Theme 3
"At the shops"
work-it-out worksheet





#### DID YOU KNOW?

Soft fruits, like strawberries, are flown across the world so we can eat them fresh in the winter, which contributes to climate change.

Some food can be transported by ship, for example bananas and dried beans, adding very little to their climate impact.

A thin plastic film (weighing just 1.5 grams) makes cucumbers last for 14 days longer!

If you want to eat strawberries in the winter, it's much better for the climate to buy them preserved, e.g. frozen, dried or in a tin, than buying them fresh.

### HANDS ON ACTIVITY

**Our mission...** is to work out the impact of food transport on the climate.

You will need... paper, a pencil, coloring pencils. What to do...

- 1. It is June in the UK... strawberries are ready to pick! Draw a strawberry and colour it in.
- 2. Draw two rulers, and label them with 100, 200... grams of greenhouse gases (see next sheet).
- 3. Growing and selling a large handful (80g) of fresh strawberries causes 140 grams of greenhouse gases (gCO<sub>2</sub>e). Mark this on each ruler, and shade in below it, the same colour as your strawberry.
- 4. How do strawberries get from the plant to you? Can you guess how much greenhouse gases this adds?
- 5. Draw a lorry and colour it in. A lorry might travel 250 miles across the UK, causing 4 grams of  $\rm CO_2e$  for 80g of strawberries. Add this onto one of your rulers and shade it in the same colour as your lorry.

- 6. Let's imagine it's Christmas! Do strawberries grow in the UK in December? Where do they come from? Delicate fruits like strawberries mostly come by aeroplane when they aren't available locally.
- 7. Draw an aeroplane and colour it in. An aeroplane from Morocco might fly 1500 miles to the UK, causing 280 gCO<sub>2</sub>e for your 80 gram portion. Add this onto the other ruler and shade it in the same colour as your plane.

**Bonus challenge...** Draw a boat and colour it in. A boat brings bananas from the other side of the world, causing 26 gCO<sub>2</sub>e for one small (100g) banana. Which do you think causes more climate change – a banana, or strawberries in winter? (Hint: growing a banana causes 40 gCO<sub>2</sub>e.)

**Have fun...** illustrating your results using unit cubes or lego bricks. *Optional: design labels supermarkets could stick on packets to show whether or not the food came by aeroplane.* 

We would love to see what you've created! Share using

#TakeABiteAtHome

## I WANT MORE

Take a look at these extra resources:

- EAT seasonably calendar https://tinyurl.com/mtnkft
- Fruits by season in the UK https://tinyurl.com/takeabiteathome
- How we can keep plastic out of ocean <a href="https://tinyurl.com/y9t9mlr2">https://tinyurl.com/y9t9mlr2</a>

Find all these links and more on:

www.takeabitecc.org/athome

## WHO WE ARE

Hiya! I am Xime, a chemical engineer, originally from Chile. I am passionate about Food Sustainability and empowering citizens to promote positive change towards climate change.



Online supporting video available 12pm Tuesday 16th June.

Theme 3 "At the shops" work-it-out worksheet Bonus material











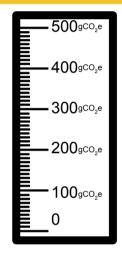






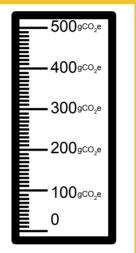


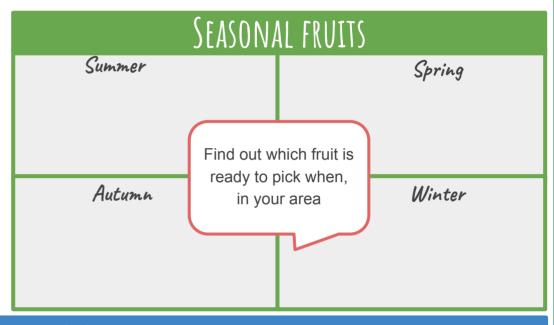
# JUNE AND DECEMBER STRAWBERRIES



Use these rulers for the activity on the previous sheet







## FOOD AND TRANSPORT

Can you guess the food with the highest greenhouse gas emissions and the one with the lowest? How much does the transport add up? Draw red circle for the highest and a green circle for the lowest. Can you rank them?









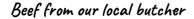
Beef from the other side of the world





Beans from the UK

Beans from the other side of the world



Hints: Remember from Theme 2 that 1 gram of beef causes 46 grams of greenhouse gas emissions (gCO<sub>2</sub>e). Growing and cooking beans at home causes about 1 gram of greenhouse gas emissions (gCO<sub>2</sub>e) for 1 gram of cooked beans. You might find the transport numbers on the previous sheet helpful too.

Bonus challenge