

## Curriculum links

### Year 5 and 6 Science

- With guidance, pose questions to clarify practical problems or inform a scientific investigation, and predict what the findings of an investigation might be based on previous experiences or general rules (VCSIS082)
- Construct and use a range of representations, including tables and graphs, to record, represent and describe observations, patterns or relationships in data (VCSIS085)
- Compare data with predictions and use as evidence in developing explanations (VCSIS086)
- Suggest improvements to the methods used to investigate a question or solve a problem (VCSIS087)

### Year 7 and 8 Science

- Use scientific knowledge and findings from investigations to identify relationships, evaluate claims and draw conclusions (VCSIS111)
- Reflect on the method used to investigate a question or solve a problem, including evaluating the quality of the data collected, and identify improvements to the method (VCSIS112)

### Year 5 and 6 Maths

- 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 (VCMSP179)
- Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies (VCMSP206)

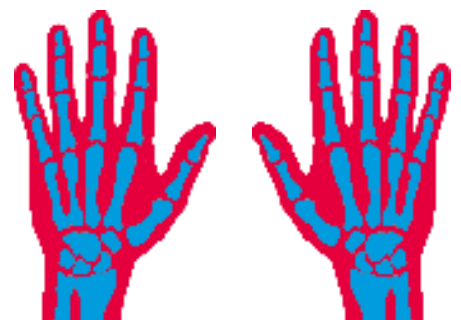
## Learning intention and success criteria

### Learning intention

- To conduct and evaluate a test based on the scientific method.

### Success criteria

- Display and interpret data on a column graph.
- Make conclusions based on results.
- Identify different variables in the scientific method.
- Suggest improvements to a method.



# Instructions to teachers

This activity has been developed for students to see the real world application of using the scientific method to test a hypothesis. Students will need access to basic equipment to conduct the experiment. Teaching resources, including YouTube clips have been included in the task.

The worksheet that students complete is a word document that has been designed using the developer function. This means that students can save the document to their device and are able to modify certain sections to record their answers. Although students are able to quickly adapt to this format, it is recommended that you briefly familiarise yourself with the document before you distribute it to students.

Answers have been provided to you to make feedback to students easier.

# Instructions for students

1. Download the activity, save to your device and then select view and select edit document.
2. Complete the activity and resave to your device.
3. Submit the task and excel file to your teacher for feedback.

# Resources included in activity

- Using excel to construct a column graph: <https://www.youtube.com/watch?v=dwaoJYSiTZ0>
- Variables in the scientific method: <https://www.youtube.com/watch?v=iaewZmc4TYQ>

