

roots&Shoots Iceworld Activity Where Does Your Food Come From?

This activity looks at the food we eat and where it comes from, providing a basis for looking at how much energy goes into getting our food from A to B, and exploring how this might be reduced.

This activity is in two parts, one for pupils to complete at home individually and one to complete as a class or in small teams at school.

Context

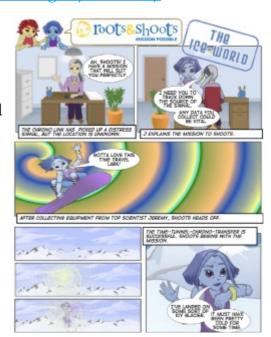
This activity was provided by Jane Goodall's Roots & Shoots UK (www.rootsnshoots.org.uk) a not for profit charity run by the Jane Goodall Institute (UK).

Each Roots & Shoots activity can either stand alone or be used as part of a themed mission. Each mission is centred around a possible future that could happen if we fail to take care of people, animals and the environment today and comes with a mission briefing comic and teacher notes – find out more at http://www.rootsnshoots.org.uk/resources/.

In the <u>Iceworld Mission</u>, Chrono-bot 5HooT5 travels to a future where the gulf stream has shifted due to climate change, leaving Scotland frozen. The smallest improvement in the rate of climate change today could help, so the more energy we can individually save the better.

Jane Goodall's Roots & Shoots Awards

By completing this activity sheet you may be eligible for an award! See the end of this document for details.





How long will it take?

The first section of the activity, a food diary, can be done by pupils at home. This could be done for one day only but it is recommended that pupils carry out the task for **a week** so that a more interesting range of information can be gathered for use in part two.

Part two needs to be done as a class or in small groups so is dependent on time available in the classroom, however the activity should ideally not take more than a week to complete.

What do I need to make it work?

Each pupil will need to draw up a diary to record the relevant information needed. An example of this is provided below. This can be done in either a pupil's own exercise book or on diary sheets based upon the example.

The collective information will need to go into a wall-chart for the classroom wall. Discuss with your class what sort of chart might be best, but the manner in which this is displayed should include the information laid out in the example below.

Under the section for calculating 'food-miles', a useful web resource would be (copy and paste the short link into your browser): goo.gl/6ScC3n

You will also need wall-maps of the UK and the world, coloured thread and pins/blu-tack for creating a visual flow-chart of the distances our food travels. Depending on what proportion of food investigated originates from within or outside the UK, just one map of either Britain or one of the world might be more relevant, but you will probably want to make use of both to illustrate the proportion of our food that is produced domestically and overseas.

What things will my students create?

- **Food Diaries** to print/write out and take home.
- A Food-Tracker Wallchart for the classroom, showing the combined types of food eaten by the whole class and where these come from.
- A **Food-Tracker Map** for the classroom, showing the distances that the food eaten has travelled.



Exercise 1 – Individual Activity

Introduce a discussion with your pupils about the food they eat, and what processes applied to that food will use energy, such as packaging, transportation, etc...

Step 1 – Make a food diary

Either by printing out copies of the accompanying example diary, or drawing up a copy in their exercise books (you might want to design your own together as a class), each pupil will keep a diary of the food they eat over a set period of time (a week is recommended).

Step 2 - Investigate your food's origins

In the appropriate columns on their diaries, ask the pupils to make a list of the following:

- What are the main raw ingredients of their food?
- Where would they originally have been grown or farmed?

Many different types of food will come from common sources such as dairy or wheat products, that are farmed in many different parts of the country as well as all around the world, so remind pupils to look at the packaging their food comes in to provide clues to their origins.

NB: For older students you may want to include what kind of wrapping or packaging might have come with their food.



Exercise 2 – Class Activity

Now that the pupils have completed their own diaries, get them to collate the information into a wallchart for the classroom. An example is provided but you may wish to design your own.

Step 1 – Make a wallchart of the information collected in your class's diaries

Discuss and design with your class a large format wallchart for the classroom to collect the information they have collected in their diaries. However you choose to do this, make sure your class's chart includes space for the following information, some of which will be filled in later:

- 1. What raw ingredients have been consumed over the course of the diaries?
- 2. Where did these ingredients come from?
- 3. How many miles did they have to travel?
- 4. How many fewer miles could they travel?

NB: For older students who also collected information on packaging materials, they can include space for this information in their wallchart.

Step 2 - Calculate your "food-miles" and make a Food-Tracker map

Using the information in your class's diaries, get them to fill in the wallchart.

Now either in groups or as a class, calculate the number of miles 'travelled' by each ingredient and fill this information in on the wallchart too.

Get the pupils to consider the proportion of ingredients that come from abroad, and to consider whether there are domestic alternatives that could give a smaller mileage 'cost' to our food.

For the ingredients that can come from both domestic and overseas sources, assign a colour of thread to each. Then get the pupils to plot with the thread and blu-tack the straight line paths from origin to end on the maps



Now get them to calculate the savings on their 'food-miles' if they were to eat food made from more domestic ingredients, and complete the remaining parts of the wallchart.

Discuss the impact of seasonal produce, whose 'food-miles' vary across the year, with your students.

Suggested further work – get the students to design a seasonal menu that maintains low food-mileage, and survey how popular this might be with other classes, friends and family, etc...

Why not enter the Jane Goodall's Roots & Shoots Awards?

This resource was provided by Roots & Shoots UK, a not for profit charity run by the Jane Goodall Institute (UK). One of the aims of Roots & Shoots is to inspire young people to care for people, animals and the environment, and one of the ways that we like to do this is by running annual awards every December.

Every school that uploads a story about their activities to the Roots & Shoots website at www.rootsnshoots.org.uk automatically wins a bronze award certificate to display at school, and the best stories win the chance for you and your children to meet Dr Jane Goodall herself along with a host of other prizes.

See http://www.rootsnshoots.org.uk/awards/ for details about the awards and information on how to upload your 'mission update' story and win!

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My Food Diary

Day	No.	

ITEM OF FOOD	RAW/MAIN INGREDIENT	WHERE IS IT FROM?			
snshootsog					
TO OF					

Sample Wallchart

Here is a basic example of the kind of wallchart that you can make with your students in class to collate the information in their diaries. The way you present the data can be bright and bold since you will be making a large-format chart for the classroom, rather than just making a table of details, but you could also include supporting data in many different ways. For example, the place of an ingredient's origin can be noted alongside the corresponding bar on the chart. You may also have a preference for the choice of descriptors. Discuss with your students what sort of chart features they want to include.

"Our Food-Miles"

		Distance							
INGRED- IENT		100	200	300	400	500	600	700	800
	How far?								
Beef									
	Alternative?								
	How far?								
Dairy									
	Alternative?								
	How far?								
Bananas									
	Alternative?								
	How far?								
Wheat									
	Alternative?								

