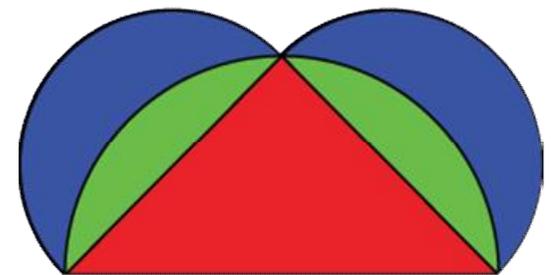


# Network of Expertise 2018 - 2020

National and Regional Mathematics Associations

VUW/WMA Symposia

December 2018



History...

What are Networks of Expertise?

Networks of Expertise seeks to grow and develop existing and new curriculum, teaching and learning networks.

Networks of Expertise supports subject associations and broader networks used by teachers and school leaders to support and improve their teaching practice. The focus is building teacher capability at school/kura and Kāhui Ako at regional and national levels.

Networks of Expertise emerged from the redesign of Professional Learning and Development (PLD). The PLD Advisory Group report in 2014 recognised the importance of providing support for subject associations and the Teacher Refresher Course Committee, and the need for brokering and connecting with stakeholders to build the local and national networks required for subject expertise.

<http://services.education.govt.nz/assets/Uploads/Needs-Analysis-Networks-of-Expertise.pdf>

3 rounds of  
funding...shortened to 2!

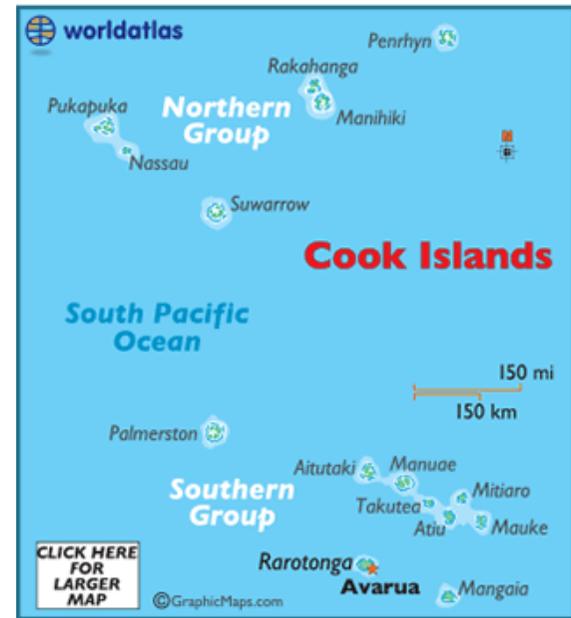
45 across the country  
BUT ours is SOOOOO  
different!



<http://services.education.govt.nz/pld/networks/where-can-i-get-support-2/>



8



## Now...

NZAMT and your regional Mathematics Associations have been funded for the next two years to support teachers and leaders within the Mathematics and Statistics learning area. As part of the support a national and regional Kaiārahi have been, or are being appointed across all regions of New Zealand. The national Kaiārahi is responsible for national and regional needs, the regional Kaiārahi is responsible for regional and local needs.

This survey is to assist the national and regional Kaiārahi to support teachers and schools through identifying national, regional and local needs.

As a result we expect to undertake different activities and supports for teachers and leaders in mathematics and statistics including:

- \* coordinating a series of workshops to address national, regional and local needs of teachers and delivered as cluster workshops

- \* supporting teachers' personal development, in clusters, of:

1. content knowledge and requirements of solving problems - pedagogy
2. curriculum knowledge
3. learning progressions within the learning area of mathematics and statistics
4. leadership

- \* assisting beginning teachers (PCTs) with meeting the requirements of the teaching standards for teacher registration

- \* supporting middle leaders (HoDs and HoFs)

- \* supporting the development of culturally responsive pedagogies

- \* using the Teaching as Inquiry spiral.

Network of Expertise Survey (Y1-6) - 46

Network of Expertise Survey (Y7-10) - 132

Network of Expertise Survey (Y11-13) - 188



*“This is interesting, 70% of the respondents to our survey said they don't respond to surveys.”*

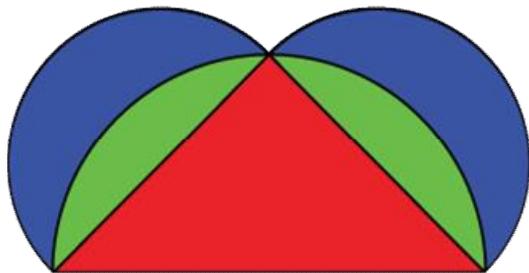
## Next steps...

To develop a model that will meet the diverse needs of the teachers and enabling the use and connectedness to the Networks of Expertise, enhancing the delivery of subject specific learning and development for teachers of mathematics and statistics. This is to be established to offer support to primary and secondary teachers and middle leaders with networks of expertise, with the philosophy of “For teachers, by teachers”.

This would enable:

- a. a greater range and frequency of subject specific PLD and the ability for these to be regionally and locally based to minimise the impact on teachers who are in isolated communities and schools (Based on survey).
- b. a service for schools looking for subject specific PLD support
- c. an oversight of secondment processes for regional and national curriculum experts to act in advisory roles within the Hub and are attached to particular networks.
- d. a coordination of skills development and practical support for associations/networks to enable them to operate more effectively and sustainably.
- e. the sharing of knowledge and skills between and across networks by identified experts.
- f. assistance with developing new networks to build and meet the needs of teachers
- g. develop an online presence.

Regional coverage would be by linking local Mathematics Associations (clusters) and the National Body (NZAMT) who will coordinate and support both regional and national messages and coordinate an overarching curriculum database.





This national newsletter has been produced by the **National Kaiārahi with the support of NZAMT and the Regional Mathematics Associations**, as part of Network of Expertise funding.

NZAMT Contact: P O Box 26-582, Epsom, Auckland. <http://www.nzamt.org.nz>

## Network of Expertise Newsletter: Mathematics and Statistics

Information and resources for Year 1 – 13 teachers | Term 4 2018

### Whakatauki

**Ma whero ma pango ka oti ai te mahi.**

With red and black the work will be complete.

This refers to co-operation, if everyone does their part, the work will be complete. The colours refer to the traditional kowhaiwhai patterns on the inside of the meeting houses.

URL: <https://tinyurl.com/y9llrhk8>, a shortened weblink from nzmaths.

### Welcome to term 4, 2018

I am writing to you as the newly appointed National Kaiārahi for the

Contact details for the  
National and Regional  
Kaiārahi

#### **National NZAMT**

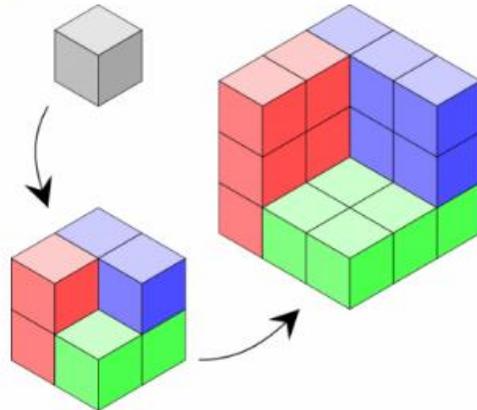
Derek Smith

Phone: 027 460 2871

E: [kaiarahi@nzamt.org.nz](mailto:kaiarahi@nzamt.org.nz)

#### **Northland**

## MathsCraft



# MathsCraft

*Doing maths like a research mathematician*

*How does a mathematician think about and solve a problem?*

*What does "doing maths" look like?*

## Flip away my friend!

Derek has two 'coins', each with two faces.

Derek shows you one face of one coin and it has the number 10 on it.

Derek shows you one face of the other coin and it has the number 7 on it.

Each coin also has a number on the flip side, but Derek does not show you!

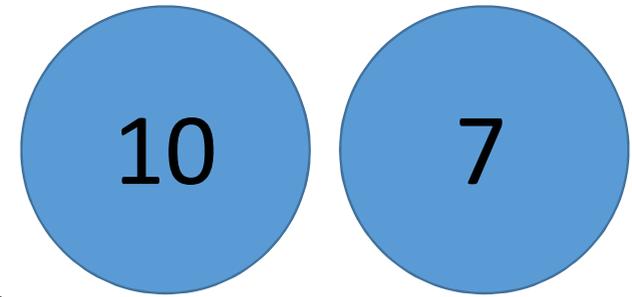
Derek then says, "I've flipped the pair of coins ten times and the sum of the upward faces, on landing, was:

11, 12, 17, 11, 16, 12, 12, 11, 17 and 16."

Derek challenges you to determine what numbers are on the flip side of each coin.

Do your best!

Ohhh...., you can only ask me one question, and it cannot be about a specific side of either coin, so what questions would you **NOT** ask me?



## Race to the Nugget (RTTN)

Race to the Nugget is a game for two players and is played on a grid of squares.

Game play is governed by the following rules:

- Each player has a mark, either a **O** or a **X**
- One player starts by placing their mark in the 'START' square. This person is known as Player 1.
- The other player, known as Player 2, then places their mark in one of the three squares touching the 'START' square.
- *They have 15 seconds to make their move*
- The players then take it in turns placing their mark in a square that is either
  - one right or one up or one up and one right of the immediately previously made mark.
- Play continues until one player places their mark on the gold nugget. That player is the winner.
- Before the start of the game, a coin is flipped and the winner can either choose to be Player 1 or Player 2.

Can you become a Master of RTTN?

The playing board is on the right.

**O** \_\_\_\_\_ vs **X** \_\_\_\_\_

							
<b>START</b>							

Hei kona mai me ngā mihi

Derek