

## **Knowledge Organiser for Year 3 & 4**

# **Topic: Rainforests and Chocolate**

### **Key Questions**

- Can you label and describe the layers of a rainforest?
- Can you explain the term deforestation and the impact it has on the rainforests?
- Can you investigate the lives of the indigenous people?
- Can you identify the types of products that can be produced from the rainforest?
- Can you use colour, expression, texture and structure to replicate rainforest art?
- Can you design, make and evaluate a new / unique form of chocolate bread?

#### **Key Information**

The rainforest and its locations.

A rainforest is a tall, dense forest that receives lots of rain every year. They are the world's oldest natural habitats, and an amazing array of animals and plants have evolved within them. The tropical rainforests of the world are often located near the equator between the Tropic of Cancer and the Tropic of Capricorn. The rainforest has lots of rain because it is very hot and wet.



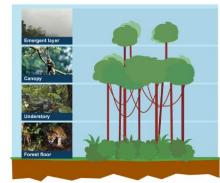
The layers of the rainforest.

Most rainforests are structured in four layers: emergent, canopy, understory, and forest floor. Each layer has unique characteristics based on differing levels of water, sunlight, and air circulation and these layers host several species of tropical animals and tropical plants.

1. The first layer of a tropical rainforest from the top is called the emergent layer. The emergent layer consists of towering

trees (basically taller than most trees in the forest) that protrude out of the rest of the plants in the area. The average height is about 70-100m from the ground level. 2. The next layer is the canopy layer, which is known to contain the majority (about 60 to 90%) of living species in the whole rainforest. The canopy layer, which is about 100 feet above the ground, contains overlapping tall trees that act as a roof over the rest of the organisms below them. 3. The third layer, is the understory layer. This layer is very humid and damp. Such humidity level is what keeps the animals in this layer alive. The understory is composed of shrubs, herbaceous plants, ferns,

contains overlapping tall trees that act as a roof over the rest of the organisms below them. 3. The third layer, is the understory layer. This layer is very humid and damp. Such humidity level is what keeps the animals in this layer alive. The understory is composed of shrubs, herbaceous plants, ferns, climbing plants, and young trees that are well adapted to areas receiving low sunlight. 4. Last but not the least is the Forest floor layer. This layer is often described as the darkest and most humid layer of a tropical rainforest as it receives less than 2% of the total sunlight. The Forest floor receives all fallen leaves, twigs, branches, fruits, and seeds from the three layers above it. All these materials, coupled with the hot and humid weather, allow quick decomposition, making the forest floor the most nutrient-rich layer of all.



The people and products of the rainforest.

More than a million species of plants and animals live in the Amazon rainforest alone. The rainforest provides a home for different groups of people. These indigenous people have lived in the rainforest for thousands of years and have a great knowledge of the plants and animals that are found there – providing them with everything they need to live: building materials, food, transport, clothing, decoration, art, music and medicine. Millions of people all over the world use products from the rainforests on a daily basis including wood, food and plant/oil items used in paints, cosmetics and tyres.

Our world's rainforests are under threat from a number of sources including farming and industry. It is estimated that 2000 trees are cut down each minute. Many rainforest animals are hunted, sometimes to extinction for their skins, feathers or as live exports. Groups of people all over the world are working to protect and sustain our rainforests.

Chocolate as a product of the rainforest.

Chocolate comes from the pods that grow on cocoa trees, which are small trees that grow in rainforests. Since the 2000s, Western Africa produces almost two-thirds of the world's cocoa, with Ivory Coast growing almost half of that amount. Sadly, cocoa farmers usually clear tropical forests to plant new cocoa trees rather than reusing the same land. That practice has spurred massive deforestation in West Africa, particularly in Ivory Coast. Experts estimate that 70% of the country's illegal deforestation is related to cocoa farming.

### **Key Vocabulary**

- Rainforest
- Forest Floor
- Understory
- Canopy
- Emergent Layer

- Weather
- Climate
- Tropical
- Indigenous people
- Deforestation

- Cacao Tree
- Fairtrade