

Are you a “modal” student?

Grades 6 to 8

Teacher's notes

Objectives

Grades 6 to 8 students will:

- read, interpret, and draw conclusions from primary data
- demonstrate an understanding of how data from tables can be used to describe a population
- use the mode to create a profile of a population



Preparations

1. Print out copy of appropriate worksheet for each student:
Grades 6 to 8 worksheet (may print as double-sided page)
2. Prepare copy of class dataset – can be either viewed on computers or printed out for each student or pair of students.
Teachers – if you are printing out the dataset, you may want to choose just enough columns of data for a double-sided page as the entire dataset is about 10 pages long.

Time required

Allow at least 30 minutes for students to complete the worksheet, with additional time for the introduction and the follow-up discussion.

Activity

Page 1

Read the descriptions of the modal male and female student who completed the *Census at School* survey in a previous year (also available on the lesson introduction). Discuss with the class how these descriptions were made and why neither of these students actually exists. Students write a few sentences to explain this at the bottom of page 1.

Page 2

Students choose 5 questions from the *Census at School* survey. They find and record the mode for each question in the table provided. (They can choose to use the class mode, the male mode or the female mode for this activity.) At the

bottom of the page, they write a few sentences describing the modal student for the class, using the information they recorded in the table on page 1. They can start by writing, “The typical (or modal) student in our class ...”.

Follow up

1. Invite students to read their modal student descriptions as a class or in small groups. Talk about why their descriptions of the modal student are not all the same.
2. Discuss how the use of data, such as *Census of Canada* data, can be used to create a profile of a population. Why is this useful?
3. Discuss whether a profile created from a sample of the population could be used to describe the entire population. What planning would be required to ensure that the sample is a good representation of the population?

Are you a “modal” student?

Here is a description of the typical or modal male student who took part in Canada's **Census at School** in a recent year.

He is 13 years old and 162 cm tall, his right foot measures 25 cm and he has a dog. He lives in a household consisting of four people and has brown eyes. He has access to a computer and Internet at home. His favourite sport to play is hockey. He looks up to a sportsperson and usually walks to school.



However, if you looked at the dataset of the survey results for all of Canada, there would be no such student.

Now, let's look at the typical or modal female student who took part in Canada's **Census at School** in a recent year:



She is also 13 years old. She measures 159 cm tall, her right foot measures 23 cm and she looks up to a relative. She likes grain products for breakfast. Her favourite subject at school is Physical Education and her favourite sport is swimming. She spends 26 minutes on the bus each morning to get to school.

However, once again, there is no student who fits this description in the Canadian dataset.

Try to explain why these two students do not exist.

Now you will describe the modal student for your class.

Choose 5 questions from your class dataset. Find the class mode, the female mode and the male mode for each question.



Question from the class dataset	Class mode	Female mode	Male mode

Write a description of the modal student for your class. You may choose the modal male, the modal female, or the modal student of both genders combined.
