

ACTIVITY 2

BE A FARM DATA DETECTIVE



TIME REQUIRED: **1 to 2 class periods**

GRADE LEVEL: **Grades 1 to 4**
(easily adaptable for younger or older students)

Lesson overview

In this lesson, students will become farm data detectives, just like the experts who support the Census of Agriculture. They will design agriculture-related questions, survey their classmates, and organize their data to create a simple bar graph that represents their findings.

While students will conduct their own mini-survey in class, they'll also learn that in Canada, agricultural data aren't collected in person—farmers across the country complete the Census of Agriculture themselves by completing their census questionnaire.

This activity introduces students to key concepts in data collection and analysis, reflecting how real agricultural data are gathered.

Curriculum connections



Social Studies

Explore the role of agriculture and food production in Canada; understand how data support community planning and decision-making; develop awareness of Canadian identity.



Math

Practice collecting data, creating simple graphs, and interpreting results.



Language Arts

Develop oral communication skills and practice forming clear, purposeful questions.



Science

Learn about food systems, agricultural practices, and how humans interact with the environment (e.g., through farming and land use).

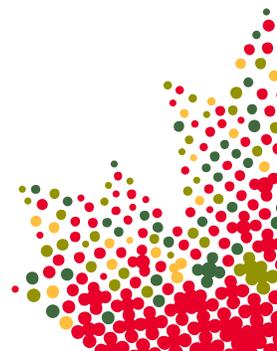
Learning objectives

By the end of this lesson, students should be able to:

- Understand the purpose of the Census of Agriculture and how it helps support agriculture in Canada
- Develop and ask simple survey questions related to agriculture
- Collect, organize, and tally data from their classmates
- Create a basic bar graph to show their findings
- Interpret their results and make connections to how agricultural data are used at the national level.

Materials needed:

- Chart or graphing paper (or an online graphing tool)
- Survey worksheet (see Appendix A)
- Clipboards (optional)
- Markers, rulers, pencils



Lesson procedure:

1 Hook (10 minutes):

- Begin with asking the class the following question: *“If you went to visit a farm, what questions would you like to ask the farmers?”*
- Introduce the idea of the census, focusing on the Census of Agriculture, which takes place every 5 years in Canada.
- Explain that students will become “farm data detectives” for the day.

2 Model the activity (10 minutes):

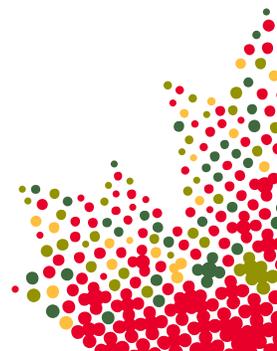
- Share sample questions students could use for their classroom “Census of Agriculture”:
 - What’s your favourite fruit or vegetable?
 - Have you ever visited a farm? (Yes/No)
 - What would you grow if you had your own farm?
 - Which farm animal do you think we have the most of in Canada?
- Demonstrate how to collect answers using tally marks on a chart.
- Show how to turn tally data into a simple bar graph.

3 Student activity - conducting the survey (20 to 30 minutes):

- Each student chooses or is assigned **one agriculture-related question**.
- Students survey their classmates and record responses using tally marks.
- Once complete, students count and total their results.

4 Graphing and analyzing data (20 minutes):

- Students use their data to create a **bar graph**.
- As a class, display and discuss some of the graphs:
 - “What does this tell us about our class?”
 - “How might this kind of data help real farmers or the government make decisions?”



Opportunities for assessment:

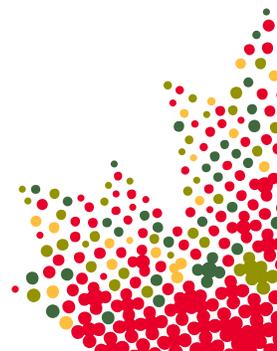
- Observe student engagement and accuracy during the survey process.
- Monitor participation in class discussions and question development.
- Review completed survey worksheets, including tally charts and bar graphs.
- Evaluate responses to the reflection question: “What did I learn about how collecting data helps us understand agriculture in Canada?”

Adaptations and differentiation:

- **To simplify:** Encourage students to use yes/no questions and create bar graphs with support from a teacher or buddy.
- **To extend:** Challenge students to create a double bar graph, comparing responses between two groups (e.g., morning class vs. afternoon class, or students who like fruit vs. students who like vegetables).
- **For multilingual learners:** Show a finished example using one of the sample questions, give students sentence starters to help them talk or write, and pair them with a classmate who can help.

Teacher tips:

- Remind students that the Census of Agriculture is more than just collecting numbers — it helps support farmers and the agricultural community.
- Use this lesson to highlight how **important agriculture is in everyday life**; from the food we eat to the jobs it supports and its role in Canada’s economy.



APPENDIX A

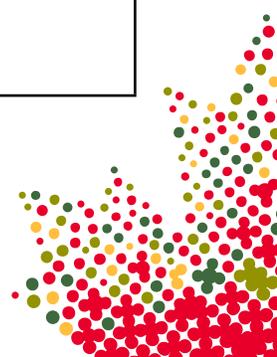
Name: _____

Date: _____

My survey question: _____

Tally chart (keep track of how many people vote for each answer here)

<i>Example:</i> favourite vegetable is carrots = 	



Graph your results here:

