

Fast Food Chains

Unit Overview

Age 6–7

Objectives

- To know what animals (including humans) eat
- To understand where this food comes from
- To know what a food chain is
- To recognise the similarities and differences between food chains
- To describe what happens when an element of a food chain is removed
- To name some of the most important world foods

The Big Questions

- What do we eat?
- What are food chains and why are they important to understand?
- What will happen to our food, and the food chains we are part of, if the climate changes?



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Unit Summary

Learners will explore the foods that different animals and humans eat and how they obtain this food. They will then focus on what might happen to diets and health, if one crop is taken out of the human food chain.

This unit provides learners with the opportunity to investigate food chains, by exploring the human food chain that they sit in.

Background Information

The move towards monoculture in the production of our staple crops is a big concern for many. If one crop fails, it has the potential to have an enormous impact on human populations across the world, the impact of which could be similar to the potato famine in Ireland in the 1800s.

Curriculum Links

England Year 2

Living things and their habitats

Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.



Working scientifically

Asking simple questions and recognising that they can be answered in different ways

Observing closely, using simple equipment

Performing simple tests

Identifying and classifying

Using their observations and ideas to suggest answers to questions

Gathering and recording data to help in answering questions

Wales

Myself and other living things

Observe differences between animals and plants, different animals, and different plants in order to group them.

Identify the effects the different seasons have on some animals and plants.

Places and people

Investigate how places change, e.g. the weather, the seasons, buildings, people's jobs.

Begin to recognise differences between their own locality, localities in other parts of Wales and in different parts of the world.

Northern Ireland KS1 WAU:

Pupils should be enabled to explore:

Strand 1: Interdependence

How living things rely on each other within the natural world.

The effects of people on the natural and built environment over time.

Strand 3: Place

Features of the immediate world and comparisons between places.

Strand 4: Change over time

Ways in which change occurs in the natural environment.

Scotland: Curriculum for Excellence

First: Biodiversity and interdependence: I can explore examples of food chains and show an appreciation of how animals and plants depend on each other for food.

I can help to design experiments to find out what plants need in order to grow and develop. I can observe and record my findings and from what I have learned I can grow healthy plants in school.

Cross-curricular opportunities

Geography: Looking at maps to find out where different people in different food chains live and how the weather and seasons are different from ours.

English: Children could write a short report about how the food chains they are part of are different from those of children in other parts of the world.



For extra drama opportunities, consider preparing and performing the Theatre of Debate Play-in-a-Day, Basmati Basmati and Beloved Burger.



Making Food Chains

Lesson Notes 1

What's It All About?

In this introductory lesson, learners will explore the foods that different animals, including humans, eat.

Learning Outcomes

- I know what different animals (including humans) eat.
- I know that I am part of a food chain.

Working Scientifically

- Asking simple questions and recognising that they can be answered in different ways
- Identifying and classifying

Big Question

- Do animals eat the same food as humans?

Key Words:

herbivore, carnivore, omnivore



Equipment



From The Crunch Kit:

Resource Sheet 1: Food Chain Cards (Teaching Notes, p39)

Other Things You Will Need:

Pencils
Crayons
Sorting hoops

Preparation

Photocopy and cut out the flashcards from Resource Sheet 1.
Consider laminating the cards for future use (optional).



Appetiser

Ask the children, who has eaten carrot recently.

Crops that we farm and eat use light from the Sun to make their own food which helps them grow. Introduce the idea of the Sun starting a food chain and explain that, as a class, the children are going to construct a food chain.

Draw an arrow from the sun to a carrot, and then from the carrot to a person, and label it:

The Sun > the carrot > you

Explain that this is called a food chain. Could they make the chain longer, perhaps by introducing an animal? For example:

The Sun > the carrot > the chicken > you

The sun helps the carrot to grow. The chicken eats the carrot and then we can eat the chicken.

Main Course

Give the children copies of the cards from Resource Sheet 1, ask them to make simple food chains of three and four elements, for example Sun > grass > cow > human.

Then ask the children to make some more of their own simple food chains by drawing pictures and linking them with arrows. They could use their favourite animals or pets for this.

For the more able children introduce the terms omnivore/carnivore/herbivore. Place two hoops, overlapping as a Venn diagram, on the floor and ask the children to label them, carnivore on the left, herbivore on the right and omnivore in the middle where the hoops overlap. They can classify the animals and themselves in each of these groups.

Dessert

The children share their own food chains with the rest of the class.

Ask: has anyone managed to make a long food chain?

Ask the class to come up with their own definition of what a food chain is. Encourage answers that summarise that a food chain shows how living things find their food by eating plants and other animals.



Food Chains Around the World

Lesson Notes 2

What's It All About?

Children will now focus on what human beings across the world eat, what food different people have access to and what food chains for these people would look like.

Learning Outcomes

- I know what a food chain is.
- I recognise similarities and differences between food chains.

Working Scientifically

- Asking simple questions and recognising that they can be answered in different ways
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions
- Gathering and recording data to help in answering questions

Big Question

- What are food chains and why are they important?

Key Words:

food chain, diet, the Sun



Equipment



From The Crunch Kit:

Mega Map

Resource Sheet 2: Food Chain Map (Teaching Notes, p40)

Resource Sheet 3: Building Food Chains (Teaching Notes, p41)



From The Crunch Website:

Fast Food Chains PowerPoint (Lesson 2)

Appetiser

Show Resource Sheet 2 with a map of the world showing children from six different countries and some of their favourite foods. Make links to the Mega Map, comparing to other foods from other countries. Show the postcards on the Fast Food Chains PowerPoint (Lesson 2). Explain that these are postcards that have been sent by the children from around the world, describing what they like to eat.



Compare their diets to those of the children in your class and look at similarities and differences.

Main Course

Look at the postcards together. Ask: do you notice any animals that eat the same food as humans? For example the sheep and Amaira both eat spinach. Ask the children how we could show this using food chains. Remind them that all food chains start with the Sun.

the Sun > spinach > sheep

the Sun > spinach > Amaira

the Sun > spinach > sheep > Amaira

Can the children identify other food chains like these using the information from the postcards? Ask them to fill in the boxes on Resource Sheet 3 to construct their food chains. Remind them that they do not need to fill in every box but challenge them to think of the longest possible food chains if they can.

Dessert

Discuss what the children have found out that they didn't know before about what people and animals eat in different countries, where their food comes from and how plants, animals and humans fit together in food chains.

An Extra Helping

Consider preparing and performing the Theatre of Debate Play-in-a-Day, Basmati Basmati. Explore the importance of bio-diversity. Where does our food come from and why is it important to eat lots of different things?





The Missing Link

Lesson Notes 3

What's It All About?

Building on previous knowledge of food chains and the food chains they have built themselves, the children will investigate food chains on which we are most dependent for our human health and wellbeing. They will begin to build simple food chains. They will explore what can happen if an element of a food chain is removed.

Learning Outcomes

- I can think about what happens when an element of a food chain is removed or reduced.

Working Scientifically

- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Performing simple tests
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions

Big Question

- What happens to a food chain if part of it breaks down?

Key Words:

nutrient, sunlight



Equipment



From The Crunch Kit:

Tomato seeds

Preparation

The seeds in The Crunch Kit have not been treated with any fungicide. However, if you choose to use bought tomato seeds, please make sure that they have not been treated with fungicide before using them with children.



Appetiser

Recap what the children have learned about food chains. What do they find most interesting? Now ask them to think about what would happen if we removed one thing from the food chain. Would the other parts of the chain have enough to eat? Would they stay healthy? Could anything else be used to fill the gap in the chain?

Explain that fish, like the salmon that we eat, are reared by farmers on fish farms. Fish need to eat special nutrients called omega-3 oils, which make them really good for us to eat. Omega-3 oils are a great fat for our brains, and help them to develop well and stay healthy. Fish normally have omega-3 oils in their diet from eating plankton, but recently there hasn't been as much plankton in the sea, so they contain less omega-3 oils.

To try and fix this problem, scientists at a research station called Rothamsted, in the south of England, are investigating how to grow special crops that contain omega-3 oils. The scientists will feed this to the fish, in the fish farms where there isn't enough plankton. So scientists have found a way to fill the gap in the fish food chain where the plankton was missing.

Main Course

Show the children a simple food chain, or use one that they constructed in Lesson 2, for example:

the Sun > spinach > sheep

Remove one element from the chain, for example the spinach. Ask: what will happen to the rest of the chain? Will the sheep have enough to eat to stay healthy? Could the sheep eat something else instead of spinach? More able children can look at longer, more complex food chains and consider the implications of removing one or more elements.

To demonstrate how the removal of an element from a food chain can affect it, conduct a simple investigation. Together, plant the tomato seeds from the box and wait until they have germinated and grown several leaves. Alternatively use any small potted plant which already has some leaves. Put some plants in the sunshine and some in the dark. Water the plants and observe what happens to them over time. Which grow better, the plants in the sunshine or the plants in the dark? Ask the learners what happens if you remove sunlight from a food chain, what might happen to the rest of the chain?

Dessert

Ask the learners what they have learned about the food we eat, and the food chains we are all part of around the world. Consider how we are reliant on a lot more than we might first think, and that we need to think about what might happen if we don't look after a particular thing in our environment.

An Extra Helping

Consider preparing and performing the Theatre of Debate Play-in-a-Day, Beloved Burger. Lots of people want to eat more meat but it isn't good for us, the rainforests or the planet. What are the alternatives?



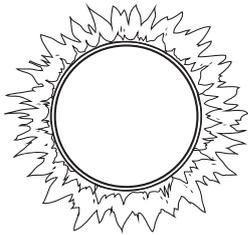
Resource Sheet 1

Name

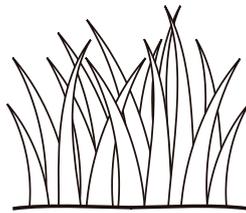
Date

Fast Food Chains – Lesson 1

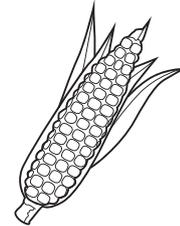
Food Chain Cards



the Sun



grass



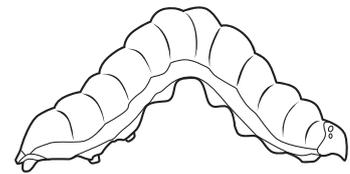
corn



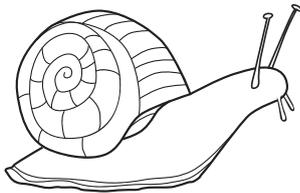
carrot



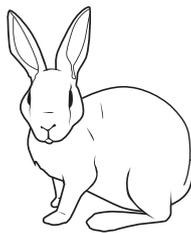
hazelnut



caterpillar



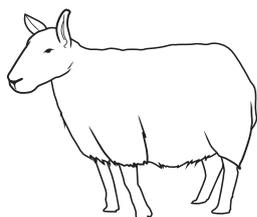
snail



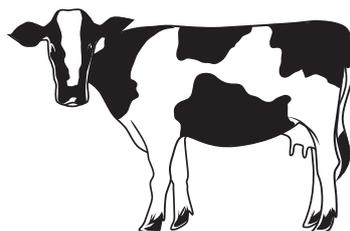
rabbit



squirrel



sheep



cow



human



Resource Sheet 2

Name

Date

Fast Food Chains – Lesson 2

Food Chain Map

Samuel, Alaska

- blueberries
- sourdough bread
- salmon
- beetroot

Valentina, Peru

- beef
- peppers
- avocado
- potatoes

Amaira, India

- lamb
- rice
- yoghurt
- spinach

Bakary, Mali

- mung beans
- cassava
- mango
- goat

Zhen, China

- egg noodles
- cabbage
- lychees
- snake

Ethan, Australia

- chicken
- abalone
- brown bread
- lettuce



Resource Sheet 3

Name

Date

Fast Food Chains – Lesson 2

Building Food Chains

