

# INVESTIGATIONS

GAMES WIDE OPEN by Lindy Sharkey

With the 2024 Paris Olympics just around the corner, now is our chance to use the global celebrations of sportsmanship and camaraderie to energise our learners in the maths classroom. The activities and investigations below have been designed to make the most of the Games as well as the lead up and follow on from the Paris Olympics.



## PREDICTING MEDAL TALLIES

In the lead up to the Games, there are plenty of analysis models predicting the medal tally. There are two main predictions given; the number of gold medals won, and the total number of medals won. Some of the algorithms used are based on the results of ongoing competition events such as world championships, others use previous success or current economic conditions of each country. Investigate the relationship between a country's success and

- their previous success
- their population
- economic resources available.

Use the data you collect to predict the number of medals of competing countries.

### CURRICULUM CONNECTIONS:

Level 7: VC2M7ST03 plan and conduct statistical investigations for issues involving discrete and continuous numerical data, and data collected from primary and secondary sources; analyse and interpret distributions of data and report findings in terms of shape and summary statistics

Level 9: VC2M9ST04 choose appropriate forms of display or visualisation for a given type of data; justify selections and interpret displays for a given context

Level 10: VC2M10ST02 construct scatterplots and consider a line of good fit; comment on the association between the two numerical variables in terms of strength, direction and linearity

## BRINGING YOUR DATA TO LIFE

During the Olympics, create your own interactive graphs and charts, displaying data in real-time using Flourish. Flourish is a digital tool that is free to use in educational settings, there are simple steps to follow for students to create interactive charts, maps and stories, or you can check out the Flourish blog from <https://flourish.studio/blog/visualizing-olympics/> 'Exploring the evolution, achievements, and highlights of the Winter and Summer Olympics through data visualization' February 26, 2024, written by Vanessa Fillis.

In this blog, Vanessa shares examples of interactive charts to engage students in Olympic data. Demonstrate or have students use the charts from the blog for their investigations or they can even create their own charts using the library of easy-to-use templates provided.