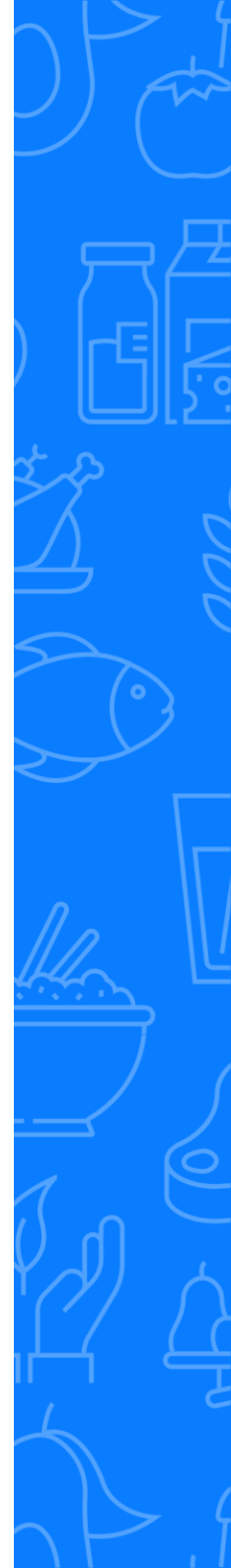


The Butterfly Effect

Food

| Age | We are learning | Resources |
|-------|---|---|
| 5-6 | Grow a Bean plant. | Bean growing activity sheet. |
| 6-7 | Explore food seasonality where you are. | Seasonal Foods Activity Sheet. |
| 7-8 | Around the World Activity Sheet and PowerPoint. | Some food packets and items to demonstrate food. From Around the World Activity Sheet. |
| 8-9 | Designing food packaging from delicate foods. | An egg box and an egg, recycled materials, resources to cut and stick the packaging together. A banana (per group). |
| 9-10 | Reprice food according to their carbon impact. | Hot Deals Activity Sheet. |
| 10-11 | Pesticides debate. | Pesticides Insight Sheet. |
| 11-12 | Create an advert for lab-grown meat. | Computers for research if required. Smartboard or projector to watch video. |

Teachers Notes:



We are learning

How to grow something to eat.

We can now...

Grow a bean plant from a bean and understand what living things need in order to grow.

Activity

Discuss what the children had for breakfast. Do they know where each item comes from? Is it grown in the ground or on a tree? Have they ever tried to grow food before? Do you think it is easy to do? Explain that we are going to grow a bean plant in a cup. Use the Grow a Bean Activity Sheet.

Digital / At Home Version

Complete the activity in the same way OR observe the teacher planting the bean and watch it grow.

Additional Challenge

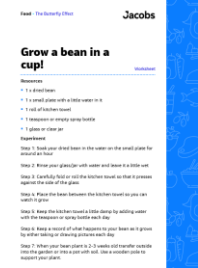
Explain to pupils what the different parts of the plant are as it grows.

Additional Support

Appropriate peer support.

Resources

Bean Growing Activity Sheet



Suggested Follow-On Activities

Read 'Jack and the Beanstalk'. Discuss the idea of 'Magic' beans. If you have no food are all beans magic?

UN Sustainable Development Goals

[Goal 2: Zero Hunger](#)

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We are learning

That it is more environmentally friendly to eat foods that are in season locally and what these foods are for each season.

We can now...

Explain why seasonal foods are better for the environment and discuss which foods are in season when.

Activity

Discuss the seasons. What sort of weather does each season have? How will this affect what grows there? Explain that, if something is not in season then it needs to come from far away or it takes a lot of energy to grow it here. Use a local website to investigate what food is seasonally available. Ask the pupils to draw pictures of seasonal produce for each month of the year and use these to complete the Seasonal Foods Activity Sheet.

Digital / At Home Version

Complete the activity in the same way but copy and paste images on to the Activity Sheet.

Additional Challenge

Complete the activity individually.

Additional Support

Complete the activity in groups or as a whole class for a wall display.

Resources

Seasonal Foods Activity Sheet



Suggested Follow-On Activities

Find a recipe to make using seasonal foods.

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We are learning

That food comes to us from places all over the world.

We can now...

Understand some of the places our food comes from and explain why this can be damaging for the environment.

Activity

Show children some food packets and tins with the 'Country of Origin' on them. Did they know that food comes to us from all around the world? Explain that we are going to look at the places that some foods came from. Use the Food from Around the World Activity Sheet and PowerPoint.

Digital / At Home Version

Complete the activity in the same way but copy and paste the images on to the map.

Additional Challenge

Explain what the equator is and how countries near the equator are usually hotter so food that needs a hot environment can usually grow easier there.

Additional Support

Play 'Hot' and 'Cold' while the children are placing the food pictures on the map to indicate if they need to move them nearer or closer.

Resources

Some food packets and items to demonstrate, Food From Around the World Activity Sheet (Can be completed on digital devices or board.)



Suggested Follow-On Activities

Draw a picture of an apple (or other item available locally) in charcoal; one apple from a local source and another from somewhere further away. Are there any differences you notice? Add describing words to your picture.

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We are learning

That food needs packaging to protect it. Why is some food packaging designed in the way it is?

We can now...

Design a piece of packaging to protect a delicate item of food.



Activity

Class discussion around how food gets to our plate. It is transported on a plane, lorry or ship to the supermarket, then we buy it and it is either carried home or put in a car or on a bike. How do we protect that food from getting damaged on the journey? Show the children an egg box. How does it help keep the eggs from breaking? What sort of material is it made of and is that a sustainable material? Using recycled materials, design packaging for a banana to protect it while travelling from where it was grown, to our fruit bowl. Try taking the banana, in its packaging, on a jog around the school and try dropping the banana to test the design.

Digital / At Home Version

Complete the activity in the same way.

Additional Challenge

Ask the pupils to design a specific experiment that could test the design. Remember that in an experiment you need to keep everything the same except one thing; in this case the packaging being tested.

Additional Support

Appropriate peer support.

Resources

An egg box and an egg to demonstrate. Recycled materials such as newspaper, old classroom paper and cardboard, tissue paper etc. Resources to cut and stick the packaging together. A banana (per group)

Suggested Follow-On Activities

Write a travel diary of your life from the perspective of an orange. Research and write about where you might come from, what journey you took and what mode of travel you used.

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We are learning

About meat and greenhouse gas emissions.

We can now...

Explain why meat and animal products are more environmentally damaging and describe a system to encourage people to choose more plant-based options.

Activity

Discuss the data shown on the Information Sheet. What can we tell about the carbon footprint of meat vs plant-based foods? Why might this be? Food that comes from animals takes a lot more energy to produce because the animals need to be fed, given shelter and water in order to live and grow before they can be eaten. If we ate the plants we feed to animals ourselves it would save a lot of energy! One of the ways we can encourage people to make more sustainable choices is by making unsustainable ones expensive. Use the Hot Deals Activity Sheet to re-price food based on the amount of Greenhouse Gases it takes to produce them.

Digital / At Home Version

Complete the activity in the same way.

Additional Challenge

Use a more complex pricing system or research real, local prices and change these.

Additional Support

Use a more simplistic re-pricing system.

Resources

Hot Deals Activity Sheet. (Can be Completed digitally or on the board)



Suggested Follow-On Activities

Can you think of any other ways we could encourage people to choose plant-based foods? Conduct a survey asking people why they choose to eat meat and how they could be encouraged to change their behaviour.

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We are learning

Why pesticides are both useful and potentially harmful.

We can now...

Explain why people have varying views on the use of pesticides and what might make them feel the way they do.

Activity

Explain to the class what pesticides are. What can they tell you about them? Do they think they are a good or a bad thing to use in farming? Ask them to stand on the left side of the classroom if they think they are a good thing to use in farming and the right if they think they should be banned. They can stand anywhere in between to reflect a mixed view. Ask them to explain why they feel the way they do. Now read the Pesticide Insight Card. Ask the class if their views have now changed and to go to the side of the classroom that affects their opinion now. Discuss the results.

Digital / At Home Version

Complete the activity in the same way except using numbers 1-10 to illustrate the spectrum of opinions rather than location in the space.

Additional Challenge

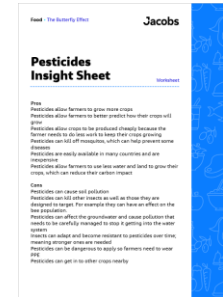
After reading the Insight Card assign pupils a role to play to see if it would change their opinion if they were that person and why. The roles might include: a farmer, a supermarket manager, an environmental activist, a bee-keeper, a parent living in poverty.

Additional Support

Appropriate peer support by working in pairs or groups.

Resources

Pesticides Insight Sheet



Suggested Follow-On Activities

Search online for the Population Clock. Discuss the issues we might have with food as the population continues to grow.

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We are learning

Some alternatives to meat as a food source that may help reduce our carbon footprint.

We can now...

Explain the pros and cons of lab grown meat and consider how to make it a more appealing product.



Activity

Class discussion around meat that has been grown in a lab; would the pupils eat it? Why or why not? Research some of the pros and cons. How could you convince those that aren't eager to try it? Split the class into small groups and ask them to create an advert for meat that has been grown in a lab. This can be filmed, and we would love to see the results!

Digital / At Home Version

Complete the activity in the same way but design a poster on Microsoft Word instead.

Additional Challenge

Look into advertising strategies used in adverts for popular junk food. Can you use any of these in your advert?

Additional Support

Appropriate peer support by working in pairs or groups.

Resources

Computers for research if required.
Smartboard or projector to watch video.

Suggested Follow-On Activities

Research other protein alternatives such as insect flour. Create a list of the pros and cons of both this, and lab grown meat and compare the two.

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