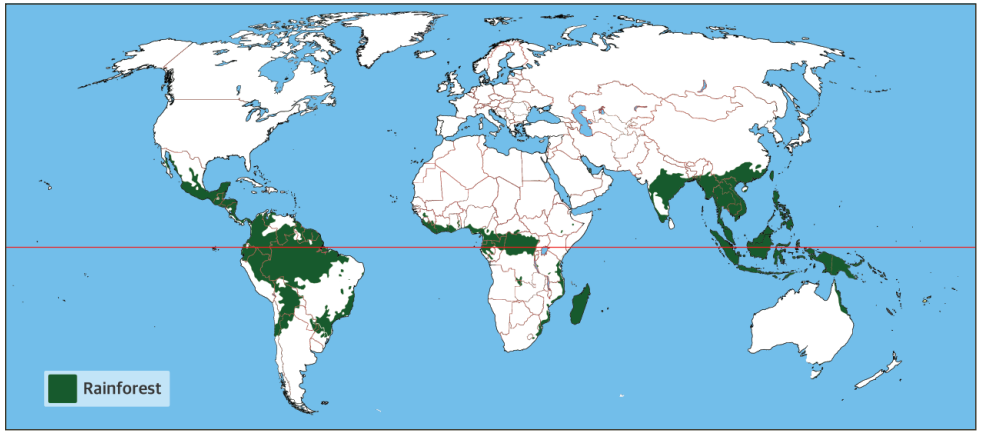
How can we craft chocolate that's fair for people and kind to the planet?

Knowledge Organiser

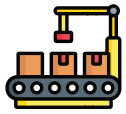
Year 4

Where does chocolate come from?

Chocolate comes from cocoa beans, which grow inside pods on the cacao tree. Cacao trees grow in warm, tropical rainforests near the equator in countries like Ghana, Ivory Coast, and Brazil. They need shade, moisture, and rich soil to thrive. The rainforest environment protects the cacao trees and provides the conditions for the beans to develop. Each tree produces large pods that hold around 20-50 cocoa beans. Farmers carefully harvest the pods and begin a process that eventually turns the beans into chocolate. Protecting rainforests is essential because cacao trees rely on them to grow, and rainforests help the planet's health.



Key vocabulary

appearance 	aroma 	cooling 	eco-friendly 
ethical 	harvest 	production 	recyclable 
roasting 	shipping 	sustainability 	texture 

What is Fairtrade?

Fairtrade is a system that helps farmers and workers get a fair price for the crops they grow, like cocoa beans for chocolate. It also ensures workers work in safe conditions and protects the environment. Fairtrade works with farmers and companies to ensure that products like chocolate are made in a way that is fair and kind to people and the planet.

How Fairtrade helps rainforests:

- Farmers grow cocoa under the shade of bigger trees, which stops rainforests from being cut down.
- Protecting rainforests keeps them full of wildlife and plants.
- Fairtrade pays farmers fairly, so they don't need to use harmful farming methods that damage the environment.

The chocolate journey: the five stages

1. Harvesting

Cocoa pods, which grow on cacao trees in tropical rainforests, are carefully picked by hand. Each pod contains around 20-50 cocoa beans.

2. Fermentation

The cocoa beans are placed in special containers or covered with banana leaves, where natural processes improve their flavour. This step is very important for creating the rich taste of chocolate.

3. Drying

After fermentation, the beans are spread out in the sun to dry. This removes moisture, making the beans ready for transport.

4. Roasting

After being transported to the factory, the dried beans are roasted. This step brings out the deep chocolate flavour we all enjoy.

5. Processing

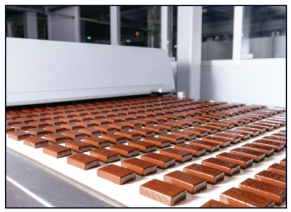
The roasted beans are ground into cocoa mass, which is then used to create chocolate products like bars, truffles, and drinks.

Watch the process here:

https://www.youtube.com/watch?v=4TDcYK-bqIY







Safety

Working with melted chocolate and hot tools can cause burns or spills if we're not careful. Following safety rules helps keep everyone safe so we can enjoy making our treats.

- **Handle hot items carefully:** Use oven mitts or ask an adult for help.
- **Work slowly and stay focused:** Pay attention to what you're doing.
- **Ask for help if needed:** If something feels unsafe, always ask an adult.
- **Keep your area tidy:** Clean up spills quickly and keep tools organised.

How to make delicious chocolate bark

Creating delicious chocolate treats involves careful steps, creativity, and safety. Here's how it's done:

1. Melting the chocolate

Melting chocolate is like a science experiment! We heat it gently and stir it carefully to make it smooth and shiny. If we overheat it, the chocolate can burn and become grainy.

2. Choosing ingredients

To make your chocolate stand out, consider exciting flavours and textures. For taste, you could add nuts, dried fruits, or spices.

3. Decorating and presenting

Chocolatiers use their creativity to make chocolate look amazing. You can drizzle melted chocolate in patterns or sprinkle toppings for extra texture and colour.

4. Sustainability choices

Good chocolatiers care about the planet too! Use Fairtrade chocolate to support farmers. Choose eco-friendly packaging that can be reused or recycled.

Watch the process here:

https://www.youtube.com/watch?v=SGHJSD-DPeE







The design process

Product designers and food scientists follow several steps to create a successful chocolate product:

Research: They start by researching flavours, ingredients, and customer preferences. They also consider how to make the product sustainable and eco-friendly.

Design: They plan how the chocolate will taste, smell, feel (texture), and look (appearance). They also design attractive packaging that uses recyclable or reusable materials to protect the environment.

Make: They create the product, carefully testing flavours, shaping the chocolate, and using techniques like tempering to make it smooth and shiny.

Evaluate: Finally, they test the product to see how well it works. They judge it on taste, smell, texture, and appearance and consider how it can be improved.

A good design is creative, delicious, and kind to the planet.