

Foundation - Year 4 Maths Overview Term 3, 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)



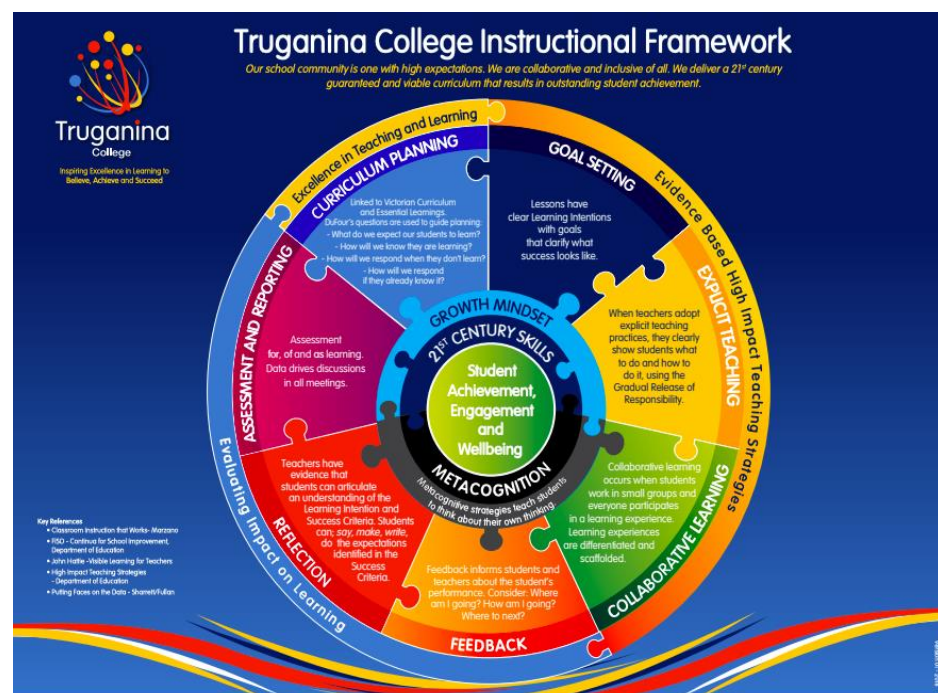
The differentiated Maths Curriculum links directly to the College's Strategic Plan

Goal 1: To improve student's learning outcomes in Literacy and Numeracy.

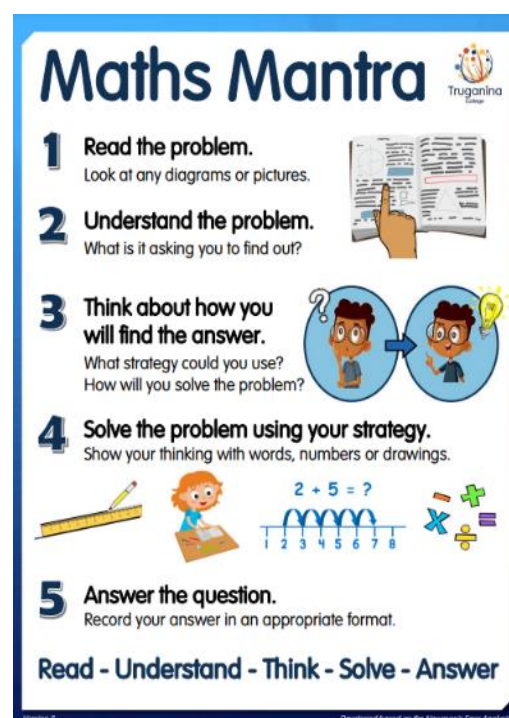
Goal 2: To empower students to become independent and self-regulating learners.

Goal 3: To enhance the health and well-being of all students.

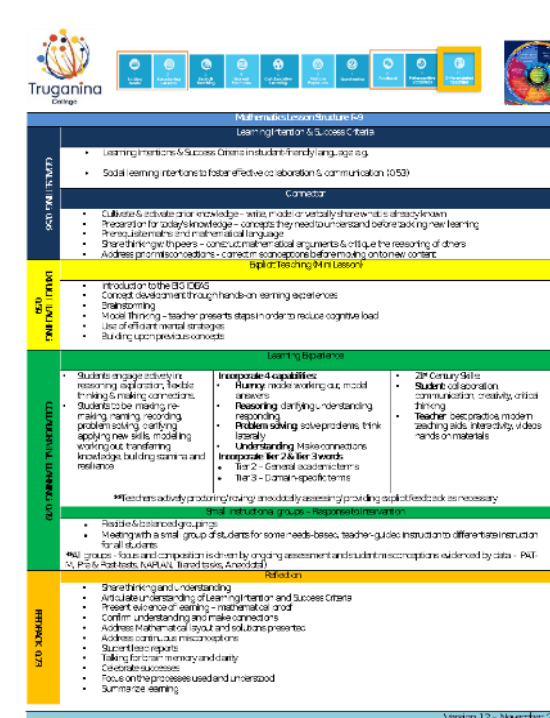
Instructional Framework



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 processes 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 | Year 1 | Year 2 | Year 3 | Year 4 |
|--|--|---|--|--|
| <p>Number & Algebra Counting and comparing collections Unit (collections of 20) (VCMNA072) <i>The focus of this unit at Foundation is:</i></p> <ul style="list-style-type: none"> Explore the number sequence to 20 forwards and backwards Identify number before and after Identify missing numbers in a sequence Count, recognise and represent numbers in the teens Compare how many more or less items are in collections to 20 Explore number patterns using a calculator <p>Addition and Subtraction Unit (Grouping 0 - 10: part-part-whole) (VCMNA073) <i>The focus of this unit at Foundation is:</i></p> <ul style="list-style-type: none"> Begin to explore addends for numbers to 10 Identify pairs of numbers that make a given total <p>Measurement & Geometry Shapes and objects Unit (3D shapes) (VCMMG081) <i>The focus of this unit at Foundation is:</i></p> <ul style="list-style-type: none"> Recognise, name and describe simple features of common 3D objects Patterns <ul style="list-style-type: none"> Investigate and describe similarities and differences between objects, including colour and size (Term 2 & 3 with shape) Make patterns using given objects | <p>Number & Algebra Multiplication and Division Unit (VCMNA090) <i>The focus of this unit at the Level 1 is:</i></p> <ul style="list-style-type: none"> Investigate and describe number patterns in a 100s charts and use this knowledge to assist with skip counting Explore practical situations involving skip counting Use a calculator to observe counting patterns Interpret, represent and solve simple repeated addition and repeated subtraction stories Skip counting and sharing money 'Fair share' <p>Measurement & Geometry 3D Objects Unit (VCMMG098) <i>The focus of this unit at the Level 1 is:</i></p> <ul style="list-style-type: none"> Identify features (3D shapes) of common objects and use them to identify and sort them <p>Mass Unit (VCMMG095) <i>The focus of this unit at the Level 1 is:</i></p> <ul style="list-style-type: none"> measuring to compare by hefting and balance scales make comparisons using mathematical language | <p>Number & Algebra Multiplication and Division Unit (VCMNA108) (VCMNA109) <i>The focus of this unit at the Level 2 is:</i></p> <ul style="list-style-type: none"> Investigate number patterns in skip counting. Use number lines to explore the link between repeated addition and multiplication. Represent and interpret multiplication as arrays Represent <i>equal</i> groupings of objects and identify equal shares Use words, numbers and symbols to record and solve simple division problems Skip counting and sharing money <p>Measurement & Geometry Area Unit (VCMMG115) <i>The focus of this unit at the Level 2 is:</i></p> <ul style="list-style-type: none"> Use uniform informal units such as hands or counters to estimate and measure the area of common objects Make comparisons between the areas of objects <p>Mass Unit (VCMMG116) <i>The focus of this unit at the Level 2 is:</i></p> <ul style="list-style-type: none"> Estimate relative mass of objects and use hefting and balance scales to compare masses. <p>3D Objects Unit (VCMMG121) <i>The focus of this unit at the Level 2 is:</i></p> <ul style="list-style-type: none"> Represent 3D objects and describe their features using appropriate language | <p>Number & Algebra Multiplication and Division Unit (VCMNA134) <i>The focus of this unit at the Level 3 is:</i></p> <ul style="list-style-type: none"> investigate number patterns and use skip counting to solve problems. Use groupings and arrays to understand multiplication and division and explore the link between two operations to solve problems (\times/\div facts) Use strategies including number lines, inverse operations and splitting numbers to record and solve multiplication and division problems. Interpret word problems involving the four operations and represent them using materials, drawings and words (number stories) Explore different strategies to solve the same problem. Multiplication and division with money <p>Measurement & Geometry Area Unit (VCMMG115)(from year 2) (VCMMG169) (working towards year 4) <i>The focus of this unit at the Level 3 is:</i></p> <ul style="list-style-type: none"> Use informal and formal units to measure and compare the area of familiar objects. <p>Mass Unit (VCMMG140) <i>The focus of this unit at the Level 3 is:</i></p> <ul style="list-style-type: none"> Estimate, measure and compare the mass of objects using informal units, grams and kilograms <p>Location Unit (VCMMG143) <i>The focus of this unit at the Level 3 is:</i></p> <ul style="list-style-type: none"> Locate items and give directions to locations on a grid map. interpret simple maps and create and describe pathways. | <p>Number & Algebra Multiplication and Division Unit (VCMNA153) (VCMNA154) (VCMNA155) (VCMNA156) (VCMNA160) (VCMNA161) (VCMNA162) <i>The focus of this unit at the Level 4 is:</i></p> <ul style="list-style-type: none"> Investigate, describe and compare number patterns made when skip counting by 3, 4, 6, 7, 8, 9. Explore odd and even numbers in skip-counting patterns Use strategies such as doubling, inverse operations and visual arrays to explore and recall division and multiplication facts. Use the strategies including the commutative property, halving and the split strategy to record and solve multiplication and division problems. Use a range of strategies such as drawing the problem and using a table to solve word problems involving the four operations. Identify, describe and complete one and two step number patterns involving whole numbers and decimals with multiplication Make calculations of money total and change using various decimal currencies. <p>Measurement & Geometry Area Unit (VCMMG166) (VCMMG169) <i>The focus of this unit at the Level 4 is:</i></p> <ul style="list-style-type: none"> Use informal and formal units to estimate, measure and compare the area of familiar objects (link to multiplication and division - arrays) <p>Mass Unit (VCMMG165) <i>The focus of this unit at the Level 4 is:</i></p> <ul style="list-style-type: none"> Estimate, measure and compare the mass of different objects using measuring instruments including pan balances and scales <p>Location Unit (VCMMG172) <i>The focus of this unit at the Level 4 is:</i></p> <ul style="list-style-type: none"> Explore important features including keys, legends and scales. |