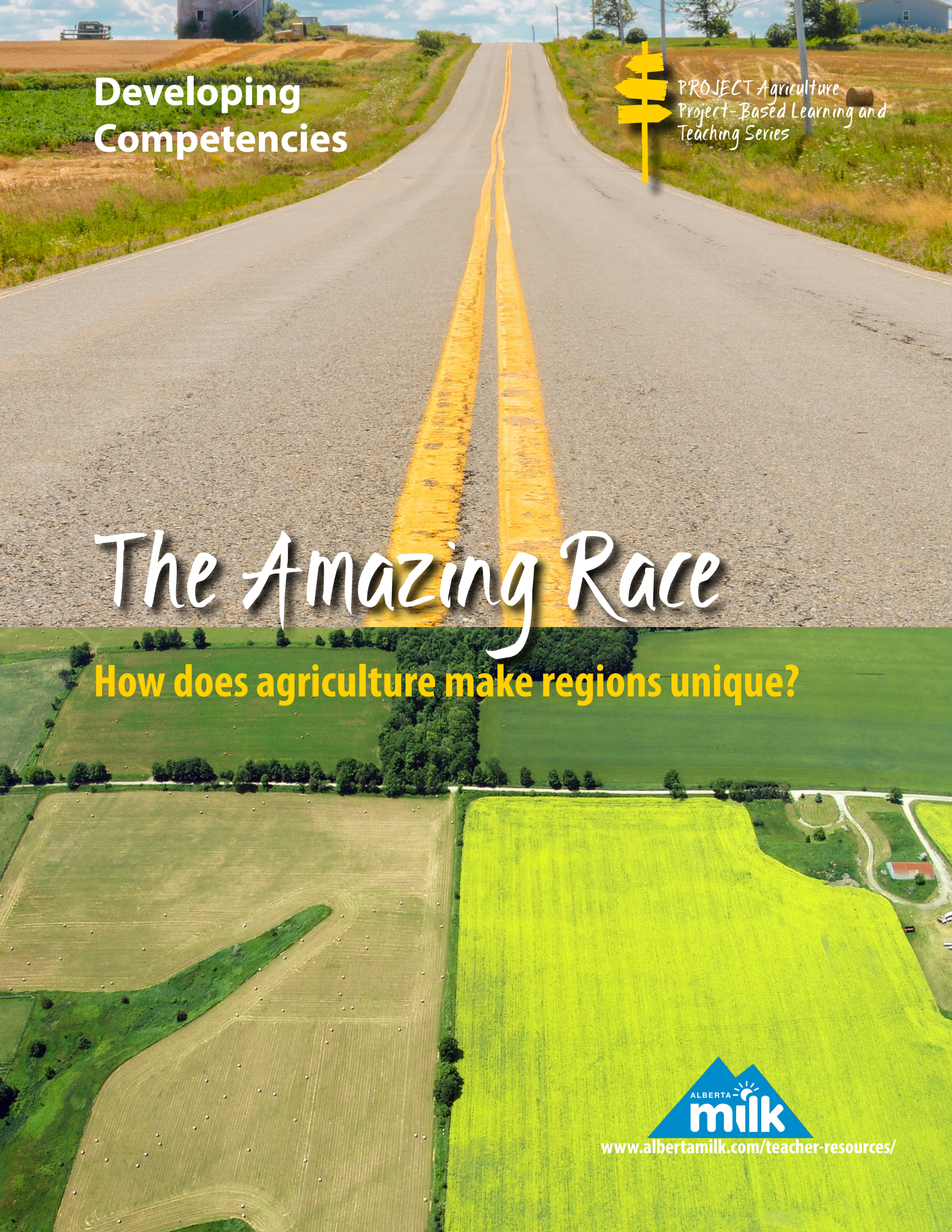

Developing Competencies

PROJECT Agriculture
Project-Based Learning and Teaching Series

The Amazing Race

How does agriculture make regions unique?

ALBERTA milk

www.albertamilk.com/teacher-resources/

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Organize and Use Information to Compare and Analyze Maps

Use the **Cross Country Canada** Learning Source to help you complete these learning tasks.

Make It Personal

Would you describe your community as one that depends on agriculture? Why or why not?

Investigate

Maps are tools that people use to help us see locations, places and features in a large area. A map of Canada's landforms helps us understand different types of information:

- How the land is similar or different
- How much land is covered by similar features
- Where places are in relation to each other

Maps often have a specific focus. For example, one map can show Canada's landforms while another can show its rivers and lakes. Another map can show communities, cities and areas of settlement. Multiple maps can help us make comparisons, see patterns and draw conclusions.

Compare the map of **Canada's Six Geographic Regions** and **Communities that Depend on Agriculture** maps in the **Cross Country Canada Learning Source**. Here's how you can make comparisons between two different maps:

- Use an outline map of Canada to lightly shade or colour the general areas of each of Canada's six regions.
- Then, using a different colour, shade the areas covered by communities that depend on agricultural activities.
- Make a legend that identifies what each colour represents.
- Use your map to respond to the questions.

An **urban** community is an area that is built up and settled by many people. Cities and towns are urban communities.
A **rural** community is found on a more open area of land with less settlement and fewer buildings.

In which regions of Canada would you expect to find the most farms? Why would you expect this?

What type of communities do you think rely more on agriculture - urban or rural? Why do you think this?

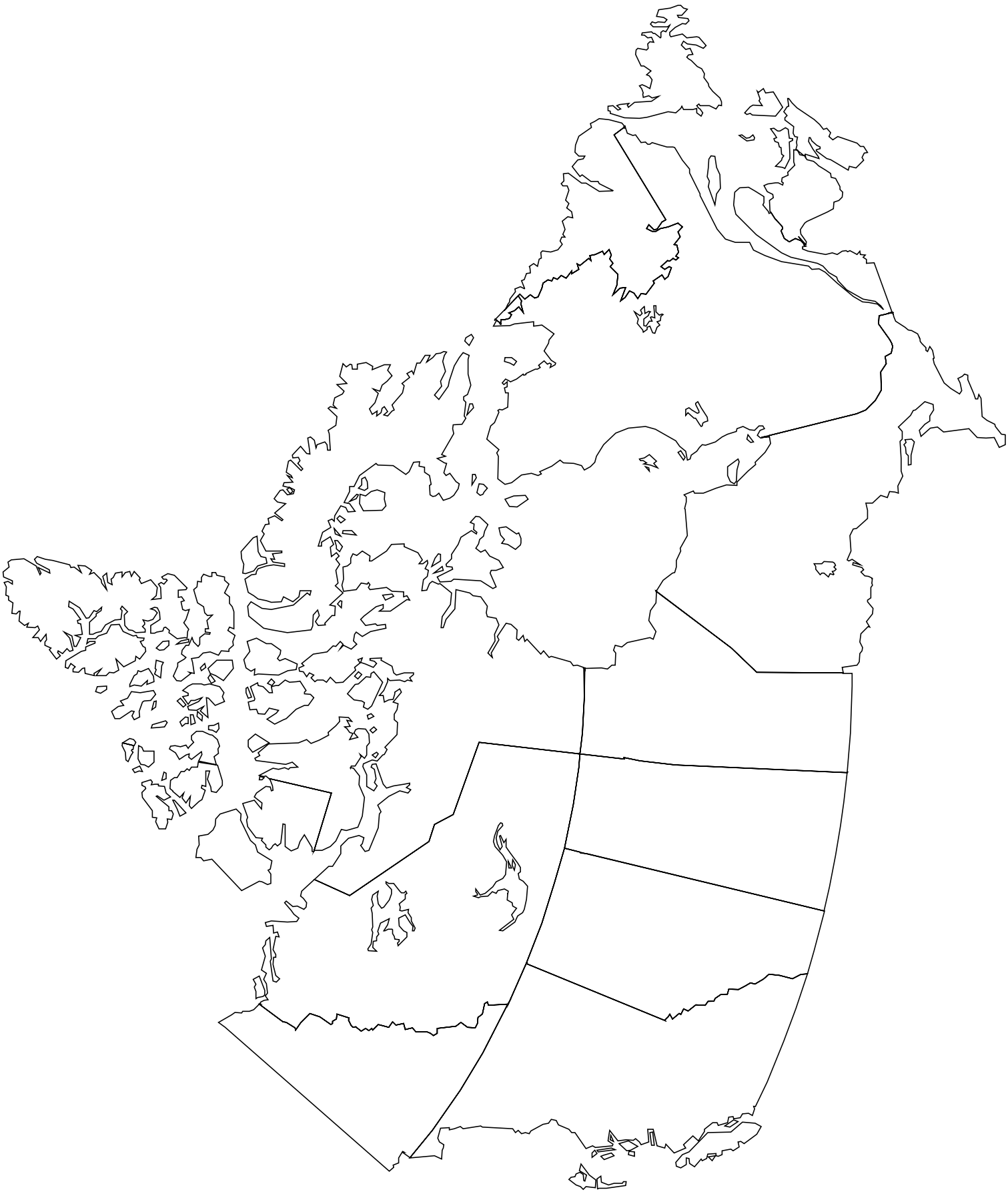
In what ways do you think large urban centres in Alberta depend on agriculture? Why do you think this?

What natural resources would you expect to find around dairy farms? Why?

What types of natural resources would you expect to find around a different type of agricultural activity? Describe an activity other than dairy farming and the natural resource you think this activity most depends on.

Target Learning

	Yes	Sometimes	Not yet
I organize and evaluate multiple pieces of information to build my understandings.			
I interpret the information to make my own conclusions.			
I describe how geographic information is used to build understandings.			



Use Geographic Information to Make Connections

Use **The Farm and Land Connection** and **Finding Farms** Learning Sources to help you complete these learning tasks.

Make It Personal

What features of your community do you think attracted people to it? Why do you think this?

Investigate

Canada's farms are spread throughout the country. Some of Canada's regions have more than others when it comes to the number of farms.

Why do you think these differences exist?

Where do you think each of the types of farms listed in the T-Chart would be located? Do you think they would be closer to cities or areas with a high population density? Or do you think they would be located further away?

Check the box that best describes where you think each type of farm would be located. Then, explain why you made this inference.

Farm Location	Why I Think This
Fruit and Vegetable Farms ☐ Close to cities or high population areas ☐ Further away from cities or high population areas	
Cattle Ranches ☐ Close to cities or high population areas ☐ Further away from cities or high population areas	
Crop Farms ☐ Close to cities or high population areas ☐ Further away from cities or high population areas	
Egg and Poultry Farms ☐ Close to cities or high population areas ☐ Further away from cities or high population areas	

Do you think dairy farms would tend to be located further from or closer to areas with a higher population density? Why do you think this?

What natural resources do you think you would find in each natural region? Describe or sketch two or three examples.

Cordillera	Interior Plains	Canadian Shield
Great Lakes and St. Lawrence Lowlands	Atlantic or Appalachian	Arctic or North

What agricultural products do you think are produced in each region? Describe or sketch two or three examples.

Cordillera	Interior Plains	Canadian Shield
Great Lakes and St. Lawrence Lowlands	Atlantic or Appalachian	Arctic or North

Search

Farm and Food Care's Facebook page provides a number of agricultural photos that can be shared. Find these photos at **www.facebook.com/pg/FarmFoodCare/photos/?tab=album&album_id=667243500040074**.

- Select three photos. How could you use each photo to inform others about agricultural activities in different regions of Canada?

Focus on Alberta. Select and find maps of Alberta's natural resources, including agriculture, soil, forestry, coal, natural gas, and oil in **Alberta's Resource Inventory** at **www.abheritage.ca/abresources/inventory/index.html**.

- Why do you think most of Alberta's dairy farms are located in central and southern Alberta? Compare the information from the **Dairy Farms in Alberta** map in the **Finding Farms Learning Source** to other maps that show climate, landforms and vegetation.

Search

Explore the information on First Nation traditional foods in B.C. in *First Nations Traditional Foods Fact Sheets* at **www.fnha.ca/Documents/Traditional_Food_Fact_Sheets.pdf.**

- What natural resources have First Nation peoples in B.C. harvested and relied on?

- First Nations people in B.C. planted the bulbs and rootlets of root vegetables back into the ground for future harvests. What evidence does this provide that First Nations people were also first farmers?

Target Learning

	Yes	Sometimes	Not yet
I search and retrieve information from digital or print sources.	☐	☐	☐
I locate additional sources to help me clarify or verify information.	☐	☐	☐
I summarize or paraphrase the main or implied ideas found in information.	☐	☐	☐

Explore a Cycle

Use the **Which Came First?** and **Resource Cycles** Learning Sources to help you complete these learning tasks.

Make It Personal

Look at the **Dairy Production and Resources Cycle** illustration in **Resource Cycles**. How do you think you can see it in action in your own community?

Investigate

The **Dairy Production and Resources Cycle** illustration in the **Resource Cycles Learning Source** shows how farmers depend on natural resources as part of the production cycle for dairy farming. They also depend on communities for workers and markets that buy their products.

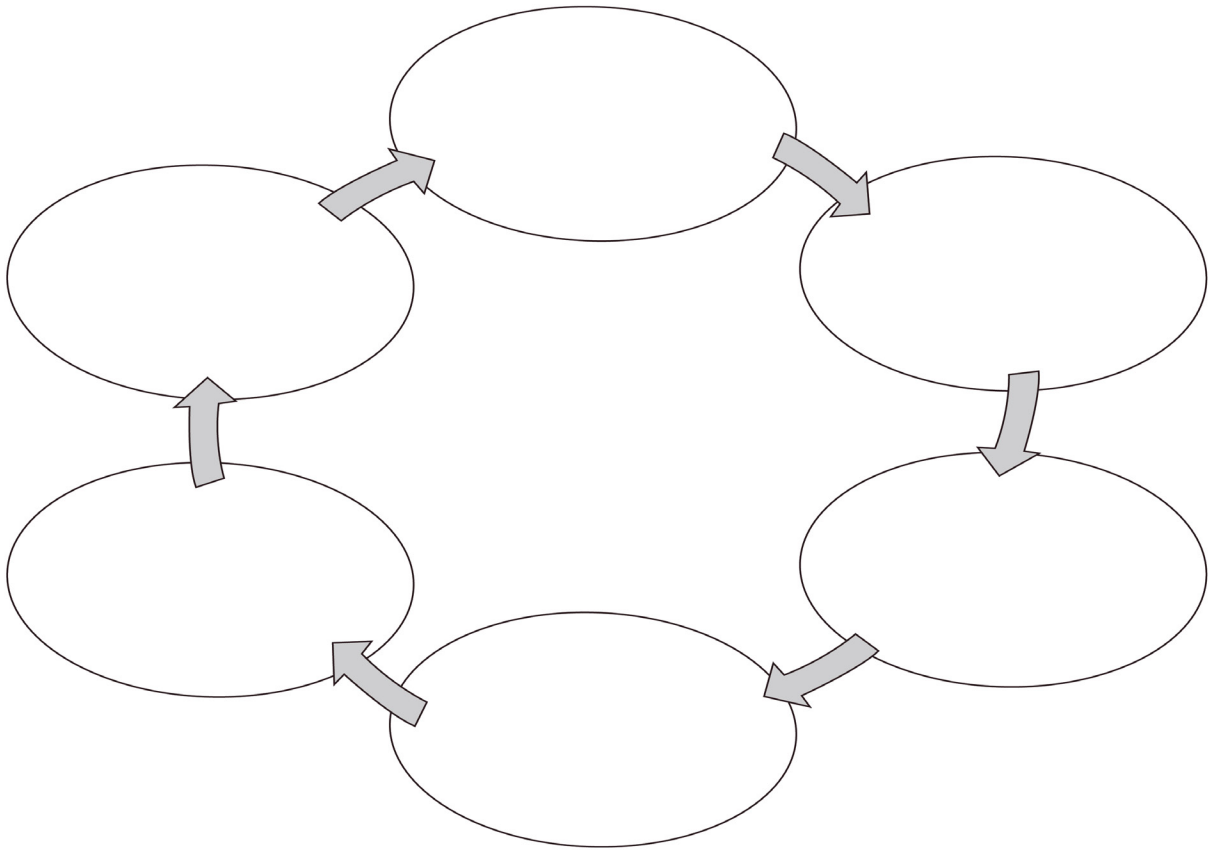
What natural resources and human activities are involved in the production cycle for another type of agricultural activity? Follow the steps below to explore this question.

1. Identify an agricultural activity. For example, you could think about a production cycle for a crop farm, a poultry farm or a vegetable farm. Explain why you picked this activity.

2. List the natural resources and the human activities that are part of the production cycle for this agricultural activity in the two columns of a **T-Chart**.

Natural Resources	Human Activities

3. Once you identify the elements of the production cycle, use a **Cycle Diagram** to place them in order.



The elements in a cycle are related to each other. Each element is affected by the other elements. Any agricultural production cycle is no exception.

What do you think would happen to the production cycle if:

- More and more people move to cities?
- Energy costs increase a lot?
- The number of farms decrease?
- The local grocery store close?
- The only local veterinarian took a job in another province?
- The water supply was polluted?

Use the **Cause and Effect Chart** to explore **two** of these "What if" questions.

- Identify the question you picked in the second column.
- Explain what you think would change in the first column.
- Explain the effect of the change in the third column.

Change	Cause	Effect
People do not have as many food choices.	Truck drivers all go on vacation.	Products, like milk or grain, would not be picked up from farms. There would be no milk or grain to make other foods, like cereal, bread, cheese or yogurt.

Talk about Agriculture

Use the **Adding Value to Natural Resources** Learning Source to help you complete these learning tasks.

Make It Personal

Which agricultural activity of a region intrigues you most? Why?

Investigate

Identify an agricultural activity that you think best represents the unique characteristics or features of a natural region. Describe what is involved in this agricultural activity. Identify its connections to other natural resources or industries in the region.

How does this agricultural activity add value to the quality of life of Canadians?

Create

How can you highlight the unique agricultural activities in a region? Create a challenge task that showcases an agricultural activity and location in one of Canada's natural regions. Model your challenge task on an Amazing Race Canada roadblock or detour. Include a route card with information on how to get to this location.

Target Learning

	Yes	Sometimes	Not yet
I make connections from my experiences and prior learning to new learning.	☐	☐	☐
I identify how agricultural activities add value to my quality of life.	☐	☐	☐
I share what I have learned in new and creative ways.	☐	☐	☐
I make connections between features or characteristics of a natural region and agricultural activities found in that region.	☐	☐	☐
When I gather information and materials on a topic, I create a way to show my understanding.	☐	☐	☐