



## Teachers' guide

### Where does food come from?

Agriculture and fisheries  
Biotechnology

### Phase 2

(age 8-11 years)





## Contents

This Teachers' guide provides teaching notes and suggests resources to help children learn about:

- **Agriculture and fisheries**  
(production, processing, safety, sustainability, animal welfare)
- **Biotechnology**  
(traditional, modern and future)



## Frameworks and lesson notes

There are two frameworks in this document, one for Agriculture and fisheries and one for Biotechnology.

Each framework outlines what children will learn and the teaching resources available. Lesson notes are also provided.



## Agriculture and fisheries



Question	Learning	Resources
Where does food come from?	Know the basic steps in food production from farm to fork	Food images cards Farm to fork worksheet
Where is food produced?	Know that food is farmed, caught or grown in Europe and all around the world  Know that the food produced is dependent on climate, resources and other factors	European produce cards European produce cards labels Food fact sheet
How is our food kept safe?	Be aware that there are systems in place for the safe production and processing of food throughout Europe  Know that it is important to store, prepare and cook food safely and hygienically	How is food kept safe PowerPoint Safe food worksheet



## Where does food come from?

Learning	Teaching notes
<p>Know the basic steps in food production from farm to fork</p>	<p>Show children the four <b>Food images cards</b>.</p> <p>Discuss each food:</p> <ol style="list-style-type: none"> <li>1. What is this food made from?</li> <li>2. Where do the ingredients come from?</li> <li>3. How are the ingredients prepared to create the food?</li> </ol> <p>For example: Pasta</p> <ol style="list-style-type: none"> <li>1. Flour and egg</li> <li>2. Flour from wheat and egg from a chicken</li> <li>3. Flour and egg are combined and the mixture is rolled, shaped and cooked.</li> </ol> <p>Give the children the <b>Farm to fork worksheet</b> and ask them to further investigate and record the ingredients and processes involved in creating one of the foods from the <b>Food images</b>.</p>

## Where is food produced?

Learning	Teaching notes
<p>Know that food is farmed, caught or grown in Europe and all around the world</p> <p>Know that the food produced is dependent on climate, resources and other factors</p>	<p>Explain that all our food has to be produced for us. Plants have to be grown and animals (including fish) have to be reared or caught.</p> <p>Show the children the <b>European produce cards</b> and ask the children if they were originally grown, reared or caught. Ask the children to suggest which countries these foods come from and ask them to explain their answers.</p> <p><b>(European produce cards labels</b> showing where the foods are produced are available should they be needed.)</p> <p>Organised the children into pairs and allocate one or two of the <b>European food cards</b> to each pair. Challenge them to research their food:</p> <ul style="list-style-type: none"> <li>• Where is the food grown, reared or caught?</li> <li>• Why is it grown, reared or caught in this place?</li> </ul> <p>Provide children with the <b>Food fact sheet</b> to help them organise their research. Ask the children to present their findings to the class.</p> <p>Discuss the factors that affect where a food is grown or produced, e.g. climate.</p> <p><u>Extension/homework:</u> Challenge the children to find out about foods which are produced in their local area.</p>



## How is our food kept safe?

Learning	Teaching notes
<p>Be aware that there are systems in place for the safe production and processing of food throughout Europe</p> <p>Know that it is important to store, prepare and cook food safely and hygienically</p>	<p>Show the <b>How is food kept safe PowerPoint</b> and discuss how food is kept safe at different stages during its journey from farm to fork:</p> <ul style="list-style-type: none"> <li>• Farming</li> <li>• Transportation</li> <li>• Shops and supermarkets</li> <li>• At home</li> <li>• When being prepared/eaten or drunk</li> </ul> <p>Give children the <b>Safe food worksheet</b> to complete. They will need to think of a food and find out how it is kept safe from farm to fork through the different stages. You could suggest children choose from one of the following:</p> <ul style="list-style-type: none"> <li>• milk</li> <li>• eggs</li> <li>• lettuce</li> <li>• strawberries</li> </ul> <p><u>Extension/homework:</u></p> <p>Ask children to look at the labels on some of the food they have at home.</p> <p>Can they find evidence (labels) of how the food has been/ is kept safe, e.g. quality assurance, animal welfare, traceability, production codes (dates, times of production), date marks, storage instructions?</p>



## Biotechnology



Question	Learning	Resources
<p>What is biotechnology?</p>	<p>Know about traditional uses of biotechnology e.g. making yogurt, bread and cheese</p> <p>Be aware, and have practical experience of, different characteristics of a range of ingredients</p>	<p>Biotechnology PowerPoint</p> <p>Yeast activity guide</p> <p>Bread recipe</p> <p>Making yogurt worksheet</p>
<p>How can biotechnology be used now and in the future?</p>	<p>Be introduced to the use of some modern and future applications of biotechnology</p>	<p>Biotechnology worksheet</p>



## What is biotechnology?

Learning	Teaching notes
<p>Know about traditional uses of biotechnology e.g. making yogurt, bread and cheese</p> <p>Be aware, and have practical experience of, different characteristics of a range of ingredients</p>	<p>Show children the <b>Biotechnology PowerPoint</b> to introduce the concept of biotechnology (using living things to create something useful).</p> <p>Show children the yeast experiment, guidance can be found on the <b>Yeast activity guide</b>. This activity demonstrates how yeast produces gas (which makes bread rise).</p> <p>Children can undertake activity (a) or (b) or both to reinforce their understanding of the practical application of biotechnology:</p> <ul style="list-style-type: none"> <li>(a) Allow children to make their own bread by following the <b>Bread recipe</b>.</li> <li>(b) Challenge the children to find out how yogurt is made and illustrate the stages on the <b>Making yogurt worksheet</b>.</li> </ul> <p>Discuss the role of biotechnology in the production of the yogurt.</p>

## How can biotechnology be used now and in the future?

Learning	Teaching notes
<p>Be introduced to the use of some modern and future applications of biotechnology</p>	<p>Recap with the children some of the ways biotechnology is used, i.e. to make bread, cheese and yogurt.</p> <p>Ask them if they know of other ways biotechnology is used.</p> <p>Ask the children to undertake some research to find out other ways biotechnology is used to produce food and ways it might be used in the future.</p> <p>They can use the <b>Biotechnology worksheet</b> to collate their research.</p>