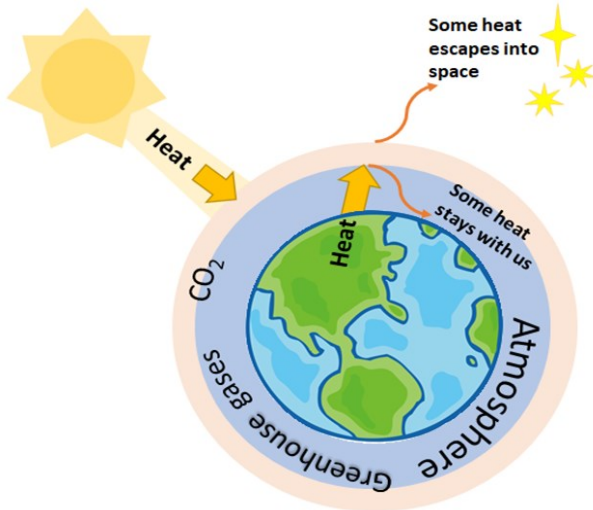


The Route of you Fruit

The activity	Kit you will need
<p>You'd be surprised at how far some foods travel to reach supermarket shelves. In this fun activity you'll experience just how long it takes by doing exercise. The longer food has travelled, the more exercise! We will also explore the link between food miles, carbon dioxide production and what this means for the environment.</p>	<p>Activity sheet & map Five food items from your cupboard Some space for the exercises (clear any obstacles out the way)</p> <p><i>Optional:</i> A pencil & worksheet to record your exercises but we recommend not printing to reduce waste</p>



The Science

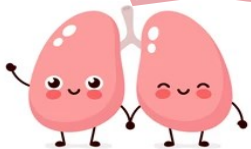
The sun generates heat for our planet. Greenhouse gases trap some heat in the atmosphere and allows some to escape. Keeping us at a suitable temperature.

Carbon dioxide, or CO₂, is one type of greenhouse gas. CO₂ is produced in naturally through the **respiration** of living beings or by human actions such as burning fossil fuels for transport vehicles, such as, trucks, planes, and boats. CO₂ is used and stored by e.g. plants and trees during **photosynthesis** or through dissolving into seawater.

Emissions from transport and other human sources have added CO₂ into the atmosphere much faster than it can be removed by plants and water. Resulting in changes to the climate around the earth. What can we do to help?

Small steps we can take is to shop more sustainably. One way to do that might be to shop locally. Food can come from all over the world. The distance travelled from food is grown to where its eaten is measured in **Food Miles**. Reducing food miles, reduces CO₂ emissions created during transport.

Respiration is the process by which energy is released from glucose, which allows other processes in the living body to function properly



Photosynthesis is the process through which plants use water, sunlight, and CO₂ to create oxygen

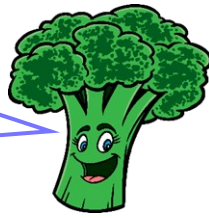


Emissions refer to the amount of harmful substances, or gases, that are produced and released into the environment.



[Learn more about the journeys our food take and met Hamish the strawberry in this video created by the team \(YouTube Link\).](#)

Food miles can increase as food moves from e.g. a ship to a lorry. Food also moves around different location to be processed



During summer, the UK grows much of its own produce such as salad leaves, carrots and strawberries. As we move into winter, half of all UKs food are imported

The UK imports nearly half of its fresh vegetables, and most of its fruit. In January, 90% of lettuces come from Europe. But in June, the UK produces 95% of its own



How To

1. Pick 5 items of food in your kitchen cupboards e.g. tea, salt, sugar, milk, cheese, eggs, bread.
2. Look at the back of the packaging and see if you can find where the food was produced. E.g. this food was produced in Bulgaria. Bulgaria is in Europe .
3. Find the continent your food came from on the map.
4. Count the number of dashes from your continent to Glasgow. For example, there are 4 dashes from Europe to Glasgow
5. Look to the Exercises Table on the next page. Each continent has been allocated exercises. There are two options for each exercise so choose which one suits you the best. For example, the 4 dashes for Europe represent 4 star jumps or 4 arm circles.



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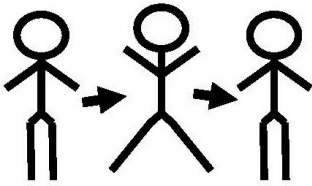
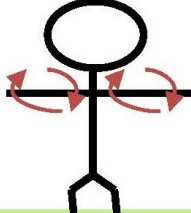
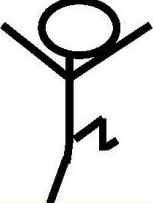
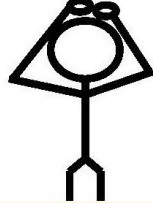
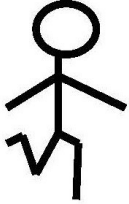
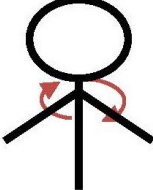
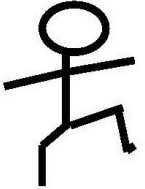
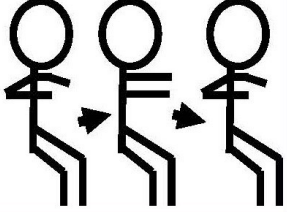

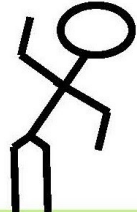
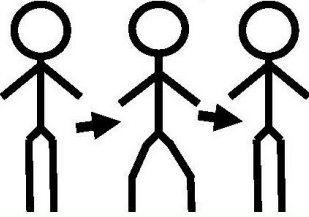
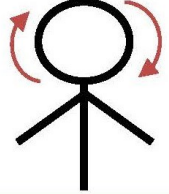
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Exercises

Continent	Option 1	How To	Option 2	How to
Europe	<p>Star jumps</p> 	<p>Jump making a star with your arms and legs</p>	<p>Arm circles</p> 	<p>Lift your arms in a T-shape and rotate them forwards or backwards</p>
South America	<p>Hopping</p> 	<p>Hop on one foot</p>	<p>Overhead claps</p> 	<p>Bring your arms straight up or in front of you and start clapping, resetting arms after each clap</p>
North America	<p>Heel kicks</p> 	<p>Bring each heel up to your back, as fast as you can</p>	<p>Shoulder rolls</p> 	<p>Roll your shoulders forwards or backwards</p>
Asia	<p>High knees</p> 	<p>Lift each knee high up to your belly button, as fast as you can</p>	<p>Chest press</p> 	<p>Sitting down, hold your arms out with a 90° bend in the elbow. Stretch out arms and then retract again</p>
Africa	<p>Lunges</p> 	<p>Place the left foot in front of the right and bend both knees. Change legs and repeat</p>	<p>Side bends</p> 	<p>Place the left arm on your hip and lift the right arm above your head. Bend towards the left, then change sides</p>
Oceania	<p>Side steps</p> 	<p>Stand up and step to the right then stand straight up again. Now do to the left</p>	<p>Head circles</p> 	<p>Make big circles with your head, first to the left, then to the right. Do half one way then half the other</p>
UK	<p>Your food is local, so it's not worked as hard to get to you, so take a rest on this one!</p>			

Please only complete exercises to your ability. To ensure the risk of injury is as minimal as possible, we have chosen easy exercises, that can be done at home. Each exercise can be made less challenging by performing at your own pace. To ensure the exercises are done correctly and to minimize any risk of injury, we have created a how-to document, which provides explanations for all the individual exercises. If you are unfamiliar with the exercise, you can search online for instructional videos, or choose another exercise you are familiar with and able to do.

Use this table to note down the foods and your exercises

Food	County	Continent	Number of dashes/ reps	Exercise	Done?

Complete the exercises on your list. Is it easier or harder the further away your food is?

Reflecting on this exercise. Has it made you think about how far your food travels? More food miles means CO₂ emissions made during its journey. Shopping local can reduce those emissions. But it's complicated! Sometimes locally grown food needs to be grown in large greenhouses which also produce CO₂ to heat.

There are many other ways people are trying to reduce CO₂ emissions and global warming. Look out for news from the United Nations Climate Change Conference (COP26) being held in Glasgow this year!

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The World

