

Food Systems

Suggested Grade Level 4 - 6



The Big Idea

Students continue to explore where their food comes from. Students begin to explore the impacts our food system has on the environment and how we can balance human needs with environmental impacts.

Activities

Total Time: 60 minutes

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| · Introduction: Brief Discussion | · 10 minutes |
| · Activity 1: "How Does Our Food System Impact the Environment" video and discussion | · 20 - 25minutes |
| · Activity 2: "Hungry Planet, What the World Eats" presentation | · 25 minutes |
| · Activity 3: Ingredient mapping | · 15 minutes |
| · Wrap-Up & Review | · 5 minutes |

Preparation

Download and load the associated resources:

- "How Does Our Food System Impact the Environment" video
- "Hungry Planet, What the World Eats" photo presentation
- Blank world maps (print 1 per group of 4)
- "Blank World Map" (label countries referenced in the "Hungry Planet" presentation)
- Ingredient Mapping Worksheet (print 1 recipe per group of 4)

Learning Outcomes

- Students will formulate questions to guide investigations into some of the issues associated with balancing human needs/wants and activities with environmental stewardship.
- Students will analyze photos and draw conclusions about the impacts that food systems have on people and their surrounding environment.
- Students can demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others' health and well-being (D3: Healthy Living).

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Introduction; Discussion

- This lesson takes a deeper look at where our food comes from and how it gets on our plates.
- Students will examine some of the impacts that food systems can have on the environment.
- Facilitate a class discussion by posing the following questions and ideas:
 - Why do you eat food? (To survive? For enjoyment? Because you are bored etc.)
 - Who is involved in preparing food in your household? Do you participate in the kitchen around meal times? Who decides what to purchase and what to eat?
 - Many foods have a long and complicated journey before they make it to our plates which can affect the earth and the environment in many ways. Can you think of ways our food might impact the environment? Think about where your food comes from, how it gets to you, and what happens to the food that is not consumed. (Open discussion)

Activity 1: How Does Our Food System Impact the Environment video

- Watch the *"How Does Our Food System Impact the Environment"* video
 - Were any of our ideas represented?
 - What impacts were listed that we didn't discuss?
 - Did the video bring up more questions?

Activity 2: "Hungry Planet: What the World Eats" photo identification

- Using the "What the World Eats" photo presentation, examine each photo giving students time to make observations and connections. Direct students to look for/identify:
 - **Types of food/food groups**
 - **Packaging:** amount and type, brands
 - **Presence of whole foods:** Does the diet contain whole foods or processed foods or both?
 - **Appliances, food storage and or cooking utensils:** What impact do you think the available appliances and food storage options have on each family's diet?

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Activity 3: Group Recipe and Ingredient Mapping

NOTE: This activity may need to be adapted for your classes' skills and abilities.

- i.e.: completing the activity using a single recipe mapping worksheet as a larger class, providing students with a world map that has countries identified beforehand.

Part 1: Food Map - group activity

To begin, review local and global food systems definitions with the class.

- Divide students into groups. Each group needs a blank world map, a different ingredient mapping worksheet and a variety of coloured pencils or pens.
- Have the students begin by identifying where they are on the map. This is where their food is consumed.
- There are two categories on each recipe ingredient guide: "Locally Sourced" and "Globally Sourced". Use a different colour for each category. Plot each recipe item by connecting its origin to where it is consumed.
- Students will finish with a map showing the journey each ingredient has taken from where it's produced and grown, to their table.
- Have groups compare their maps at the end.

Part 2: Discussion

Debriefing questions:

- Which recipe would you guess has the most environmental impact? Explain why using examples from the video. Kilometres traveled? Packaging? Temperature controls? Waste?
- Which recipe would you guess has the least environmental impact? Explain why?
- How might the local recipe examples be different depending on the season? Explain?
- Some ingredients have no local substitution, should we still eat these foods?

Digging deeper: questions for further discussion.

- If you were to consider how the foods you choose to eat affect the environment, what changes could you make and why?
- If you are looking to find where your food is sourced, how could you get that information? Food labels? Signs at the grocery store? Where you shop, like a farmer's market?
- Write a paragraph about the importance of learning/knowing about the foods you choose to eat/buy.
- If we were to look back at the "What The World Eats" photos, which families would you guess have the most/least environmental impact? Explain why.

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Wrap-Up & Review

Have students identify and record two questions they have regarding food systems. The purpose of these questions is to inspire some curiosity in the students and to identify gaps in their understanding. These can be used as exit cards, or to start future discussions.

Activity Notes

- Students may have encountered associated lesson plan resources in previous grades. Consider checking with students and if necessary, framing resources, including videos, as a review.
- Consider finding local field trip opportunities, resources and programs in your area to use as extension activities, such as cooking programs, farmers market/grocery store tours etc. Be mindful of associated cost and potential impact on access and student participation.
- Be sure to foster a safe and inclusive space for all students during discussion. For example, consider food access, cultural background, varying definitions of healthy food, and ensure that food is discussed in a positive manner without judgement.
- The photos show a diverse collection of families coming from many different cultures. Encourage the students to be mindful of the language they are using and to be respectful with their comments.
- The locally sourced items on the recipes are locally sourced to London Ontario. If your class is outside of London, what are some local options that are available to you?

Additional Resources

- Book: "What the World Eats" by Faith D'Aluisio and Peter Menzel is available for purchase online and is a great resource to have in the classroom.
- Growing Chefs! Ontario YouTube channel

Learning Goals

- Students will further develop an understanding of where the food they eat comes from.
- Students will start to understand the impacts of food systems on their environment.

Success Criteria

- Students demonstrate understanding through group participation.
- Consider establishing more specific success criteria by reviewing grade-specific Healthy Eating curriculum expectations (D3. Making Connections for Healthy Living, D3.1 Healthy Eating).