Environment and Climate Change: Lesson 4 How Can Each Person Help? Math Activity How Far Does Our Food Travel?

Math activity

This numeracy building math activity engages students in looking at how far their food travels so they can reflect on this in terms of how this might affect our environment and climate. It also includes information about nutrition based on the Canada Food Guide.

Overview:

Being aware of where our food comes from and how our choices impact the environment. Students will better understand their consumption habits and how far their food travels from.

Instructions:

- 1. **Ask students where does a person go to get their food/groceries**, after a few answers ask them do they know where their food comes from before the grocery store and do they know how far the food they eat travels?
- 2. **Assign students a meal/snacks for them to research** with an emphasis on produce and whole foods. (Sandwich, fruit salad, veggie wrap etc.) Have students personalize their choices and add as many ingredients as they want and have them create a list.

For example, if you have a class of 28 students you could have them work in pairs and provide them with 14 snack examples. You might want to review Canada's Food Guide at this time.

- Fruits
 - strawberries
 - bananas
 - blueberries
 - apples
 - pears
- Grains
 - o cereals
 - bread
 - o rice
- Vegetables
 - carrots
 - avocados
 - peas
 - potatoes
- Proteins
 - o tofu
 - chicken
 - beef





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In the Canadian Food Guide, we can see that we have different types of foods. We have food that has not been modified like carrots you will find in your lunch box. We also have foods that have been modified like frozen meals, Kraft Dinner, cookies. When you look at labels you will notice stickers on some fruits and vegetables telling you where they come from.

On modified or processed foods you will see labels with nutritional information, ingredients and where they come from and where if they have been packaged. Because sometimes ingredients might come from a different place and will be packaged in a different place.

For example, cashew nuts grow far away in more tropical climates and are shipped and packaged in Canada.

3: Research where ingredients come from or a food product is made and have them calculate km food travelled to them..

You could bring in some examples of packaged food to show them where to find the information on the packaging. And/or go online and show them.

For example Walmart sells the Pita bread shown in this image. The online description explains that this product is "Proudly made in Atlantic Canada."

Have them Google search the distance in kilometers their food travelled and write that down.



Example

Atlantic Canada to Saskatoon is 3,216 km as shown in a Google search image below.





Students add all the km their food has traveled.

You can choose how you want the students to organize the data they are collecting as a Math activity to look at together and compare.



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Table Example

Type of Food	Location food product is made	Distance in kilometres
Pita Bread	Atlantic Canada	3,216
Bananas	Mexico	3,736
	Total distance	Add all distances

- 4. Have students compare their findings with each other in small groups.
- 5: Discuss the advantages of buying local in season foods and have students swap a few items on their list to try and reduce their foods km traveled in total. Have them subtract km from their totals.
- 6: Have students present their findings in small groups.