

Life on the Murray River

Activity 4

View the 'Life on the Murray River' VR tour at www.lsv.com.au/vr

LEVELS 3 & 4



Key Learning

During this lesson, students will investigate rainfall in the Murray-Darling Basin over the past year and create a bar graph to visualise how much water this actually is.



Resources

- Smartboard or projector
- Computer access for students
- Poster paper
- Rulers
- Appendix A: *Monthly Rainfall Data*



Engage

Watch [1956 Murray River Floods](#) (the first video on the webpage).

- How did the community respond to this disaster?
- Why did the flood spread so far across the land?
- Where did this water come from?
- What dangers do floodwaters pose?
- Explain why you should always check rainfall and conditions before swimming in the river?



Explore

- As a whole class look at the [Murray Darling Basin map](#).
- Students will research a city within the Murray-Darling Basin. Students need to collect data regarding total rainfall for the town/city for each month of the previous year. They should collate this data using Appendix A: *Monthly Rainfall Data*. A useful website is [Climate Data Online](#) from the Bureau of Meteorology.



Curriculum

Geography – Geographical Concepts and Skills

Data and information

Levels 3 & 4

- Represent data and the location of places and their characteristics by constructing tables and simple graphs and maps of appropriate scale that conform to cartographic conventions of border, scale, legend, title and north point ([VCGGC075](#))

Geography – Geographical Knowledge

Diversity and significance of places and environments

Levels 3 & 4

- Main climates of the world and the similarities and differences between the climates of different places ([VCGGK081](#))

Mathematics – Measurement and Geometry

Using units of measurement

Level 3

- Measure, order and compare objects using familiar metric units of length, area, mass and capacity ([VCMMG140](#))

Level 4

- Use scaled instruments to measure and compare lengths, masses, capacities and temperatures ([VCMMG165](#))

Mathematics -Statistics and Probability

Data representation and interpretation

Level 3

- Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies ([VCMSP149](#))

Level 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 ([VCMSP179](#))



Explain

Model to the whole class how to graph this data as follows:

- Draw the sample data table (right) on the board.
- Show students how to set up their graphs by ruling two axes. Label the horizontal axis with the months and the vertical axis with millimetres. Point out that the vertical axis needs to be at least as tall as their largest monthly rainfall measurement.
- Model how to build the bar graph, using the ruler to measure each total

Town: Examplesville

Year: 3000

Month	Total rainfall (mm)
January	37.2
February	54.6
March	113.5
April	68.9



Elaborate

- Allow students enough time to create their own bar graphs, using the data they collected, on the poster paper provided. Remind them to include a title and label for each axis.



Evaluate

- Students now need to show their graph to a partner. They should compare their months of most and least rainfall.

As a whole class, discuss:

- What would we need to do to change these measurements to cm? (Maybe try a few examples!)
- Which town had the most/least total rainfall for the whole year?
- What do you think the average rainfall for the entire year was across these towns?
- How do you think this might compare to towns/cities in other parts of the country?
- Which parts of Australia do you think would get more/less rain than the Murray-Darling Basin?

References

Discover Murray River, 1998-2018. *1956 Murray River Floods*. [online video] Available at: <http://www.murrayriver.com.au/about-the-murray/1956-murray-river-floods> [Accessed 15 July 2020]

Murray-Darling Basin Authority. *Murray-Darling Basin Boundary Map*, https://www.mdba.gov.au/sites/default/files/pubs/Murray-Darling_Basin_Boundary.pdf [viewed 15 July 2020]

Bureau of Meteorology. *Climate Data Online*, <http://www.bom.gov.au/climate/data/?ref=fr> [viewed 15 July 2020]

