



WORKING
TOGETHER TO
INSPIRE AND
EMPOWER
PEOPLE



HEALTHY FOOD FOR A HEALTHY PLANET

A resource for primary
schools to explore food that is
healthy for people and healthy
for the planet

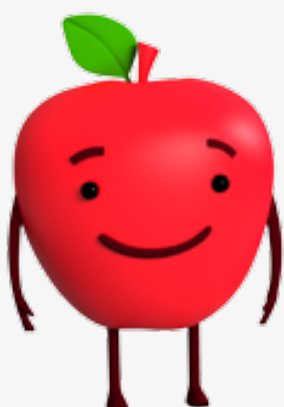
FOCUS ON CLIMATE CHANGE



OVERVIEW

Children are constantly bombarded with information about the negative impact of human activity on the Earth, and particularly how we're affecting the climate. The topic of food provides a unique opportunity to introduce the issue of climate change in an accessible and engaging way, exploring actions we can all take to make a positive difference.

Today 60% of the Earth's land surface is used in agriculture and food production.



What we choose to eat and the way we grow, produce and process our food have a huge impact not only on our health but also on the health of the planet. Today 60% of the Earth's land surface is used in agriculture and food production. Food production is also responsible for about 30% of the greenhouse gases contributing to climate change. These gases are released when we use energy from fossil fuels for farm machinery, food processing, transport, storage, cooking or waste disposal. And our meat and dairy heavy Western diets also contribute to greenhouse gases through the methane

released by livestock and uses more of the world's natural resources (eg land directly grazed or used to grow feed for livestock, and water).

But it doesn't end there. When we cut down forests to create farmland, the carbon stored in trees and in the soil around them is released into the atmosphere.

The aim of this resource is to encourage 7 to 11 year olds to find out more about where our food comes from and the impact of food production on the environment, with a particular focus on climate change.

It will also help them to form and articulate their own ideas and opinions through a set of fun, creative activities and to reflect on how their own food choices can have a positive impact on the environment.

This resource has been produced as part of WWF's Green Ambassadors 'Plant2Plate' campaign, which offers a host of resources and activities to develop pupils' knowledge and skills around the topic of food and to develop an interest in cooking and growing their own food.



Check out the 'Shaping our Future - The Climate Challenge' pack for more resources on climate change. Visit www.wwf.org.uk/shapingourfuture



The strawberry story: A fun game to explore the different steps in the production of strawberries, from plant to plate.



Food rap: Inspired by the WWF 'One planet Future' film, a creative writing and music activity focusing on food, climate change and the positive actions pupils can take at home and at school.



Earth friendly master chefs: A design and technology activity to create a food recipe that is good for people and good for the planet.



Label detectives: A creative activity for pupils to design their own label for their favourite Earth friendly food.



For the love of food: Linking to The Climate Coalition campaign 'For the Love of', an activity to find out more about the different foods that come from plants and the impact of climate change on growing food.

CURRICULUM LINKS

England KS2

Design and Technology Cooking and nutrition, design, make and evaluate; **Science** Plants, animals including humans, living things and their habitats; **Geography** Locational knowledge, human and physical geography; **English** Language, comprehension and composition; **Music** Compose for a range of purposes, play and perform

Northern Ireland KS2

Curriculum objectives Personal health, citizenship, education for sustainable development; **The World Around Us** Interdependence, place, change over time, movement and energy; **Personal and Mutual Understanding; Language and Literacy; The Arts Work** creatively with sound and perform with simple instruments

Scotland Curriculum for Excellence P4-P7

Sciences Planet Earth - Biodiversity and interdependence, energy sources and sustainability; **Social Studies** People, place and environment; **Health and Wellbeing** Food and health; **Technologies** Food; **Languages** Literacy and English; **Expressive Arts** Music

Wales KS2

Geography Locating places, environments and patterns, understanding places, environments and processes; **Design and Technology** Designing and making; **Science** Interdependence, the sustainable Earth; **Personal and Social Education** Active citizenship, health and emotional wellbeing, sustainable development and global citizenship; **English** Language and literacy; **Music** Composing and performing



THE STRAWBERRY STORY

OVERVIEW

Through a fun game with picture cards, pupils explore the different steps in the production of strawberries, from plant to plate. They also reflect on how different food choices can help reduce the impact of food production on the environment.

OBJECTIVES

- Develop understanding of how food is grown and produced
- Explore actions we can take through our food choices to reduce energy use and waste

WHAT YOU NEED

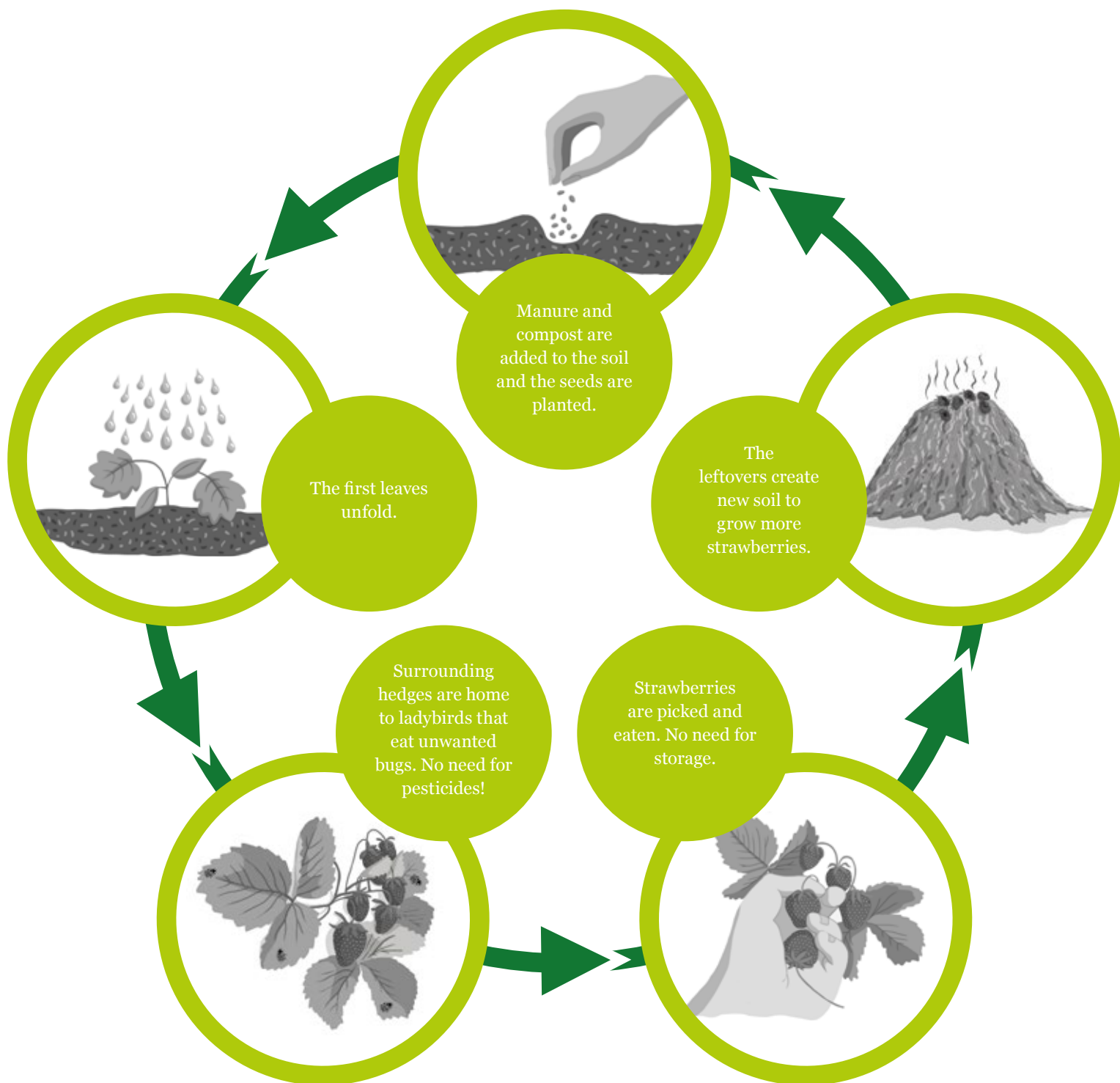
- One set of 'WWF food cards' per team
- One 'Energy' resource sheet per team
- Paper
- Scissors
- Coloured pens

GET GOING

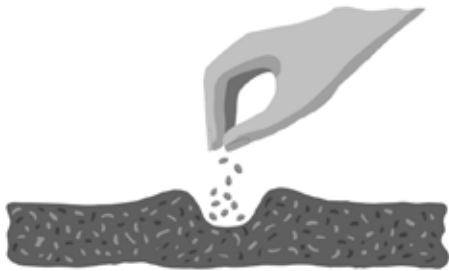
Discuss what pupils already know about where strawberries come from. In small groups, ask them to place the 'WWF food cards' showing the production of strawberries in the right order. Then give out the energy cards and ask them to highlight where they think energy is used in the process (e.g. preparing the soil, packaging, storing, transport, waste disposal). As a group, discuss what we can all do to help reduce energy use through the choices we make about food (e.g. eating food produced locally to reduce transport, eating food in season, eating less processed food, growing our own food, using reusable packaging). Each

team could then produce an alternative set of cards for strawberries grown locally in the summer and compare both processes. They could also grow their own strawberries or visit a local pick-your-own farm, followed by a strawberry feast. Look for ideas at alpro.com/uk/recipe-inspiration.

GROWING YOUR OWN STRAWBERRIES



RESOURCE SHEET: FOOD CARDS



The soil is prepared and the seeds are planted.



With plenty of sunshine and plenty of water, the first leaves unfold.



The plants are sprayed with chemicals to get rid of unwanted bugs and fungi.



The strawberries are harvested by hand.



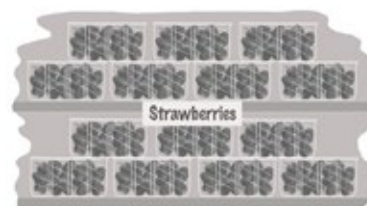
The strawberries are cleaned, sorted, packed and placed in cold storage.



The packed strawberries are taken to the airport to be flown from Spain to the UK.



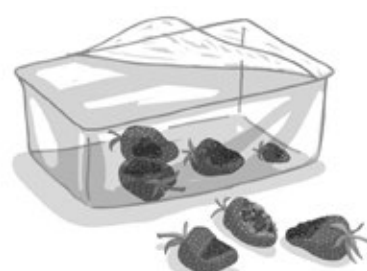
The strawberries are transported from the airport to the warehouse and from the warehouse to our local shops.



We buy strawberries from the shop and take them home.



We store our strawberries in the fridge until we are ready to eat them. Yum!

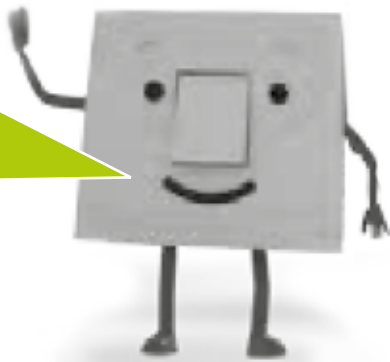


We throw away the leftovers and packaging.

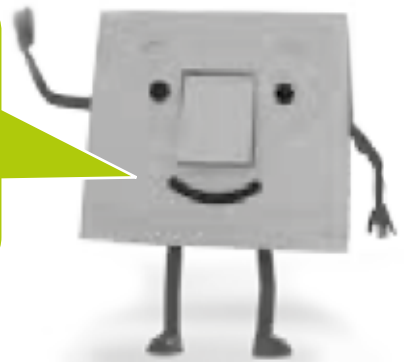
RESOURCE SHEET: ENERGY CARDS



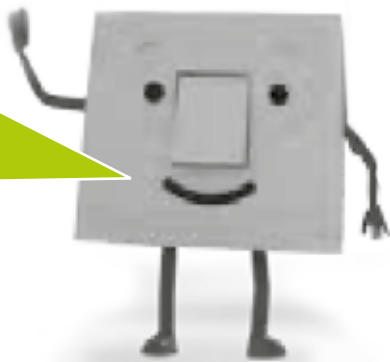
I'm Switch, the
energy expert.
I think energy has
been used here.



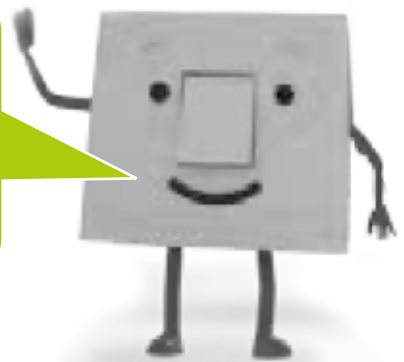
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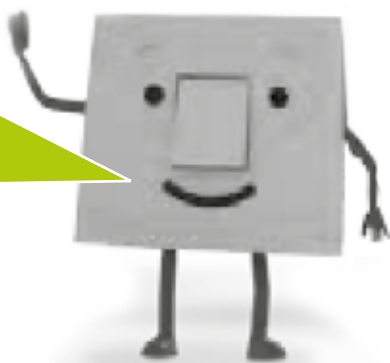
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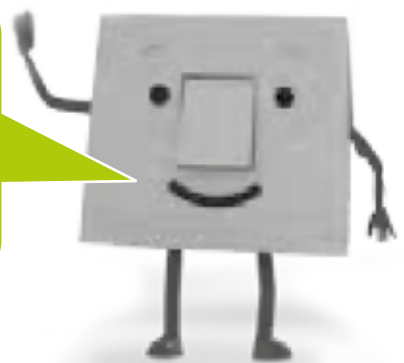
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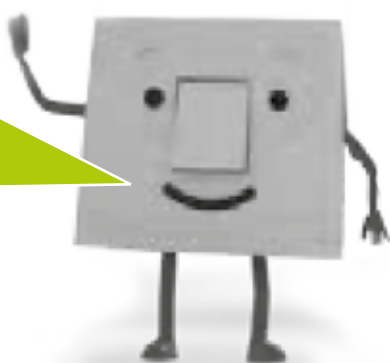
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FOOD RAP

OVERVIEW

In this creative writing and music activity, pupils produce a rap to express their own views and feelings about food, climate change and the positive actions they can take at home and at school.

OBJECTIVES

- Learn more about the link between food production and climate change
- Use language and music in a creative way to express ideas and feelings

WHAT YOU NEED

- 'One Planet Future' film [youtube.com/watch?v=ZmDymnWrMa4&t=25s](https://www.youtube.com/watch?v=ZmDymnWrMa4&t=25s)
- 'One Planet Future - key phrases' resource sheet
- 'Bet you didn't know' resource sheet
- Percussion instruments (drum, tambourine, triangle, cymbals, maracas) or plastic bottles and other recycled containers filled with rice, lentils etc to create their own instruments

'ONE PLANET FUTURE' CYCLING RAP

“

We cycle into school
cos we think it's very cool
and the driving is very bad
cos the consequence is sad
Get out of your car
cos it's not very far
And walk to your school

”

GET GOING

Introduce the activity with the WWF 'One Planet Future' film and discuss the impact of food production on the environment and the Earth's climate. What does climate change mean? What are greenhouse gases? What produces them? How does the way we grow and produce our food contribute to climate change? You could use the 'Bet you didn't know' resource sheet to aid discussion. Next, using phrases from the film, pupils work in groups and write their own rap about actions we can all take through our food choices to help the planet. The groups can perform their raps in front of the class or in assembly to raise awareness, using percussions instruments as well as stills from the film or other images to complement the music.

RESOURCE SHEET: BET YOU DIDN'T KNOW

FOOD AND CLIMATE CHANGE

Scientists agree that climate change is caused by greenhouse gases such as carbon dioxide and methane released into the atmosphere by human activity. They are known as greenhouse gases because they trap heat like a greenhouse and warm up the planet. Food production is responsible for 30% of greenhouse gases contributing to climate change. These are produced not only by

the way we transport food all around the world, but also by the way we grow, produce, process, store and dispose of waste. Cutting down forests to create farmland also adds to the problem, releasing carbon from trees and ground into the atmosphere. Livestock farming for meat and dairy products is the largest contributor, as cows produce methane gases in their digestion process. Also, dairy cows, pigs and sheep are given feed grown in places like the Cerrado (tropical savanna in Brazil) and Amazon rainforest.



Every year in the UK we throw away a third of all the food we buy. Most of it is buried in landfill, releasing methane, or burned, releasing carbon dioxide. Only a small amount is composted and used as a valuable resource to enrich the soil.

Source: data from vision2020.info



RESOURCE SHEET: ONE PLANET FUTURE

KEY PHRASES



CHOICES WE CAN MAKE ABOUT THE FOOD WE EAT

- ✓ Eat seasonal food produced locally
- ✓ Grow our own food
- ✓ Eat less processed food
- ✓ Reduce food waste
- ✓ Feed vegetable and fruit waste to livestock
- ✓ Compost our food waste



EARTH FRIENDLY MASTER CHEFS

OVERVIEW

In this activity, pupils create a food recipe that is healthy for people and healthy for the planet, using the six WWF Livewell principles. They investigate where the ingredients for their recipe come from and consider the impact of food production on the environment.

OBJECTIVES

- Develop understanding of where and how a variety of ingredients are grown/reared and processed
- Develop understanding of the impact of food production on the environment
- Encourage pupils to explore how they can make informed choices about food that is good for them and good for the planet

WHAT YOU NEED

- Labels for burger ingredients (meat, bun, sesame seeds, cheese, lettuce, tomatoes, pickles, black pepper)
- 'WWF Livewell principles' resource sheet
- The Eatwell plate and Eatwell food cards
foodafactoflife.org.uk
- WWF/Sodexo 'Green and lean meals' animation film – first part of the film up to 1.28min
youtube.com/watch?v=2HAoqmp8vGo&feature=youtu.be
- Paper, pens and scissors to create additional food cards

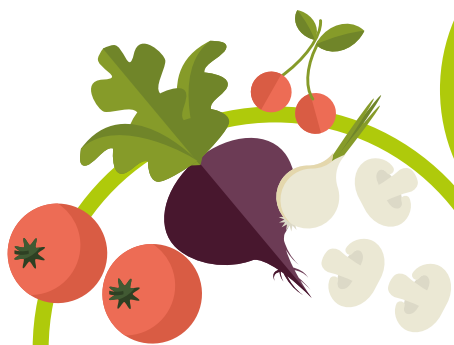
GET GOING

Ask pupils to investigate food labels for the different ingredients of a burger and to research how these are grown, produced, transported and distributed. They can locate the food sources on a large world map and add pictures to illustrate the production process. Then discuss as a group the impact of producing food like a burger on the environment (e.g. energy use for transport, production and use of fertilisers, food processing; land and water use). The animation film can be used to inform the discussion. Using the WWF Livewell principles, their knowledge of a healthy diet from the Eatwell plate and the Eatwell food cards, pupils work in small groups to create a healthier burger that is also healthier for the planet. They consider the impact sourcing their meal can have on energy use and climate change. Each team prepares a pitch for their earth friendly recipe and the class can vote for the best one. Conclude by discussing the reasons for this choice. Perhaps the winning recipe could become part of the school menu!

AMAZING FACT
Producing 1kg of beef creates 50 times more greenhouse gases than producing 1kg of vegetables.

AMAZING FACT
To produce 1kg of beef we need 15 times as much land as to produce 1kg of cereals.

RESOURCE SHEET: WWF'S LIVEWELL PRINCIPLES



EAT MORE PLANTS

Enjoy vegetables, fruits and whole grains.

EAT A VARIETY OF FOODS

Have a colourful plate!



WASTE LESS FOOD

One third of our food is lost or wasted.



BUY FOOD THAT MEETS A CREDIBLE CERTIFIED STANDARD

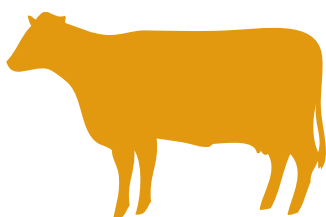
Consider MSC, free-range and fair trade.

EAT FEWER FOODS HIGH IN FAT, SALT AND SUGAR

Keep sweet and salty foods for occasional treats.

MODERATE YOUR MEAT CONSUMPTION

Try other sources of proteins such as peas, beans and nuts.



MSC stands for 'Marine Stewardship Council'. This logo means that the fish you buy was caught in a way that maintains fish stocks and protects the marine environment.



Free range means that the meat and eggs you eat come from animals that have been raised outdoors, at least some of the time.



Fair trade means that workers have received a fair amount of money for their products and worked in safe conditions.



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LABEL DETECTIVES

OVERVIEW

In this activity, pupils design their own label for a planet friendly food of their choice. They find out what labels tell us about the food we eat and consider what else could be included to help us make informed choices about food that is good for the planet.

OBJECTIVES

- Develop understanding of where food comes from and how it is produced
- Consider information that could help us to make informed choices about the food we eat

WHAT YOU NEED

- Examples of food labels (some including organic, free range, MSC and fair trade logos)
- Resource sheet 'Design your own Earth friendly label'
- Coloured pens


GET GOING

Looking at examples of food labels, pupils investigate what these tell us about the food we eat and learn more about food certification (e.g. organic, free range, MSC, fair trade). They then design a cool label for a food of their choice which tells us why it is healthy for people and healthy for the planet.

WHAT'S IN A LABEL?

Labels provide information about the food and drinks we buy. As well as information such as country of origin, weight, cooking instructions, use by date or recycling packaging, many food products also have logos on their labels. These give additional information on how the food was produced. Labels such as 'organic', 'MSC', 'free range' or 'fair trade' are awarded by different organisations (e.g. Soil Association or Marine Stewardship Council) to producers who can show that their food has been grown or produced with minimal negative impact on the environment.

RESOURCE SHEET: DESIGN YOUR EARTH FRIENDLY LABEL



Where do you think energy was used in the process?

Where is the name of your product?

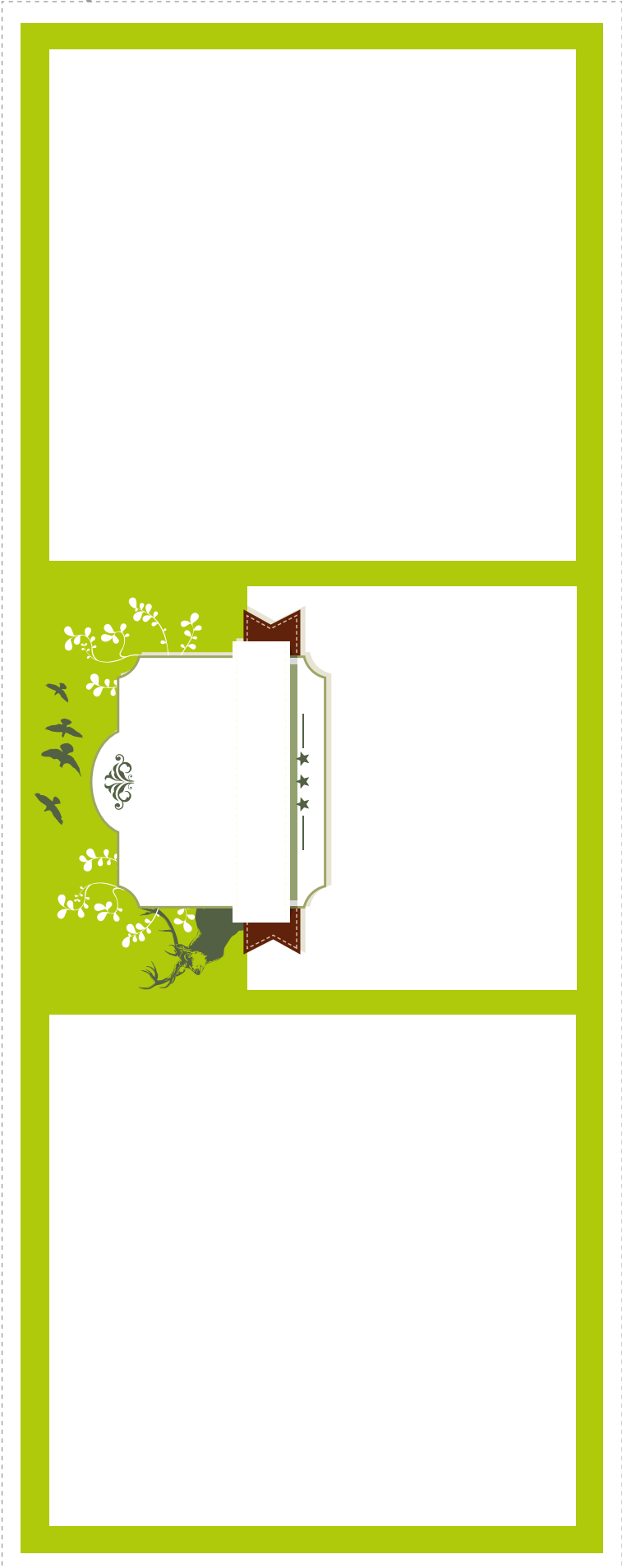
How was it grown/produced?

Where does this food come from?

Does it need to be packaged? Why?

What type of produce is it?

Can the packaging be composted or recycled?





© Tishan Feawings - MWFLUK

FOR THE LOVE OF FOOD



OVERVIEW

Inspired by the Climate Coalition campaign 'For the love of', this activity enables pupils to learn more about the different parts of plants that end up on our plates and to explore the impact climate change can have on growing food.

OBJECTIVES

- Learn more about food that comes from plants
- Develop a sense that we can all make a difference in the world
- Raise awareness of the impact of climate change on the planet

WHAT YOU NEED

- A selection of food from different parts of plants (e.g. broccoli, asparagus, carrots, lettuce, apple, rice, almonds, kidney beans, cinnamon, maple syrup)
- Film 'For the love of' and information on the Climate Coalition Campaign at fortheloveof.org.uk
- 'Heart outline' resource sheet

GET GOING

Bring a large basket of food and invite pupils to identify what parts of plants these are - flower, stem, root, leaves, fruit, seed, bark (cinnamon), tree sap (maple syrup). Discuss what plants need to grow (air, water, sunshine and nutrients from soil). Using the cocoa bean as an example, widen the discussion to the impact of climate change on growing food crops (more extreme weather events, increased droughts and floods, rising sea levels). The film 'For the love of' can inspire pupils to think about the small changes they could make to the food they eat to help protect the environment. They could also take up The Climate Coalition's idea and make heart shapes featuring the food they love and the one action they will take to help reduce the impact on the environment through their own food choices. The hearts can be displayed in the school to raise awareness or hung on a giant paper food plant.

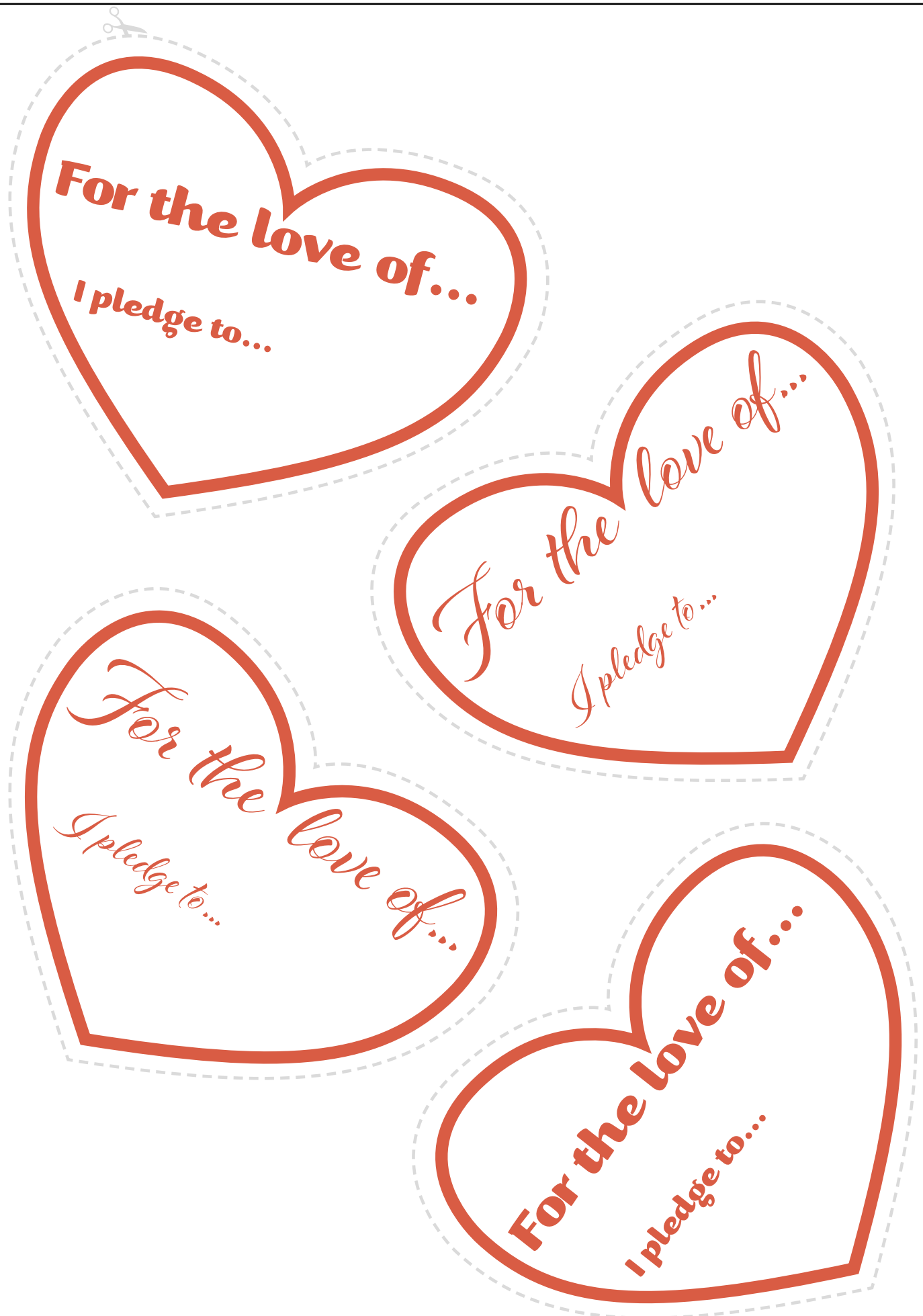


COCOA BEANS AND CLIMATE CHANGE?

Chocolate is made from the seeds of the cocoa tree, which grows in warm, humid, tropical countries. More than half of the world's cocoa is grown on small farms in Ghana and Ivory Coast in Africa. The rising temperatures and more prolonged drought will make it too hot and dry for farmers in these regions to continue to grow cocoa trees. For many, cocoa is their main source of income.

Source: Rainforest Alliance

RESOURCE SHEET: FOR THE LOVE OF... FOOD



WHAT DOES WWF DO?

In December 2015 a new global climate agreement was reached and signed by 195 countries around the world, acting together to keep global temperature rise well below 2°C above pre-industrial levels. Governments have promised to help tackle global warming by limiting greenhouse gas emissions. WWF works actively with governments, businesses and policy makers across the world to make sure that tackling climate change remains a priority and to push for stronger action to reduce use of fossil fuels, move to renewable energy and protect forests.



For a future where people and nature thrive | [wwf.org.uk](https://www.wwf.org.uk)

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