Teacher Resource

Census History

Focus Questions

Discuss the BTN story as a class and record the main points of the discussion. Students will then respond to the following:

1. Summarise the BTN Census Questions story.
2. What is a census?
3. How often is the Australian Census held?
    a. Every year
    b. Every 4 years
    c. Every 5 years
4. Why is the Census important?
5. What question do a lot of people want added to the next Australian Census?

Activity: Class Discussion

Discuss the BTN Census History story as a class and record the main points on a mind map.

Students will respond to the following:

- What is a census? Write a class definition for the word census.
- How often is a census held in Australia?
- Why do we have a census?
- Do you think it's important to have a census? Why or why not?
- What did you learn from this story?
- Think of three questions you would like to ask about the story.

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KEY LEARNING
Students will learn more about the language of statistics. Students will conduct their own census in the classroom.

CURRICULUM
Mathematics – Year 4
Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values.

Evaluate the effectiveness of different displays in illustrating data features including variability.

Mathematics – Year 5
Pose questions and collect categorical or numerical data by observation or survey.

Describe and interpret different data sets in context.

Mathematics – Year 6
Interpret secondary data presented in digital media and elsewhere.

Mathematics – Year 7
Identify and investigate issues involving numerical data collected from primary and secondary sources.

Calculate mean, median, mode and range for sets of data.

Interpret these statistics in the context of data.

Activity: Vocabulary

Students will brainstorm a list of key words that relate to the BTN Census History story. Here are some words to get them started.

CENSUS	STATISTICS	SURVEY
DATA	PERCENTAGES	SAMPLE SIZE

Ask students to write what they think is the meaning of each word (including unfamiliar words). They will swap definitions with a partner and ask them to add to or change the definition. Check these against the dictionary definition.

Further activities for students:

- The word 'census' has its origins in ancient Rome, coming from the Latin word 'censere'. What is the meaning of censere? When was the first census carried out? What ancient civilisations used censuses?
- What is the difference between numerical data and categorical data? Create a Venn diagram. Give examples of numerical data and categorical data from the last Australian census.
- Who conducts the Australian Census? How do they collect data for the census? Describe the method they use.
- What is a statistical question?

Activity: Warm-up Game

As a class, play this warmup game “The Truth About Me” to get your students thinking about statistics. Refer to these instructions from the University of Texas, to get started – you just need an open space and room for a circle.

Explain to your students that the aim of the game is to learn more about statistics. Use the directions provided to play the game and then use the reflection questions below to spark a discussion:

- What did you notice?
- Which statements made a lot of people move? Why do you think that is?

- What did you learn about your classmates?
- What did you learn about your class as a whole?

Play the game again, but this time nominate someone (it could be a student or the teacher) who can record the information that is shared by the class, collecting as much data as they can throughout the game.

- Which of the data is numerical?
- Which of the data is categorical?
- What was your sample size?
- How might changing the sample size effect your results?
- What are some different ways that the data could be displayed?
- What is the best way to represent the data you collected? Why?
- What assumptions or conclusions can you make about the data?
- Are your assumptions different to your classmates? Compare.
- Use the statistics taken from the game to tell a story about your class.

Activity: Classroom Census

Students will become statisticians and hold a census in their classroom. As a class discuss what you want to learn about the population of your class. Develop questions to investigate student's experiences, opinions and interests. As a class or in small groups, students will design a survey, collect data, sort the information, analyse the data and then communicate their findings. Students can use the following framework to help guide them through the activity.

Write your questions

What do you want to find out about your class?
Make a list of questions that you want to ask.
Remember that your questions need to be statistical questions.
Think about the type of data that you can get. See below for some ideas:

- How do you get to school? (E.g., walk, ride, drive).
- How many people are in your household?
- What is your favourite sport?
- What is your favourite food?
- How much screen time do you have daily?

Which of the questions are numerical or categorical?
What is your sample size?
What is the purpose of your investigation? Write a sentence explaining why the data is being collected and how it will be used.

Collect data

Survey the students in your class using the questions you have formulated. If you are collaborating, assign different roles and responsibilities to each student.

- How will you collect the data?
- What will your census look like? (a paper form, digital)
- Design a form or simple table to record the information.
- Is your census anonymous? How will you respect privacy and protect confidentiality? For example, do not include your names on the census.

Represent data

Sort and enter the information you have gathered into an excel spreadsheet. Use mathematical equations like sum, percentage and averages in your spreadsheet.

- What is the best way to represent the data you have collected? Summarise the information you have gathered and create a graph (e.g., column graph, pie graph, line chart) using excel.
- Consider drawing a diagram or creating an infographic to highlight the survey results.

Interpret data

What do the statistics tell you about your classroom? Write a short paragraph explaining the results.

- How could you use the results from your census to benefit students, their families, and your school community? Make one decision based on the data. Present an argument to your teacher by using the data to support your views.
- If you conducted another survey using a different class, do you think the results would differ from your class data? Explain.
- Did you have a big enough sample size? If you surveyed the whole school how would this effect the results?

Reflection

- What interesting things did the data tell you about your class?
- How could the results collected from this data help your school make better informed decisions?
- Is your census anonymous? How will you respect privacy and protect confidentiality? For example, do not include your names on the census.

Further activity

Make a time capsule which includes the data gathered from your classroom census. Future generations at your school, will be able to learn about the population of your class and then compare to their own.

Useful Websites

- The Australian Census Controversy Explained – BTN Newsbreak
- LGBTQI+ questions government scrapped from 2026 census revealed – ABC News
- Learn and Explore Census Data – Australian Bureau Statistics
- Census 2021 – BTN
- 2021 Census Lesson Guides (PDF)– Australian Bureau Statistics