Tahakopa School Mathematics Statement

"…mathematics plays a key role in shaping how individuals deal with the various spheres of private, social and civil life."
(Mathematics BES)

The New Zealand Curriculum

What is mathematics and statistics about?
Mathematics is the exploration and use of patterns and relationships in quantities, space, and time. Statistics is the exploration and use of patterns and relationships in data

Why study mathematics and statistics?
By studying mathematics and statistics, students develop the ability to think creatively, critically, strategically, and logically. They learn to structure and to organise, to carry out procedures flexibly and accurately, to process and communicate information, and to enjoy intellectual challenge. Mathematics and statistics have a broad range of practical applications in everyday life, in other learning areas and in workplaces.

How is the learning area structured?
The achievement objectives are presented in three strands. It is important that students can see and make sense of the many connections within and across these strands.

Number and Algebra - Number involves calculating and estimating, using appropriate mental, written, or machine calculation methods in flexible ways. It also involves when it is appropriate to use estimation and being able to discern whether results are reasonable. Algebra involves generalising and representing the patterns and relationships found in numbers, shapes, and measures.

Geometry and Measurement - Geometry involves recognising and using the properties and symmetries of shapes and describing position and movement. Measurement involves quantifying the attributes of objects, using appropriate units and instruments. It also involves predicting and calculating rates of change.

Statistics - Statistics involves identifying problems that can be explored by the use of appropriate data, designing investigations, collecting data, exploring and using patterns and relationships in data, solving problems, and communicating findings. Statistics also involves interpreting statistical information, evaluating data-based arguments, and dealing with uncertainty and variation.

Financial Literacy – financial literacy involves developing the financial capabilities around money, spending, saving and investing, income and taxation, budgeting and financial management.

What is important to us

Number and Algebra

Students will:

- recall basics facts.
- use mental methods to calculate answers as well as written methods.
- estimate answers.
- check the reasonableness of their answers.
- understand that numbers are made up of patterns that are predictable.
- communicate and explain their thinking verbally.
- apply number knowledge to everyday life.

Geometry and Measurement

Students will:

- read measurements on measuring tools accurately.
- use the appropriate units to measure everyday objects.
- convert one standard unit to another
- calculate measurements and quantities.
- tell the time.
- recognise the different properties of shapes
- use direction in practical applications

Statistics

Students will:

- design investigations where they collect data.
- present data in a variety of ways.
- understand the practical applications of statistics.
- identify trends in data.
- explore the patterns and meanings in data.

Financial Literacy

Students will:

- use money appropriately.
- Make choices according to needs and money available
- Know the difference between needs and wants and budget accordingly.
- know how to save
- know how to keep financial resources safe