

SDG2 The Future of Food

MM5: The Food We Eat



Micro-Module 5: The Food We Eat

Experimentation and Exploration

Subjects: Art and Design, Agricultural Science, CPSE, Home Economics, SPHE

Micro-module Summary: The Food We Eat

This micro-module The Food We Eat aims to draw attention to our food choices, food production, food trends and how these can impact our environment, economy, and ecology.

The micro-module contains 7 lessons that invite learners to explore the basics of food production, the link between food and culture, and the link between food and the climate and environment.

The module is part of a two-part module that primer for micro-module 6 which supports the learner to develop

In this lesson, the learner will:

- Understand the basics of food production
- Understand the link between food and culture
- Learn about climate and the environment
- Develop skills in research
- Develop skills in design thinking
- Learn about STEAM
- Learn storytelling methods
- Learn how to collate ideas and insights
- Develop communication and presentation skills

Materials

- Lesson plans
- Worksheets



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The Food We Eat

Lesson 1: Understanding Food

One of the biggest challenges we face when it comes to food is understanding where it came from and how it got to us. When we start to learn more about the food we eat, we start to understand much more than what it tastes like. Learners will be tasked with investigating their favourite food.

Resources: My Food Profile Worksheet

Lesson 2: How Do We Produce Food?

In this lesson, learners will begin to understand the different systems and elements of agriculture and primary food production. This lesson includes key terms and words associated with food systems to help the learners to develop vocabulary that will aid them as they continue to explore the topic of food.

Resources: Glossary Worksheet, How Do We Produce Food? Worksheet

Lesson 3: Food and the Environment

In this lesson, learners will investigate the environmental impacts of global food production. They will begin to understand what is required to create the food that we eat every day, and what it means for the planet and its natural resources.

Resources: Food and the Environment Worksheet

Lesson 4: Food Production and Our Health

In this lesson, learners will investigate the health implications of different types of food products and production methods. Learners will also learn research methods, e.g., picture sorting research, validating assumptions. Through activities, learners will practice making decisions as a group.

Resources: Sort Your Groceries Worksheet, Grocery Sticker Sheet

Lesson 5: A Story About Food 1

Stories help us connect with others and understand topics in new ways. This lesson is about turning the information gathered and learned about food production, the environment, and health into an engaging narrative. Learners will use storyboarding techniques to achieve this — an important method used in design thinking, film making, and project planning.

Resources: Write a Story Worksheet

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Lesson 6: A Story About Food 2

Stories help us connect with others and understand topics in new ways. This lesson is a continuation from the previous lesson and is about turning the information gathered and learned about food production, the environment, and health into an engaging narrative. Learners will use storyboarding techniques to achieve this — an important method used in design thinking, film making, and project planning.

Resources: Create a Storyboard Worksheet

Lesson 7: What's Trending?

Learners will begin to explore the future of food in this lesson by investigating current food trends. Trends help us understand how behaviors are changing, what people want, and what the future might look like.

Resources: What's Trending Worksheet

The linked module, micro-module 6 contains the following lessons. While this micro-module can be delivered as a standalone module, micro-module 6 requires knowledge from micro-module 4, so should be delivered only after completion of micro-module 4.

- Lesson 1: Explore specific emerging food trends and technologies through the lens of STEM and agriculture
- Lesson 2: Find and experiment with new food ideas / products in a local context
- Lesson 3: Develop a point of view on learnings and experiences from previous lessons and experiments
- Lesson 4: Understand people's needs and concerns through empathy mapping and interviews
- Lesson 5: Imagine new food scenarios using futures thinking and simple speculative design methods
- Lesson 6: Collaborate to further build out future food scenarios

Using the Resources:

If you wish to use these resources, we can offer an induction and online support throughout the unit. To register for this option, please contact Rebecca White; e:rebecca@futurefocus21.com

Module development and expertise: Lara Hanlon, Portion Collaborative, Founder

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Micro-Module 5: The Food We Eat

Exploration and Experimentation

Lesson 1: Understanding Food

Subjects: Agricultural Science, CPSE, Geography, Home Economics, SPHE

Lesson Title and Summary: Understanding Food

One of the biggest challenges we face when it comes to food is understanding where it came from and how it got to us. When we start to learn more about the food we eat, we start to understand much more than what it tastes like.

Learners will be tasked with investigating their favourite food.

Vocabulary: Journey, Local, Playback, Research

In this lesson, the learner will:

- Think critically about the food they eat
- Consider the differences between local and global
- Be exposed to the complexities of food supply chains
- Work independently to conduct research
- Develop basic presentation skills

Materials

- Worksheet: My Food Profile
- Internet access
- Markers/pens/pencils
- Paper



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Lesson 1: Understanding Food

11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



15 LIFE ON LAND



ACTIVITY INSTRUCTIONS

Activity 1: My Food's Journey (25 mins)

1. Put learners into pairs.
2. Distribute Worksheet: My Food Profile (one per learner).
3. Ask learners to think about their favourite food.
4. Complete the assigned worksheet as an interview. One learner should ask their partner the questions on the worksheet and record their answers. Their partner should then ask the learner the questions on the worksheet and record their answers. Work together to complete part 2 of the worksheet for both learners.

Activity 2: Playback (25 mins)

1. Clear a space on the wall or provide a board and ask the learners to hang/stick up their worksheets for the class to see.
2. When everyone has their worksheets in place, ask each learner to present their partner's Food Profile, if time allows.
3. Have each group take photos of their worksheets and upload to a shared drive or virtual classroom. Ask learners to read each profile before the next class.

REFLECTIVE EXERCISE: 3-2-1 (10 mins)

- Three things they feel they have learnt from the tasks.
- Two things they found most interesting and would like to explore more.
- One – their opinion they have about the tasks.

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EXTENSION / REDUCTION ACTIVITIES:

Reduction: For a shorter lesson, run activity 1 as a flipped classroom. Have the class discussion in the next lesson. Alternatively, divide the class into groups of 2 or 3 and ask each group to pick a shared food to research together.

Extension: For a longer lesson, allow learners to research additional foods/dishes. Provide a new worksheet for each food.

MEDIA BOX: (materials, online video links, extra resources, case studies etc)

SDG goal 12: Ensure sustainable consumption and production patterns

<https://sdgs.un.org/goals/goal12>

SDG goal 13: Take urgent action to combat climate change and its impact

<https://sdgs.un.org/goals/goal13>

SDG goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

<https://sdgs.un.org/goals/goal2>

LOCAL TRIP / EXPERTISE / ADDITIONAL WORK AND ASSESSMENTS

Visit your local grocery store, shop or supermarket and look at the labels of some food products. Can you find out where they came from e.g. Ireland or Argentina? How many ingredients are listed on the label?

Complete Seeding Sustainability Food Sovereignty Lesson 2: Introduction to Food Miles

LESSON 1 WORKSHEET

2 ZERO HUNGER



MY FOOD PROFILE

You will interview your partner and complete the following questions:

PART 1

What is your favourite food?

Add a photo or draw it in the box then write it down below.

List all the parts that make up this food.

e.g. If your favourite food is pizza it might include cheese, tomato sauce, flour.

Where do you usually get this food from?

e.g. at home, at school, shop, restaurant

LESSON 1 WORKSHEET

2 ZERO HUNGER



MY FOOD PROFILE

Work with your partner to complete the follow questions based on part 1.

PART 2

Using the internet, let's dig a bit deeper. Try to understand more about this food using the following questions as a guide.

What is the history of your favourite food?

Where was it first grown or made?

Who was the first person to eat it?

What country is it associated with the most?

LESSON 1 WORKSHEET

2 ZERO HUNGER



MY FOOD PROFILE

What ingredients are needed to make it?

Where do all the ingredients come from?

Is it usually grown or made in Ireland?

Can it be grown or made in Ireland?

Were you surprised by what you learned? Why?

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Micro-Module 5: The Food We Eat

Exploration
Experimentation and

Lesson 2: How Do We Produce Food?

Subjects: Agricultural Science, CPSE, Geography, Home Economics, SPHE

Lesson Title and Summary: How Do We Produce Food?

In this lesson, learners will begin to understand the different systems and elements of agriculture and primary food production. This lesson includes key terms and words associated with food systems to help the learners to develop vocabulary that will aid them as they continue to explore the topic of food.

Vocabulary: Aquaculture, Agriculture, Agroecology, Biodiversity, Cultivation, Ecosystems, Geography, Globalisation, Local, Organisms, Polyculture, Production, Research, Supply-chain, Systems, Technology

In this lesson, the learner will:

- Understand agricultural systems
- Learn about the history and trends of agriculture
- Learn about the different people involved in food production
- Develop a basic understanding of food systems
- Practice notetaking

Materials

- Worksheet: Glossary
- Worksheet: How Do We Produce Food?
- Teacher's Notes: Glossary
- Internet access
- Markers/pens/pencils
- Paper

11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



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Lesson 2: How Do We Produce Food?

11 SUSTAINABLE CITIES AND COMMUNITIES



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ACTIVITY INSTRUCTIONS

Activity 1: Glossary (20 minutes)

1. Divide learners into groups of 2-4.
2. Have each group write their own definitions for the words from the glossary in the WORKSHEET: Glossary.
3. Briefly discuss their definitions. See teacher's notes for glossary definitions.

Activity 1: How Do We Produce Food? (30 minutes)

1. As a class watch the video How Do We Produce Food? Crash Course Geography #43 (11:39 mins).
 - a. Allow the learners to read through the questions and prompts on the WORKSHEET: How Do We Produce Food? independently (5 mins). They will each need to complete this worksheet while watching the video, taking notes about what they are hearing and seeing along the way. Learners will also need to revise their glossary as they watch the video.
2. When everyone is ready, play the video. NOTE: the video moves very quickly and there is a lot of information for the learners to digest. Please pause the video regularly so the class can take notes and grasp the content steadily.
3. Facilitate any questions from the class along the way.
4. When the video has ended, allow the learners extra time to complete their worksheet and add any final notes. Ask the learners to revise their glossary definitions based on the video as well.
5. Then ask the class to discuss what they've learned about food production, following their worksheet as a talking guide (see teachers notes for glossary definitions).

REFLECTIVE EXERCISE: 3-2-1 (10 mins)

- Three things they feel they have learnt from the tasks.
- Two things they found most interesting and would like to explore more.
- One – their opinion they have about the tasks.

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Lesson 2: How Do We Produce Food?



EXTENSION / REDUCTION ACTIVITIES:

Reduction: For a shorter lesson, ask the learners to do activity 1 at home, in advance of the lesson. This should reduce the learning curve and the amount of time required to view the video in class.

Extension: For a longer lesson, spend more time discussing the video and the various terms.

MEDIA BOX: (materials, online video links, extra resources, case studies etc)

Video: How Do We Produce Food? Crash Course Geography #43 (11:39 mins)

https://youtu.be/xx_Cu7Le3ZY

National Geographic: The Art and Science of Agriculture

<https://education.nationalgeographic.org/resource/agriculture/>

Bord Bia: Agriculture and Food & Drink Sector (Ireland):

<https://www.bordbia.ie/industry/irish-sector-profiles/irish-agriculture-food-drink-sector/>

Bord Bia: Irish Vegetables – What's In Season

<https://www.bordbia.ie/whats-in-season/vegetables/>

Climate Ireland: Agriculture

<https://www.climateireland.ie/#!/tools/sectors/agricultures>

LOCAL TRIP / EXPERTISE / ADDITIONAL WORK AND ASSESSMENTS

Visit your local community garden, farm, or production facility to learn how food in your area is produced. E.g. Can you visit a dairy farm or talk to a dairy farmer about milk production? Or can you observe fishers bringing fish and seafood off the boats to sell to local mongers or chefs?

LESSON 2 WORKSHEET

2 ZERO HUNGER



GLOSSARY

Aquaculture:

Agriculture:

Agroecology:

Biodiversity:

Cultivation:

Ecology:

Ecosystem:

Geography:

LESSON 2 WORKSHEET



GLOSSARY

Globalisation:

Organisms:

Polyculture:

Supply-chain:

LESSON 2 TEACHER'S NOTES

2 ZERO HUNGER



GLOSSARY

Aquaculture: the breeding, rearing, and harvesting of fish, shellfish, algae, and other organisms in all types of water environments.

Agriculture: the science or practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products

Agroecology: farming that works with nature, the application of ecological concepts and principals in farming.

Biodiversity: the variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable.

Cultivation: to promote or improve the growth of (a plant, crop, etc.) by labor and attention.

Ecology: the study of relationships between plants, animals, people, and their environment - and the balance between these relationships.

Ecosystem: all the organisms and the physical environment with which they interact.

Geography: the study of the physical features of the earth and its atmosphere, and of human activity as it affects and is affected by these, including the distribution of populations and resources and political and economic activities.

Globalisation: the process by which businesses or other organizations develop international influence or start operating on an international scale.

Organisms: an individual animal, plant, or single-celled life form.

Polyculture: the practice of growing more than one crop species in the same space, at the same time.

Supply-chain: the sequence of processes involved in the production and distribution of goods.

LESSON 2 WORKSHEET

2 ZERO HUNGER



HOW DO WE PRODUCE FOOD?

Complete this worksheet while watching the accompanying video. There is lots to learn so take your time!

Why did humans domesticate food?

List 3 things that make up an agricultural ecosystem:

1. _____
2. _____
3. _____

What method of agriculture is used to farm fish?

Why was industrial agriculture created?

List 2 different organisms that might exist in a polyculture:

1. _____
2. _____

What type of subsistence system are the Filipino Rice Terraces (tick one):

- Extensive subsistence system
- Intensive subsistence system

LESSON 2 WORKSHEET

2 ZERO HUNGER



HOW DO WE PRODUCE FOOD?

Is industrialised food typically more or less cost effective? Tick one.

More cost effective

Less cost effective

In your own words, why is commercial agriculture bad for communities?

List 3 types of people who are involved in producing food:

- ---
- ---
- ---

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Micro-Module 5: The Food We Eat

Experimentation and Exploration

Lesson 3: Food and the Environment

Subjects: Art and Design, Agricultural Science, CPSE, Home Economics, SPHE

Lesson Title and Summary: Food and the Environment

In this lesson, learners will investigate the environmental impacts of global food production. They will begin to understand what is required to create the food that we eat every day, and what it means for the planet and its natural resources.

Vocabulary: Commodity, Data, Environment, Eutrophication, Greenhouse Gas Emissions (GHG), Supply Chain

In this lesson, the learner will:

- Research food production and the environment
- Navigate, search, and filter data
- Learn how to compare data
- Work in pairs/groups

Materials

- Worksheet: Food and the Environment
- Internet access
- Markers/pens/pencils
- Paper



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



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Lesson 3: Food and the Environment

11 SUSTAINABLE CITIES
AND COMMUNITIES



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



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ACTION



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ACTIVITY INSTRUCTIONS

Activity 1: Investigation (35 minutes)

1. Divide the class into groups of 2 or 3.
2. Provide a computer with internet access to each group.
3. Load the URL: <https://ourworldindata.org/environmental-impacts-of-food> on each computer. This will be the primary source of information for the duration of this lesson.
4. Distribute the worksheet: Food and the Environment (one per group).
5. Learners should use the worksheet to guide their research, answering the questions along the way.

NOTE: This lesson can be run as a flipped classroom if computers are not available for all learners/groups in class.

Activity 2: Research playback (15 minutes)

1. Ask each group to place their worksheets on the shared classroom board for everyone to see.
2. Ask each group to read out or “playback” PART 3 of their completed worksheet. They should share this task so that each learner has the opportunity to present their findings and learnings.

REFLECTIVE EXERCISE: 3-2-1 (10 mins)

- Three things they feel they have learnt from the tasks.
- Two things they found most interesting and would like to explore more.
- One – their opinion they have about the tasks.

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Lesson 3: Food and the Environment



EXTENSION / REDUCTION ACTIVITIES:

Reduction: For a shorter lesson, run activity 1 as a flipped classroom activity. If possible, learners should still work in pairs or groups of 3 to complete the activity outside of class.

Extension: For a longer lesson, give the class more time to explore the research. Once the worksheet is complete, learners can continue to click through the data and read additional articles.

MEDIA BOX: (materials, online video links, extra resources, case studies etc)

Our World in Data: Environmental Impacts of Food Production:

<https://ourworldindata.org/environmental-impacts-of-food>

Environmental Protection Agency:

<https://www.epa.ie/our-services/monitoring--assessment/climate-change/ghg/agriculture/>

National Geographic:

<https://education.nationalgeographic.org/resource/environmental-impacts-agricultural-modifications/>

Video: How does your diet affect the environment? (1:26 mins)

<https://youtu.be/7Rufgoy9R2U>

Video: Can healthy food save the planet? (2:10 mins)

<https://youtu.be/Plc42olU0Ik>

LOCAL TRIP / EXPERTISE / ADDITIONAL WORK AND ASSESSMENTS

Visit your local community garden, farm, or production facility to learn how food in your area is produced.

Interview a farmer about the impact of agriculture on the environment.

Contact your local council to ask about steps they are taking to reduce the impact of agriculture on the environment.

LESSON 3 WORKSHEET

2 ZERO HUNGER



FOOD AND THE ENVIRONMENT

You will need to access the following website for this activity:

<https://ourworldindata.org/environmental-impacts-of-food>

Steps:

1. Work together to read the data on the website and complete the questions below.
2. One person should manage the worksheet and take notes while the other navigates the website and datasets. Decide who owns which task!

PART 1

How does agriculture impact the environment?

1. _____
2. _____
3. _____

What negative impact does agriculture have on our land?

What percentage of greenhouse gas emissions come from food?

_____ %

What percentage of global freshwater is used for agriculture?

_____ %

What does Eutrophication mean?

In your own words, why do we need to change the way we produce food?

LESSON 3 WORKSHEET

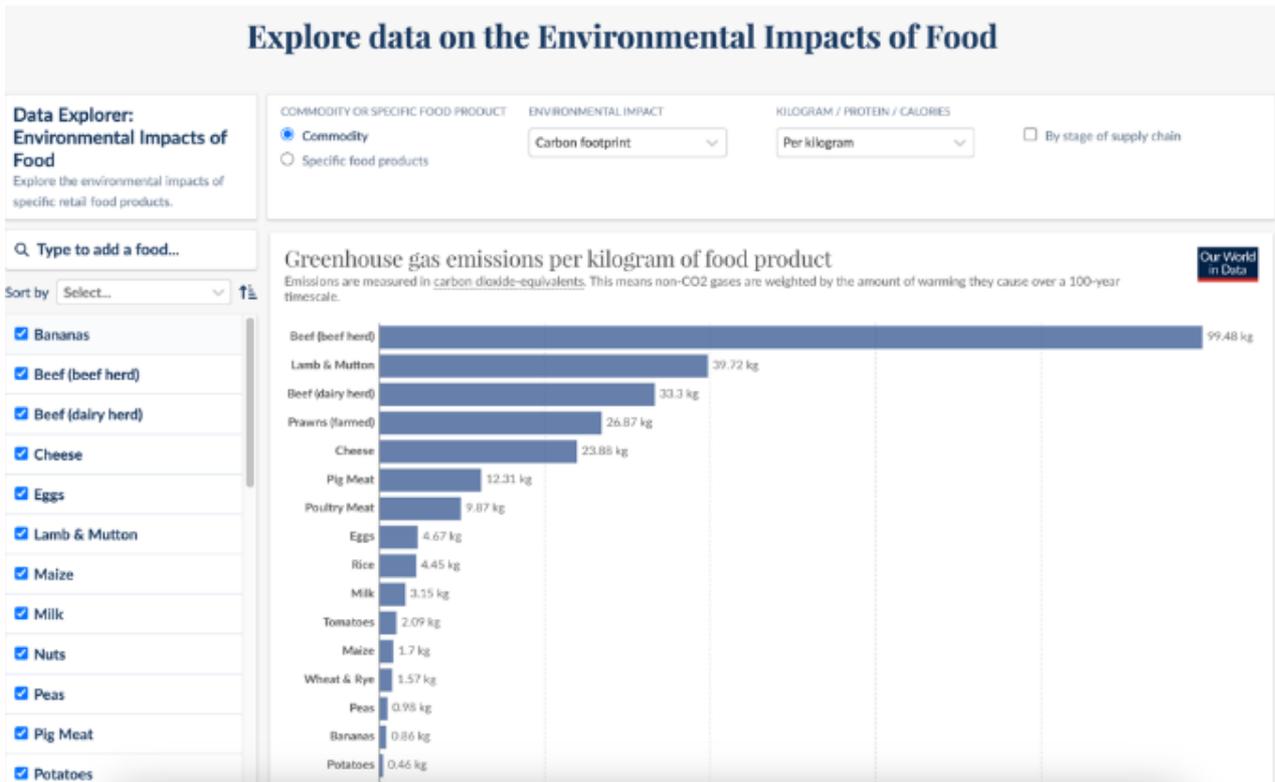
2 ZERO HUNGER



FOOD AND THE ENVIRONMENT

PART 2

Use the Data Explorer tool to complete the rest of the worksheet. Use the filters on the left and top to answer the questions below.



What are the greenhouse gas emissions per kilogram of potatoes

What are the greenhouse gas emissions per kilogram of milk

Out of the following, which food product emits more greenhouse gases per kilogram (circle one):

- Fish (farmed)
- Pig meat
- Poultry meat

By how much (in kg)? _____

LESSON 3 WORKSHEET

2 ZERO HUNGER



FOOD AND THE ENVIRONMENT

Out of the following, which food product requires more land per kilogram (circle one):

- Fish (farmed)
- Pig meat
- Poultry meat

By how much (in m²): _____

Out of the following, which food product requires more land per kilogram (circle one):

- Fish (farmed)
- Pig meat
- Poultry meat

By how much (in m²)? _____

Out of the following, which food product requires more land per kilogram (circle one):

- Fish (farmed)
- Pig meat
- Poultry meat

By how much (in m²)? _____

How many litres of freshwater is required to produce one kilogram of cheese?

PART 3

Now, move to the Research & Writing section for the final part of this activity.

Steps:

1. Looking at these article headlines, choose one that interests you.
2. Take a minute or two to read the article and any associated data.
3. Create a summary of what you have learned. Fill out the fields below:

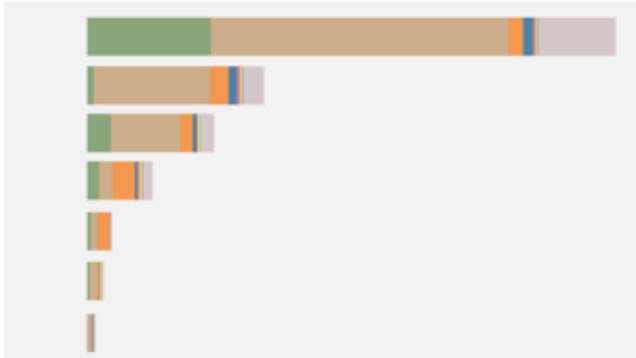
LESSON 3 WORKSHEET

2 ZERO HUNGER



FOOD AND THE ENVIRONMENT

Research & Writing



You want to reduce the carbon footprint of your food? Focus on what you eat, not whether your food is local

'Eat local' is a common recommendation to reduce the carbon footprint of your diet. But transport tends to account for a small share of greenhouse gas emissions. How does the impact of what you eat compare to where it's come from?

Hannah Ritchie

Food production is responsible for one-quarter of the world's greenhouse gas emissions

One-quarter of the world's greenhouse gas emissions result from food and agriculture. What are the main contributors to food's emissions?

Hannah Ritchie

MORE KEY ARTICLES ON THE ENVIRONMENTAL IMPACTS OF FOOD

Less meat is nearly always better than sustainable meat, to reduce your carbon footprint

Hannah Ritchie

Dairy vs. plant-based milk: what are the environmental impacts?

Hannah Ritchie

Yields vs. Land Use: How the Green Revolution enabled us to feed a growing population

Hannah Ritchie

Article 1: <https://ourworldindata.org/food-choice-vs-eating-local>

Article 2: <https://ourworldindata.org/food-ghg-emissions>

Article 3: <https://ourworldindata.org/less-meat-or-sustainable-meat>

Article 4: <https://ourworldindata.org/environmental-impact-milks>

Article 5: <https://ourworldindata.org/yields-vs-land-use-how-has-the-world-produced-enough-food-for-a-growing-population>

Article headline:

In your own words, what is the article about:

LESSON 3 WORKSHEET

2 ZERO HUNGER



FOOD AND THE ENVIRONMENT

Share two facts or statistics that you found most interesting:

1. _____
2. _____

What did you learn that surprised you?

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Experimentation and Exploration

Lesson 4: Food Production and Our Health

Subjects: Art and Design, Agricultural Science, CPSE, Home Economics, SPHE

Lesson Title and Summary: Food Production and Our Health

In this lesson, learners will investigate the health implications of different types of food products and production methods. Learners will also learn research methods, e.g., picture sorting research, validating assumptions. Through activities, learners will practice making decisions as a group.

Vocabulary: Nutrition, Processed Foods, Ultra-processed Foods (UPF)

In this lesson, the learner will:

- Learn how food production methods can impact health
- Apply picture-sorting research techniques
- Conduct research to validate assumptions
- Work in groups and learn how to make decisions together

Materials

- Worksheet: Sort Your Groceries
- Grocery Sticker Sheet
- Internet access
- Markers/pens/pencils
- Paper
- Scissors
- Tape/glue/Blu tack



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Lesson 4: How Do We Produce Food?

11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



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ACTIVITY INSTRUCTIONS

Activity 1: Watch a Video (15 minutes)

1. As a class, watch the video: UK doctor switches to 80% ULTRA-processed food diet for 30 days 🍔🍕🍷 BBC (9:12min)
2. At the end of the video, facilitate an open class discussion:
 - What did you think of the experiment?
 - Were you surprised by what happened to the doctor?
 - What did you learn that you didn't know before?
 - What is a UPF?
 - Why do you think these kinds of foods are so popular?
 - How do you feel about food after watching this video?

Activity 2: Sort Your Groceries (35 minutes)

1. Divide the class into groups of 4 or 5 and distribute the Grocery Sticker Sheet.
2. Allow 5 minutes for each group to cut the individual food items out of the second worksheet. Meanwhile, distribute the Worksheet: Sort Your Groceries (one per group).
3. Each group should work together to decide where each food item from the sticker sheet belongs by placing them into the appropriate category on the Sort Your Groceries worksheet. It's okay if the learners are unsure at this stage, they should use their judgement to decide collectively.
4. When all food items are placed into their categories, each group should prepare to share their worksheets with the class by placing them on the shared classroom board.
5. Allow the class to look at all the worksheets and facilitate discussion to draw out and notice any differences in how each group sorted their food items.

Activity 3: FLIPPED CLASSROOM: Check Your Sorting

1. Each group should validate their completed worksheet by researching the different food items to understand if they are in fact unprocessed, processed, or ultra-processed. They should continue to work in groups if possible and can use the internet for this task. Please see multimedia box for useful videos and articles.
2. When they have conducted this research, each group should make a note on their own worksheet to indicate if certain food items should be moved to a different category.
3. It's important that the group work together to make any changes so that each learner can reflect on what they have learned. Facilitate a brief discussion of any changes they made and their validation research in the next lesson.

REFLECTIVE EXERCISE: 3-2-1 (10 mins)

- Three things they feel they have learnt from the tasks.
- Two things they found most interesting and would like to explore more.
- One – their opinion they have about the tasks.

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Lesson 4: How Do We Produce Food?



EXTENSION / REDUCTION ACTIVITIES:

Reduction: For a shorter lesson, ask the class to watch the assigned video for activity 1 at home before the lesson. Note: the classroom discussion should still take place.

Extension: For a longer lesson, add a secondary video: How harmful can ultra-processed foods be for us? BBC News to the first activity (see multimedia box). Encourage the class to take notes during both videos and facilitate a discussion in response to both experiments.

Allow the groups to complete activity 3 in class.

MEDIA BOX: (materials, online video links, extra resources, case studies etc)

Video: UK doctor switches to 80% ULTRA-processed food diet for 30 days 🍔🍕🍷 BBC (9:12 mins)
<https://youtu.be/T4PFt4czJw0>

Video: How harmful can ultra-processed foods be for us? BBC News (6:42 mins)
<https://youtu.be/wlhbYA5QLEw>

Video: How the food you eat affects your brain (4:52 mins) <https://youtu.be/xyQY8a-ng6g>

Video: How sugar affects your brain (5:02 mins) <https://youtu.be/IEXBxijQREo>

Video: Whole Foods vs Processed Foods (1:36 mins) <https://youtu.be/lCyakCKf1vM>

Article: It delivers a taste bomb of pure pleasure, but ultraprocessed food is killing us
<https://www.irishtimes.com/health/your-wellness/2023/01/30/it-delivers-a-taste-bomb-of-pure-pleasure-but-ultraprocessed-food-is-killing-us/>

Article: Processed Foods and Health
<https://www.hsph.harvard.edu/nutritionsource/processed-foods/>

LOCAL TRIP / EXPERTISE / ADDITIONAL WORK AND ASSESSMENTS

Visit your supermarket and try to determine what food is unprocessed, processed, or ultra-processed. Notice how the supermarket organise these items – can you find unprocessed and ultra-processed food in the same aisle or are they kept separate? How are the foods labeled – do they use the words processed or unprocessed anywhere?



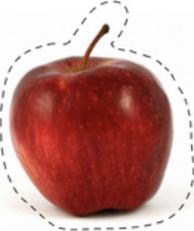
GROCERY STICKER SHEET

Grocery Sticker Sheet

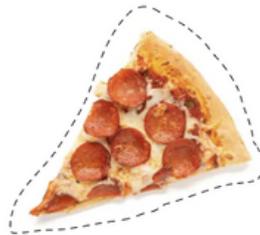
Using a scissors, cut out the food items below



Nuts



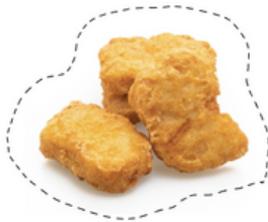
Apple



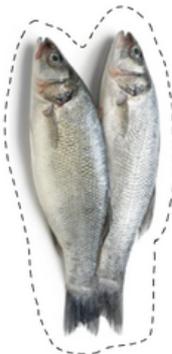
Microwavable Pizza



Tinned Fish



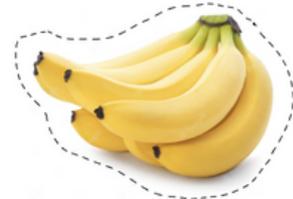
Chicken Nuggets



Fish



Milk



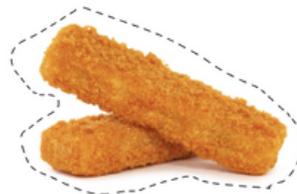
Bananas



Ready Meal



Chocolate



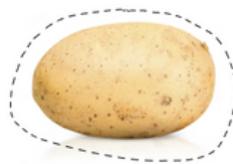
Fish Fingers



Homemade Bread



Carrots



Potato



Crisps



Chicken Fillets

LESSON 4 WORKSHEET

2 ZERO HUNGER



SORT YOUR GROCERIES

Place your food items into the category you think they belong to.

UNPROCESSED

WHOLE, RAW FOODS STRAIGHT FROM NATURE

PROCESSED

FOOD THAT HAS BEEN FROZEN, DRIED, CANNED, BLENDED, DICED, WASHED, FERMENTED, BKAED

ULTRA-PROCESSED

FOOD THAT HAS CHEMICALS, ADDED SUGARS, SALT, EXTRACTS, OR MULTIPLE INGREDIENTS

SDG2: Future of Food

MM5: The Food We Eat



Micro-Module 5: The Food We Eat

Exploration and Experimentation

Lesson 5: A Story About Food 1

Subjects: Art and Design, Agricultural Science, CPSE, Home Economics, SPHE

Lesson Title and Summary: A Story About Food 1

Stories help us connect with others and understand topics in new ways.

This lesson is about turning the information gathered and learned about food production, the environment, and health into an engaging narrative. Learners will use storyboarding techniques to achieve this — an important method used in design thinking, film making, and project planning.

Vocabulary: Character, Empathy, Narrative, Plot, Research, Storyboard, Storytelling

In this lesson, the learner will:

- Turn quantitative research into a qualitative narrative
- Learn how to plot a simple story
- Exercise creative and critical thinking
- Develop empathy for people and planet
- Practice written, visual, and verbal storytelling

Materials

- Worksheet: Write A Story
- Internet access
- Markers/pens/pencils
- Paper

11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



15 LIFE ON LAND



MM5: The Food We Eat

Lesson 5: A Story About Food 1

11 SUSTAINABLE CITIES
AND COMMUNITIES



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



13 CLIMATE
ACTION



15 LIFE
ON LAND



ACTIVITY INSTRUCTIONS

Activity 1: Write A Story (50 minutes)

1. Ask everyone to gather their own worksheets and notes from all previous lessons.
2. Divide learners into groups of 2.
3. Distribute the worksheet: Write A Story.
4. Learners will need to look back at what they learned throughout the module so far and turn aspects of their research findings into a short story. They might choose to focus on one past lesson or specific activity, or they might choose to summarise everything they have learned so far. It's up to each learner to decide what story they want to tell.
5. Learners should complete the worksheet: Write a Story

REFLECTIVE EXERCISE: 3-2-1 (10 mins)

- Three things they feel they have learnt from the tasks.
- Two things they found most interesting and would like to explore more.
- One – their opinion they have about the tasks.

MM5: The Food We Eat

Lesson 5: A Story About Food 1

11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



15 LIFE ON LAND



EXTENSION / REDUCTION ACTIVITIES:

Reduction: For a shorter lesson, reduce the amount of time they work on creating their stories.

Extension: For a longer lesson, as a class, watch the videos provided in the multimedia box.

MEDIA BOX: (materials, online video links, extra resources, case studies etc)

Article: How To Write A Story Plot

<https://www.grammarly.com/blog/story-plot/>

Video: Why Stories Are Important (1:28 mins)

<https://youtu.be/VG3eKnUeqwo?si=3gsZ5W3OZ28iKqAz>

Video: How stories shape our minds (4:36 mins)

<https://youtu.be/vyZMSZG2Dmk?si=JMVoKOKcxwm6Talv>

LOCAL TRIP / EXPERTISE / ADDITIONAL WORK AND ASSESSMENTS

Can you turn a personal experience about food and the environment or food and health into a story? What facts do you know about local food production such as farming and can you share those facts in a story to make them more interesting?

See Media Communications Micro-Module 1: Videos for extra lessons on storyboarding, or to turn their story into a film.



WRITE A STORY

Create an outline and a summary of your story. You will use that to develop your storyboard.

You have learned a lot about food production, the environment, and health so far in this module. Now it's time to turn what you have learned into a short story. Stories help us connect with others and understand topics in new ways.

You will need to revisit your completed worksheets and any notes you may have taken in the previous four lessons. Follow the instructions below and get writing!

Instructions:

First, you need to choose a focus for your story. Consider:

- a. Thinking back on your previous lessons about food production – the case studies, videos and worksheets – what did you find most interesting or surprising?
- b. Did you learn something about how agriculture impacts the environment that you think others should understand?
- c. How would you tell someone about the ways food can affect our health? What story might you tell?
- d. Did you discover anything new about the food in your local supermarket or the food you eat at home that you could explain in a story?

Quickly brainstorm some story ideas:

- a. Write down the top 2 things you learned.
- b. Think about how you can turn them into stories.
- c. Make a list of the people (or characters) who might be involved.
- d. Write a basic plot for each. A plot is simply the sequence of events that happen.

Next, pick your preferred one and refine it. Make sure to:

- a. Consider the main message or piece of information you want to share.
- b. Keep it simple!

Every story needs a strong character. Some questions to ask yourself:

- a. Can you give your character a name?
- b. What kind of personality do they have?
- c. What are they doing in your story? For example, are they buying groceries? Are they farming their land? Are they having a snack?



WRITE A STORY

Create a key moment. Think about:

- a. Does something important happen in your story? The key moment might involve a character being challenged by something or someone, for example.
- b. The middle of your story should highlight this moment.

Finish with a resolution. Consider:

- a. How your story ends. Does your character overcome the challenge?
- b. What do you want your peers and teacher to learn at the end of the story.

Write a summary / outline of your story here:



WRITE A STORY

Create an outline and a summary of your story. You will use that to develop your storyboard. Consider the parts of a story:

our
**STORY
BEGINS**
here

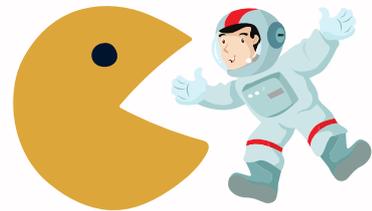
This is the opening of the story - Who, What Where and When?



This is the problem or purpose of the story and defines your main plot line.

DON'T FORGET

Who are the characters and settings, what they will say, and where and how they will say it.



The middle of the story

DON'T FORGET

There maybe one or two events with different characters that make up the film.



The resolution of the problem or realisation of the purpose - the closing scenes

SDG2: Future of Food

MM5: The Food We Eat



Micro-Module 5: The Food We Eat

Exploration and Experimentation

Lesson 6: A Story About Food 2

Subjects: Agricultural Science, CPSE, Geography, Home Economics, SPHE

Lesson Title and Summary: A Story About Food 2

Stories help us connect with others and understand topics in new ways.

This lesson is a continuation from the previous lesson and is about turning the information gathered and learned about food production, the environment, and health into an engaging narrative. Learners will use storyboarding techniques to achieve this — an important method used in design thinking, film making, and project planning.

Vocabulary: Character, Empathy, Narrative, Plot, Research, Storyboard, Storytelling

In this lesson, the learner will:

- Turn quantitative research into a qualitative narrative
- Learn how to plot a simple story
- Exercise creative and critical thinking
- Develop empathy for people and planet
- Practice written, visual, and verbal storytelling

Materials

- Worksheet: Create A Storyboard
- Internet access
- Markers/pens/pencils
- Paper

11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



15 LIFE ON LAND



MM5: The Food We Eat

Lesson 6: A Story About Food 2



ACTIVITY INSTRUCTIONS

Activity 1: Review (10 min)

1. Working in the same groups from lesson 5, have learners review their plan for their story. They should make any changes or note any gaps they have in their story before moving to the storyboard.

Activity 2: Create A Storyboard (40 minutes)

1. Distribute the worksheet: Create a Storyboard
2. Learners will need to turn their written story from activity 1 into a 6-panel visual story using the worksheet provided. To fill out the panels they can draw directly onto the sheet, paste photos, or make a collage.
3. At the end of the activity, when all learners have completed their stories, ask the learners to place their storyboards on the shared classroom board for everyone to see. If there is time, ask all of the learners to present their storyboards.

REFLECTIVE EXERCISE: 3-2-1 (10 mins)

- Three things they feel they have learnt from the tasks.
- Two things they found most interesting and would like to explore more.
- One – their opinion they have about the tasks.

MM5: The Food We Eat

Lesson 6: A Story About Food 2



EXTENSION / REDUCTION ACTIVITIES:

Reduction: For a shorter lesson, skip activity 1.

Extension: For a longer lesson, as a class, watch the videos provided in the multimedia box.

Option B: Allow more time for activity 2 or all learners to start writing their short-story to create a class booklet of stories.

MEDIA BOX: (materials, online video links, extra resources, case studies etc)

Article: How To Write A Story Plot

<https://www.grammarly.com/blog/story-plot/>

Video: Why Stories Are Important (1:28 mins)

<https://youtu.be/VG3eKnUeqwo?si=3gsZ5W3OZ28iKqAz>

Video: How stories shape our minds (4:36 mins)

<https://youtu.be/vyZMSZG2Dmk?si=JMVoKOKcxwm6Talv>

LOCAL TRIP / EXPERTISE / ADDITIONAL WORK AND ASSESSMENTS

Can you turn a personal experience about food and the environment or food and health into a story? What facts do you know about local food production such as farming and can you share those facts in a story to make them more interesting?

See Media Communications Micro-Module 1: Videos for extra lessons on storyboarding, or to turn their story into a film.



CREATE A STORYBOARD

Storyboards

Storyboards enable you to visualise your ideas as a sequence - showing the story's plot over time. You will develop your storyboard in the this lesson.

TITLE OF YOUR STORYBOARD

1 A storyboard is a sequence of illustrations that are used to develop a story.

2 Designers have used storyboard to design scenes for television, or movies.

3 A storyboard is a sequence of illustrations that are used to develop a story.

Storyboard explanation from Canva 2023. Canva has a storyboard editor - with a number of templates

Scene 1, Shot 1 A cat lies on a bed in the corner of a near-empty bedroom. NARRATOR She may think the life of a cat is boring.	Scene 1, Shot 2 The same cat is eating food from a bowl in a kitchen. NARRATOR A life of easy living, spoiled with eggs, food, and an occasional trip to the litter box.	Scene 1, Shot 3 Cat face shot against country background. Slow zoom on cat's face to focus on eyes, then fade to black. NARRATOR But the story of Fletcher, a countr cat gone city, is different from the usual tale.
Scene 2, Shot 1 City street with our "meowing" supplies.	Scene 2, Shot 2 Family runs around during the movie, cat forms to watch the humans walk by.	Scene 2, Shot 3 The cat is curled up in an empty closet. NARRATOR

1 [Hand holding pen]	2 [Hand holding pen]	3 [Wristwatch]
4 [Man's face]	5 [Man at desk]	6 [Two men talking]

Different Storyboard styles, Canva 2023



CREATE A STORYBOARD

A good storyboard is:

- Clear
- Easily understood by anyone
- Doesn't have overly detailed drawings - shows key scenes, characters and times of day

1

Have you established your timeline?

Some things to think about -

- When does your story occur - what time of the day?
- What are the main events in your story and in what order do they happen?
- Will you use flashbacks?
- Will you have different endings?
- Different storylines happening at once to show different outcomes?

2

Before you start - Do you know the key scenes in your story?

Some things to think about -

- Scenes should show your story / plot development
- Key scenes show important info for the viewer
- Key scenes also show if your locations change or time changes or character changes - make it clear

3

Have you a written description for each image in your storyboard?

- Rough draft - this doesn't have to be perfect but it needs to show a description and some dialogue ideas, e.g. conversations between main characters.
- Are the characters fighting, smiling, or moving toward a destination? Some sort of action should take place in each drawing.
- Show Backgrounds / Characters.



CREATE A STORYBOARD



Use the storyboarding template provided, the index cards, or one of the digital resources to begin storyboarding your project.

CREATE A STORYBOARD SEQUENCE

- Once you have your story idea, characters, key moments, and resolution, you are ready to create your storyboard.
- Get a cork board, some index cards, and drawing pins. You can use the computer and some templates, a magnetic board, or just pieces of paper.
- Think of each row of cards or paper as a scene in your story.
- Write down a brief description and do a drawing on your cards / paper for scenes that you know are in your story.
- Now look and see if there are any gaps in your story – you can do this with someone else and see if makes sense.
- Once it's storyboarded then you can begin writing the full story.

TEMPLATES

- <https://www.studiobinder.com/blog/downloads/storyboard-template/>
- <http://www.printablepaper.net/category/storyboard>
- <https://boords.com/storyboard-template#pdf-storyboard-templates>
- <https://app.studiobinder.com/register?shot-lists-storyboards>
- www.prezi.com
- <https://boords.com/storyboard-template#microsoft-word-storyboard-templates>

Create you own storyboard with MS PowerPoint - <https://docs.microsoft.com/en-us/azure/devops/boards/backlogs/office/storyboard-your-ideas-using-powerpoint?view=tfs-2018>

LESSON 6 WORKSHEET

2 ZERO HUNGER



CREATE A STORYBOARD

1

2

3

4

LESSON 6 WORKSHEET

2 ZERO HUNGER



CREATE A STORYBOARD

5

6

7

8

SDG2: Future of Food

MM5: The Food We Eat



Micro-Module 5: The Food We Eat

Exploration and Experimentation

Lesson 7: Food Trends

Subjects: Art and Design, Agricultural Science, CPSE, Home Economics, SPHE

Lesson Title and Summary: Food Trends

Learners will begin to explore the future of food in this lesson by investigating current food trends. Trends help us understand how behaviors are changing, what people want, and what the future might look like.

Vocabulary: Cultivated, Entomophagy, Forage, Future, Plant-based, Trends, Technology, Veganism, Viral

In this lesson, the learner will:

- Research local and global food trends
- Learn about behavior change and patterns
- Discover novel terms and products
- Work with peers to conduct research
- Consider what the future might look like

Materials

- Worksheet: What's Trending
- Internet access
- Markers/pens/pencils
- Paper



MM5: The Food We Eat

Lesson 7: Food Trends

11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



15 LIFE ON LAND



ACTIVITY INSTRUCTIONS

Activity 1: What's Trending? (35 minutes)

1. Divide the class into pairs.
2. Distribute the worksheet: What's Trending.
3. Assign one food trend from the following list to each pair of learners:
 - a. Cultivated Meat
 - b. Entomophagy
 - c. Fake Meat
 - d. Foraged Food
 - e. Veganism
4. Learners should work together to learn about the food trend assigned to them. They will need access to the internet to conduct the research and complete the worksheet.

Activity 2: Playback (15 minutes)

1. Each pair should prepare to share what they've learned with the rest of the class.
2. When everyone is ready, allow each pair to talk about their assigned food trend. They can simply read from their worksheet or pin their worksheet on the classroom board/wall for everyone to see and follow along.
3. Encourage the class to ask questions and share their own thoughts in response to each trend. Use these prompts to guide the conversation:
 - a. What do you all think about this trend?
 - b. Was anyone surprised to learn about it?
 - c. Has anyone tried these kinds of foods before?

REFLECTIVE EXERCISE: 3-2-1 (10 mins)

- Three things they feel they have learnt from the tasks.
- Two things they found most interesting and would like to explore more.
- One – their opinion they have about the tasks.

MM5: The Food We Eat

Lesson 7: Food Trends



EXTENSION / REDUCTION ACTIVITIES:

Reduction: For a shorter lesson, run this lesson as a flipped classroom.

Extension: For a longer lesson, assign more than one food trend to each pair of learners.

MEDIA BOX: (materials, online video links, extra resources, case studies etc)

Article: 10 Key Trends in Food, Nutrition & Health 2013 (Bord Bia)

<https://www.bordbia.ie/industry/news/insightful-articles/2021/10-key-trends-in-food-nutrition--health-2023/>

Article: Deliveroo Reveals Future Food Trends in 2040

<https://www.hospitalityireland.com/features/deliveroo-reveals-future-food-trends-in-2040-199338>

Article: 5 latest tech trends in food and drink manufacturing

<https://www.foodmanufacture.co.uk/Article/2023/07/06/food-technology-trends-2023>

Article: Food Trends (Failte Ireland)

<https://www.failteireland.ie/Product-development/taste-the-island/Archived-content-2020/Food-knowledge-library/Food-trends-in-Ireland.aspx>

Interview: Darina Allen: Here are the 28 food trends I think will become popular in 2023

<https://www.irishexaminer.com/food/arid-41050631.html>

LOCAL TRIP / EXPERTISE / ADDITIONAL WORK AND ASSESSMENTS

Visit some of your local restaurants or takeaways and look at their menu – do you notice any changes or new additions? Do they offer vegan options, for example?

Talk to older community or family members and ask them about food trends. Have they noticed any changes in the type of food available today in comparison to when they were young? Can they tell you about it?

LESSON 7 WORKSHEET

2 ZERO HUNGER



WHAT'S TRENDING

Food trends are changes in food preferences that have become popular over a certain amount of time. Just like other trends, food trends often go viral and usually last for a long time. Food trends are important because they indicate a change in how and what people eat and give us a glimpse into the future.

Use this worksheet to learn about the food trend assigned to you.

PART 1

Our food trend is:

Have you heard of this trend before?

In your own opinion, what do you think it involves?

PART 2: Use the internet to learn more about this food trend.

List your sources below i.e. websites, articles, videos etc. as you conduct your research:

1. _____
2. _____
3. _____
4. _____
5. _____

LESSON 7 WORKSHEET

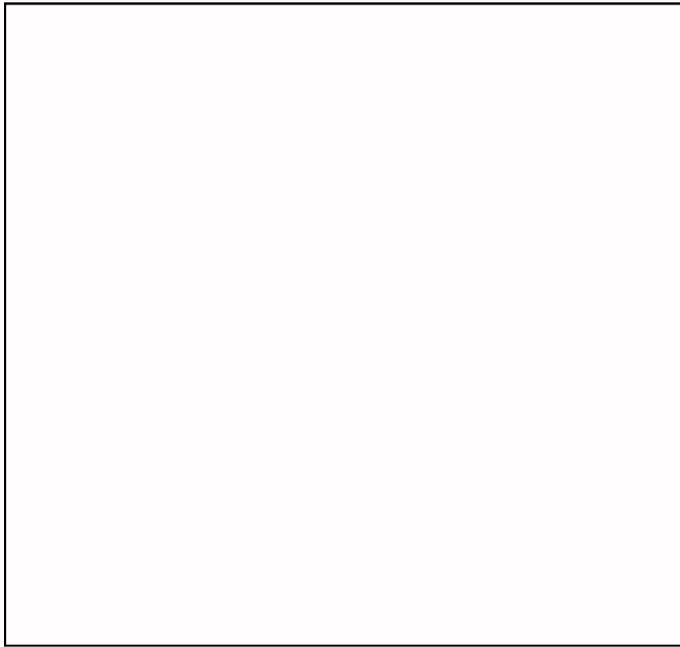
2 ZERO HUNGER



WHAT'S TRENDING

Where is this food trend most popular? e.g. Ireland, Asia, Everywhere

What does this food look like? Draw it below or add a photo from the internet.



What is the official definition of this trend?

Does it rely on technology? If yes, explain how:

LESSON 7 WORKSHEET

2 ZERO HUNGER



WHAT'S TRENDING

Do you think it is expensive or cheap to eat this kind of food?

What type of food would you associate with this trend? e.g. meat, flowers, grain

1. _____
2. _____
3. _____

How is this food made? e.g. is it raw or cooked? Is it ultra-processed?

Could you make this type of food at home?

In your own opinion, do you think this a positive or negative trend?

Do you think it will become a popular food in the future?

Do you think people in Ireland will like it?

Explain your answer.
