

Triple Crossed Project

Food Miles Past: Food Miles Present

Teachers Notes

Resources

Food miles: Food miles present – stimulus page Roman Food Miles map

Roman Food Miles table Modern Food Miles map

Modern Food Miles table / question sheet Food Diaries examples x 2 A4 sheets My Food Diary – recording sheet

Curriculum Links

New KS3 Science National Curriculum

Key concepts:

1.4 – Collaboration

a - Sharing developments and common understanding across disciplines and boundaries.

Key processes:

2.2 – Critical understanding of evidence

a – Obtain, record and analyse data from a wide range of primary and secondary sources, including ICT sources, and use their findings to provide evidence for scientific explanations.

2.3 – Communication

a – Use appropriate methods, including ICT, to communicate scientific information and contribute to presentations and discussions about scientific issues.

Range and content:

3.3 – Organisms, behaviour and health

c – Conception, growth, development, behaviour and health can be affected by diet, drugs and disease.

3.4 – The environment, Earth and universe

c – Human activity and natural processes can lead to changes in the environment

Curriculum opportunities

k – make links between science and other subjects and areas of the curriculum

Objectives

Personal Capability:

Team work: to co-operate and reach agreement with others.

Science, History and Citizenship

- To consolidate and then apply knowledge of nutrient groups and balanced diet in a range of present-day and historical contexts.
- To develop an awareness of the idea of food miles and the related environmental impact issues.

Success criteria

To be successful the pupils will:

- Know the major food groups and their sources and understand their importance in a balanced diet.
- Understand that balanced diets vary between groups of people depending on their lifestyles.
- Appreciate that many foods are moved huge distances around the world and that 'food miles' may have an environmental impact.

Introducing the Overall Task

Introduce and discuss the learning objectives for the task. Emphasise that the task will involve working as a team, using modern knowledge of food groups and balanced diet to help understand the Roman diet.

Session 1

If appropriate, review food diaries produced for homework or in lesson, discuss possible improvements to current diets. Example *Food Diaries* sheets provided could be used for discussion, identifying which food group is 'low' within the diet.

Discuss the idea of a balanced diet. Emphasise the idea that the 'balance' may be different for different people depending on their lifestyle.

Session 2

Use the *Food miles past: Food miles present* stimulus sheet to raise the idea that food has always been transported, sometimes over long distances even in Roman times.

Pupils should use the *Roman Food Miles* map to help them complete the *Roman Food Miles* table. They then move on to use the *Modern Food Miles* map to complete the *Modern Food Miles* table and answer the questions on the sheet.

Discuss with the class issues related to food miles such as the idea that the type of transport used has a bearing on environmental impact, e.g. transport by ship requires less energy per 'food mile' than transport by aeroplane, and also the way the food is packaged and stored, e.g. refrigerated fresh food uses more energy than dried or tinned products.

Reviewing the Task

Discuss the possible environmental impact of moving food huge distances around the world.

Involve the pupils in reviewing the task using the assessment for learning Smart Grid.