

Pathfinder Census

**Australian Curriculum V9.0
links for Years 3 to 7**

Science

- Science Inquiry

Maths

- Statistics

Digital Technologies (*some*)

General Capabilities:

- Critical and Creative Thinking
- Numeracy
- Personal and Social Capability
- Literacy

Meet the Pathfinders! Find out how much you, and your classmates, have in common with them.

Learning outcomes

All students will be able to:

- organise data and information
- identify patterns and relationships
- share findings through displays

Some students will be able to:

- share findings through displays to present data in a creative way

Previous knowledge

Before undertaking this activity, get students to complete the Pathfinders Quiz. This can be done online, or using the paper-based quiz sheet. Students must record their answer to share with their classmates.



[Online Pathfinder Quiz](#)



[Paper-based Pathfinder Quiz](#)

Instructions

Tell your students they will collect information from their classmates to see which Pathfinder they are most like.

Students will gather data about their classmates. After they've finished collecting their data, they will organise their information in a way that makes it easier for them to analyse it. After they've analysed their data, they can answer the questions on the graph worksheet.

Note: Students can use the supplied worksheets, or complete this activity in a digital space, using appropriate software and technology. Using digital technology for this task will link it to the following areas in the digital technologies curriculum.

- [AC9TDI4K03](#): recognise different types of data and explore how the same data can be represented differently depending on the purpose
- [AC9TDI6K03](#): explain how digital systems represent all data using numbers



Australian Curriculum V9.0 Links:

Science: Inquiry

AC9S3I04 – Year 3

construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information, show simple relationships and identify patterns

AC9S4I04 – Year 4

construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information, show simple relationships and identify patterns

AC9S5I04 – Year 5

construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data and information and describe patterns, trends and relationships

AC9S6I04 – Year 6

construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data and information and describe patterns, trends and relationships

AC9S7I04 - Year 7

select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information

AC9S7I05 - Year 7

analyse data and information to describe patterns, trends and relationships and identify anomalies

Maths: Statistics

AC9M3ST01 - Year 3

acquire data for categorical and discrete numerical variables to address a question of interest or purpose by observing, collecting and accessing data sets; record the data using appropriate methods including frequency tables and spreadsheets

AC9M3ST02 - Year 3

create and compare different graphical representations of data sets including using software where appropriate; interpret the data in terms of the context

AC9M3ST03 - Year 3

conduct guided statistical investigations involving the collection, representation and interpretation of data for categorical and discrete numerical variables with respect to questions of interest

AC9M4ST01 - Year 4

acquire data for categorical and discrete numerical variables to address a question of interest or purpose, using digital tools; represent data using many-to-one pictographs, column graphs and other displays or visualisations; interpret and discuss the information that has been created

AC9M4ST02 - Year 4

analyse the effectiveness of different displays or visualisations in illustrating and comparing data distributions, then discuss the shape of distributions and the variation in the data

AC9M4ST03 - Year 4

conduct statistical investigations, collecting data through survey responses and other methods; record and display data using digital tools; interpret the data and communicate the results

AC9M5ST01 - Year 5

acquire, validate and represent data for nominal and ordinal categorical and discrete numerical variables, to address a question of interest or purpose using software including spreadsheets; discuss and report on data distributions in terms of highest frequency (mode) and shape, in the context of the data

AC9M5ST03 - Year 5

plan and conduct statistical investigations by posing questions or identifying a problem and collecting relevant data; choose appropriate displays and interpret the data; communicate findings within the context of the investigation

AC9M6ST01 - Year 6

interpret and compare data sets for ordinal and nominal categorical, discrete and continuous numerical variables using comparative displays or visualisations and digital tools; compare distributions in terms of mode, range and shape

AC9M6ST03 - Year 6

plan and conduct statistical investigations by posing and refining questions or identifying a problem and collecting relevant data; analyse and interpret the data and communicate findings within the context of the investigation

AC9M7ST01 - Year 7

acquire data sets for discrete and continuous numerical variables and calculate the range, median, mean and mode; make and justify decisions about which measures of central tendency provide useful insights into the nature of the distribution of data

Pathfinder Census Worksheet

NAME :

Fill out the table below with the data you collect from each of your classmates.

Classmate	Pathfinder	Classmate	Pathfinder

Pathfinder Census Worksheet

NAME :

Using the data you collected from your classmates, tally up how many of your classmates got Mikaela, Stuart, Phoebe, Jamie, etc as their answer.

Pathfinder	Tally
Ajay	
Bardie	
Daisy	
Jamie	
Kayta	
Lisa	
Louise	
Meredith	
Mikaela	
Phoebe	
Renee	
Sharna	
Siobhan	
Skye	
Stuart	
Thomas	

Pathfinder Census Worksheet

NAME :

Now that you've gathered your data, choose the best way to present it. You can use a table, graph, visual or physical model, to organise and process data and information.

Pathfinder Census Worksheet

NAME :

Use the data you have gathered to answer these questions.

1. Which Pathfinder are most of your classmates like? _____
2. Which Pathfinder are your classmates least like? _____
3. Which Pathfinder did you think you would be like? _____

Stretch task. Share your findings in a creative way.