



# Queensland Science Contest 2021

## Mathematical Investigations Category Bursary

Sponsored by QAMT

This is an opportunity for Queensland students from Prep to Grade 12 to have their mathematical work judged for awards and prizes. It is currently in its 66th year!

Projects can be on any mathematical topic and may be presented in a variety of forms such as:

- Written report
- Written as a booklet, brochure or poster
- Video

Winning & some runner up entries from this competition are submitted to the National Mathematics Talent Quest Competition.

**Get Credit and Cash - Why  
not enter your school  
PSMT or assignment?**



Science  
Teachers  
Association of  
Queensland

- \*Scientific Investigations
- \*Engineering & Technology
  - \*Classified Collections
  - \*Environmental Action
- \*Communicating Science
  - \***Mathematical Investigations**
  - \*Poster Presentation

## Over \$12000 in prizes!

Prep - Year 12 students  
\$5 for individual entries  
\$10 for group entries

## Register by 7 October 2021

More information:  
[www.staq.qld.edu.au](http://www.staq.qld.edu.au)



Queensland  
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Mathematics  
Teachers

# Category: Mathematical Investigations

## What to do:

1. Choose a topic for your investigation
2. Collect the necessary background information and clearly state a realistic problem to investigate
3. Use mathematical approaches to solve the problem
4. Present a report to tell others what you did and what you found out. Include any references and acknowledge the assistance you receive

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## What makes a winning entry?

- The topic of the investigation should be relevant, original and creative It should address an issue of significance that may be of a social, local or personal nature.
- The approach should be original, creative and resourceful and integrate a range of mathematical concepts and processes.
- The report should include:
  - Clear questions/aims for investigation
  - Details of the materials used and the procedure
  - Evidence of replication of results (if appropriate), accuracy and thoroughness
  - Results, observations, measurements, graphics and text
  - Discussion of the results referring to the aims
  - Explanation of errors and anomalies, reflection and assumptions made
  - Reasonable conclusion
  - Suggestions for further research
  - Appropriately acknowledge any assistance. Clarify which aspects of the project were devised and carried out alone and which aspects were not and what sort of assistance was provided.

## Some ideas to get you started:

Students are encouraged to investigate a particular theme utilising and expanding on mathematical concepts learnt in class. An excursion to the Zoo, or museum could provide a useful source of ideas and motivation for projects. Current events or special celebrations such as the International Year of the Periodic Table may also prove a starting point. Students could choose to investigate the mathematical content of a specific interest eg. maths in basketball, budgeting for a holiday. More project ideas and past winners' samples can be found on the competition website. Consider entering your school Problem Solving and Modelling Task (PSMT) or assignments if they meet the competition criteria.