



Using Samples and Populations to Collect Data





**Sample -
a portion
of the
population**



Topic:

Favorite TV show of
grade 9 JMH students



Population? Who do you want to ask?

Census: All ^{Gr 9} students at JMH

Sample: 1 or 2 classes

Census -

Costly



Time consuming



Difficult or impossible to complete



Sample -

A sample represents the population.



There is an advertisement...
(making hot sauce.. advance to 3:58)

Explain why a population was surveyed instead of a sample.

To determine the average number of siblings of his classmates, Carlos surveyed each person in his class.



Every 5 years, Statistics Canada conducts a census. One question in the survey is used to determine the ages of the people in each household.





The student leadership team is planning a school dance. To attract grade 9 students to the dance, the team decided to collect data about the preferred music to the grade 9 students. The team set up in the hallway to collect the data. By the end of the day they had surveyed 73% fo the grade 9 students.

Why do you think a sample was used instead of the population?

Will the opinions of the sample likely reflect those of the population?



Identify if the data collected was from a sample or a population.

The province considers banning cell phones in all of its schools. To determine the opinions of students on this issue, you poll each student in your school.



To determine which politician is expected to win the municipal election, every person over 18 and who is eligible to vote in the election is polled.



To determine the average lifetime of a type of light bulb, 150 light bulbs were selected randomly from the production line and tested.

