 4 metres. This area is home to animals like the jaguar and some smaller animals, such as bats, insects, lizards and the hummingbird. Very little sunlight reaches this layer so plants have to grow larger leaves to try and reach the sunlight.

## Forest Floor

Very few plants grow in this dark environment. Leaves and other debris decompose very quickly. Animals such as tapirs, caimans and anacondas live here.







# Layers of the Rainforest

The emergent layer is the highest part of the rainforest, featuring a few very tall trees that rise above the main canopy. These trees have large, flat, horizontal crowns. The sky is visible through the gaps in their branches.

**emergent**

The canopy is the dense, continuous layer of tree crowns that forms the upper part of the forest. It is a thick, green wall of leaves and branches, with very little light reaching the ground below.

**canopy**

The understorey is the layer of smaller trees and shrubs that grows below the canopy. These plants are adapted to low light conditions and have smaller, more delicate leaves. They are scattered throughout the forest floor.

**understorey**

The forest floor is the ground level of the rainforest, covered in a thick layer of fallen leaves, twigs, and other organic matter. It is home to a variety of plants, including ferns, mosses, and small shrubs, which are adapted to the low light and high humidity of the forest floor.

**forest floor**