Truganina College
Inspiring Excellence in Learning to Believe, Achieve and Succeed.

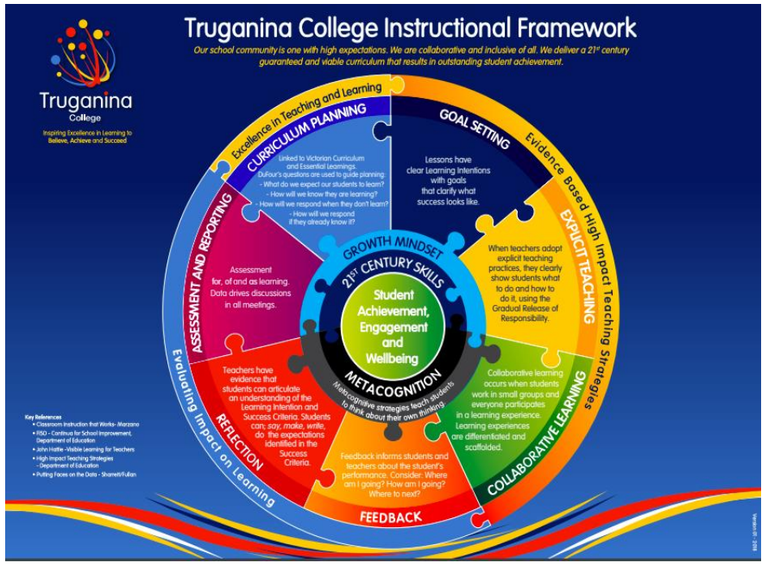
Foundation - Year 4 Maths Overview
Term 4, 2024

Our school community is one with high expectations.
We are collaborative and inclusive of all.
We deliver a 21st century guaranteed and viable curriculum that results in outstanding student achievement.

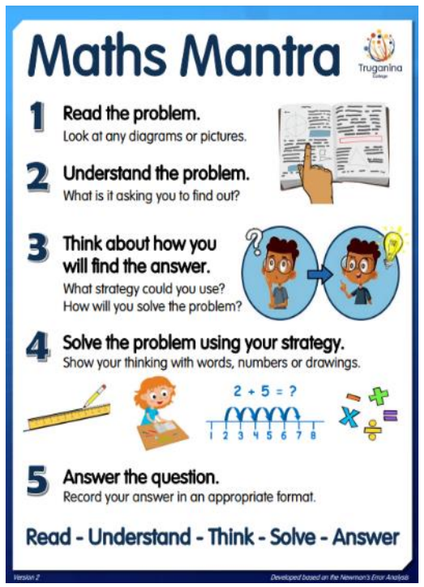
The Maths Curriculum links directly to the High Impact Teaching Strategies (HITS)

The differentiated Maths Curriculum links directly to the College's Strategic Plan
Goal 1: To improve student's learning outcomes in Literacy and Numeracy.
Goal 2: To empower students to become independent and self-regulating learners.
Goal 3: To enhance the health and well-being of all students.

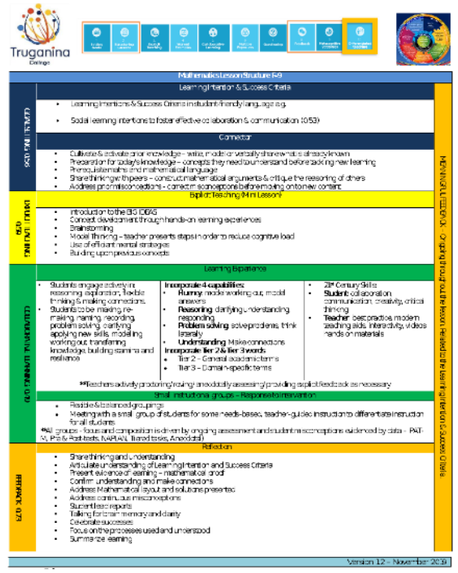
Instructional Framework



Maths Mantra



Maths Lesson Structure



21st century learning

- Ways of Thinking: Creativity & Innovation, Critical Thinking, Problem Solving & Decision Making, Learning to Learn
- Ways of Working: Communication & Collaboration
- Ways of Living in the World: Local & Global Citizenship, Personal & Social Responsibility, Life & Career
- Tools for Working: Information Literacy, Information & Communication Technology (ICT) Literacy

Curriculum Planning - Refer to DuFour's questions
What do we need our students to learn?
How will we know they are learning?
What will we do if they have already learned it?
What will we do if they have not learned?

Assessment & Reporting - Data drives discussion in all meetings

Maths Proficiency Strands
– Understanding, Fluency, Problem Solving and Reasoning

The four proficiency strands will continue to be embedded across each term. For details of the four strands, refer to the Mathematics Curriculum

- The Compass Learning Tasks will be the Common Assessment Task for the first unit.
- Mental Strategies A – S will be based on the Truganina College Efficient Mental Strategies
- Big Ideas in number outline of concepts
- Misconceptions are based on MOI and Common Unit Assessments as questions from these tests have been taken from previous NAPLAN and PAT Assessments
- F – Year 6 Yearly Overview

Foundation

Number & Algebra

Combining and Separating Unit **(from 0 to 10)**
(VCMNA073)

The focus of this unit at Foundation is:

- Begin to explore combining and counting back as addition and subtraction strategies with numbers to 10
- Represent and solve simple addition problems to 10
- **Patterns:** Identify repeating parts and errors (term 3 - number focus)
- **Money (year 1 foci)**
  - Identify features of Australian coins and match these to the value
  - Classify and arrange coins according to attributes, such as size and value.

Measurement & Geometry

Mass Unit
(VCMMG078)

The focus of this unit at Foundation is:Using Units of Measurement

- Understand mass as how heavy things are
- Use simple mathematical language to compare mass

Capacity Unit
(VCMMG078)

- Explore capacity as how much containers can hold using comparative language, such as 'holds less' and 'holds more'

Year 1

Number & Algebra

Fractions Unit
(VCMNA091)

The focus of this unit at the Level 1 is:

- Investigate the concept of half with simple shapes in everyday situations (*fractions of a whole*)
- Divide collections into equal halves *(fractions of collections)*

Statistics & Probability

Chance Unit
(VCMSP100)

The focus of this unit at the Level 1 is:

- Describe the likelihood of outcomes to familiar events and connect to real-life examples to the language of chance

Measurement & Geometry

Capacity Unit
(VCMMG095)

The focus of this unit at the Level 1 is:

- Explore capacity of different containers and select appropriate informal units with which to measure capacity

Location Unit
(VCMMG099)

The focus of this unit at the Level 1 is:

- Understand and interpret location language, such
- as 'next to' and 'between' and describe the position of one object in relation to another
- Give and follow directions involving simple mathematical language including 'clockwise' and 'anticlockwise'

Year 2

Number & Algebra

Fractions Unit
(VCMNA110)

The focus of this unit at the Level 2 is:

- Investigate halves, quarters and eighths of objects and represent fractions in drawings and numbers (*fractions of objects*)
- Investigate halves, quarters and eighths of *collections*
- Give a numerical value to fractions of small *collections*

Measurement & Geometry

Capacity & Volume Unit
(VCMMG115)

The focus of this unit at the Level 2 is:

- Measure, compare and order the capacity or volume of everyday items using uniform informal units
- Understand the difference between capacity and volume.

Location Unit
(VCMMG099)

The focus of this unit at the Level 2 is:

- Find objects on a plan or picture according to simple directions (*Interpreting Maps)*
- Create a simple plan and describe the position of objects

Statistics & Probability

Chance Unit
(VCMSP125)

The focus of this unit at the Level 2 is:

- Consider and describe the likelihood of common events using the language of chance
- Classify events according to likelihood

Year 3

Number & Algebra

Fractions Unit
(VCMNA136)

The focus of this unit at the Level 3 is:

- Explore equal shares of wholes and collections to make and describe halves, quarters, thirds and fifths
- Use a fraction set to identify equivalents of multiples of common fractions
- Describe fractions in terms of numerators and denominators with the aid of a number line
- Investigating the link between fractions and money (e.g ½ price)

Measurement & Geometry

3D Objects Unit
(VCMMG142)

The focus of this unit at the Level 3 is:

- Explore the properties of 3D objects and use this knowledge to construct objects.

Capacity & Volume Unit
(VCMMG140)

The focus of this unit at the Level 3 is:

- Estimate measure and compare the capacity of containers using informal units and litres

Statistics & Probability

Chance Unit
(VCMSP147) (VCMSP150)

The focus of this unit at the Level 3 is:

- Use the language of chance to identify the likelihood of everyday events occuring (*chance events*)
- Conduct simple *chance experiments* and compare and explain the results

Year 4

Number & Algebra

Fractions and Decimals
(VCMNA157) (VCMNA158) (VCMNA159)

The focus of this unit at the Level 4 is:

- Investigate, compare and rename equivalent fractions of a whole.
- Represent fractions on a number line to find equivalence and count by halves, quarters and thirds.
- Identify improper fractions and convert them to mixed fractions with the aid of a number line.
- Explore tenths and hundredths as fractions and as decimals using tools such as hundred grids and number lines.

Measurement & Geometry

Volume and Capacity
(VCMMG165) (VCMMG166)

The focus of this unit at the Level 4 is:

- Estimate, measure and compare the capacity of containers using litres and millilitres. Investigate volume using centicubes and unfamiliar units.

3D Objects Unit
(VCMMG171) (Working towards Year 5: VCMMG198)

The focus of this unit at the Level 4 is:

- Explain and compare the geometric properties of three-dimensional objects.
- Compare cross sections and nets of familiar 3D objects and identify examples of objects such as prisms and pyramids in the environment.

Statistics & Probability

Chance Unit
(VCMSP175) (VCMSP176) (VCMSP177)

The focus of this unit at the Level 4 is:

- Assess and describe the likelihood of various events occurring and investigate the fairness of chance.
- Investigate possible outcomes of chance experiments and conduct chance experiments to explain the likelihood of events occuring.

Updated on 11 September 2024