

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:

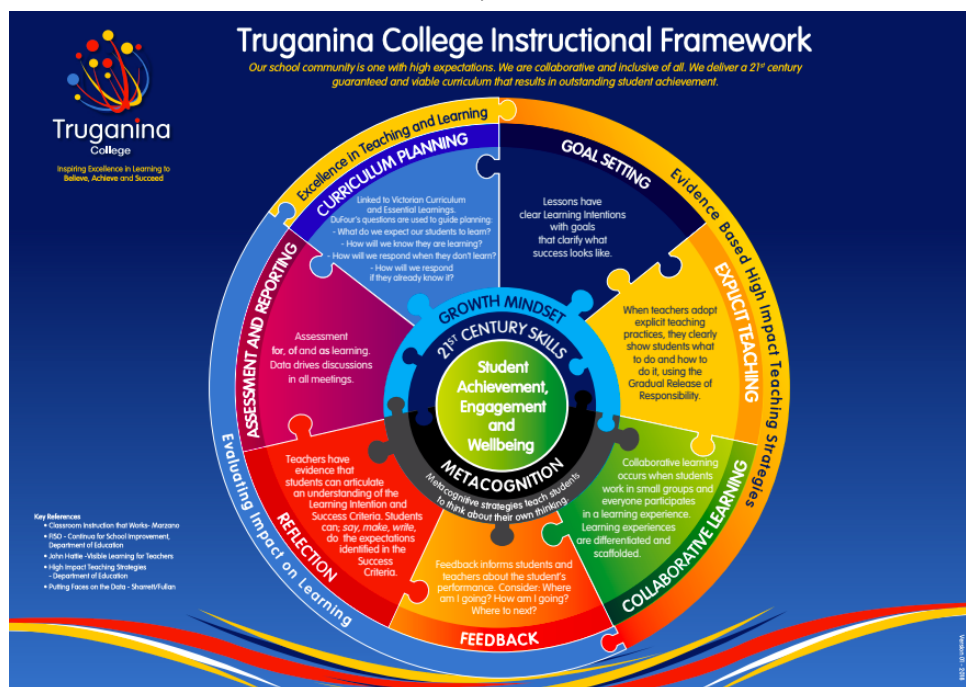
HIGH IMPACT TEACHING STRATEGIES (HITS)

1. Setting Goals	2. Structuring Lessons	3. Explicit Teaching	4. Worked Examples	5. Collaborative Learning	6. Multiple Exposures	7. Questioning	8. Feedback	9. Metacognitive Strategies	10. Differentiated teaching
Effect size Teacher Clarity: 0.60	Effect size Teacher Clarity: 0.60	Effect size Teacher Clarity: 0.60	Effect size Worked Example: 0.60			Effect size Questioning: 0.46	Effect size Feedback: 0.73	Effect size Metacognitive Strategies: 0.60	

The planning, teaching and learning of the Maths Curriculum link directly to the College's Strategic Plan goals:

- Goal 1: To improve student 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 wellbeing of all students.

Instructional Framework Maths Mantras Maths Lesson Structure



Maths Mantra Years F-4

Read question two times (uncover the information)

Underline key words (focus on the question)

Doodle, draw, figure. (Engage!)

Drawing a diagram

Goldilocks bubble. (Not too dark, not too light, just right)

dit dot, not dit

This means we do not look for the first thing. It is the next thing.

Maths Mantra Year 5-9

R Read the question twice.

U Underline the important information.

I Illustrate your thinking.
- Doodle, draw, figure.

N Name the operations you will need.
- What will you have to do?

E Evaluate the problem.
- Find your solution.

D Decide if your solution makes sense.
- Goldilocks bubble.

What are Goldilocks bubbles?
Not too dark, not too light, just right!

Maths Lesson Structure

Learning Intention & Success Criteria

CONNECTOR

EXPLORE

EXPLAIN

ELABORATE

EVALUATE

TRANSFER

- ### 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

- **NAPLAN minimum standards**
For outlines of the competencies expected of Year 3, 5, 7 and 9 students in Numeracy: <https://www.nap.edu.au/naplan/numeracy/minimum-standards>
- **Maths Proficiency Strands**
For details of the four strands in the Mathematics Curriculum: <http://victoriancurriculum.vcaa.vic.edu.au/mathematics/introduction/learning-in-mathematics>

- The Compass Learning Tasks will be the Tiered tasks for the first unit from Years 2 to 9.
- Foundation to Year 1 Compass Learning Tasks will be a snapshot of students' learning from the first unit.
- Mental Strategies A – S will be based on the Truganina College Efficient Mental Strategies
- Week 2 is pre-assessment week.
- Week 8 is post assessment week. All assessments to be completed by Friday of Week 8.

Week	1	2	3	4	5	6	7	8	9	10	11
	Refer to the Maths Essential Learnings when planning the Maths Curriculum										
Foundation	Number & Algebra CONSOLIDATE Number Concepts Movement on 0-99 Counting Chart Partitions 19=10 + 9 (VCMNA070) Mental Strategies E		Statistics & Probability Data Representation & Interpretation (VCMSP083) (VCMSP084) (VCMSP085)		Measurement & Geometry Clocks (Time) (VCMMG079)		Measurement & Geometry Mass (Comparing) Capacity (Measuring) (VCMMG078)		Number & Algebra Facts to 10 Friendly Numbers Rainbow Facts (VCMNA073) Mental Strategies A		Assessment Recording Progress on Foundation Benchmarks
Year 1	Number & Algebra Facts to 18 Associative Law Rainbow Facts (VCMNA089)	Number & Algebra Addition (VCMNA089) Mental Strategies C, E, F	Number & Algebra Subtraction (VCMNA089)		Number & Algebra Fractions Sharing in equal groups (VCMNA090) (VCMNA091)		Measurement & Geometry Duration (VCMMG097) Assessment Recording Progress on Year 1 Benchmarks		Measurement & Geometry Give & Follow Directions (VCMMG099)		Revision
Year 2	Number & Algebra Addition and Subtraction (VCMNA107)	Number & Algebra Multiplication & Division (VCMNA108) (VCMNA109)	Measurement & Geometry Slides & Flips (VCMMG123)		Measurement & Geometry Shape & Area Volume & Capacity (VCMMG120) (VCMMG121) (VCMMG115)			Statistics & Probability Chance and Data Graphing (VCMSP125) link with (VCMSP128)		Revision Money Equivalence Capacity & Volume Assessment Mental Strategies C, D, E, F	
Year 3	Number & Algebra Number Skills (VCMNA133) (VCMNA134) (VCMNA135) Mental Strategies E, F, G, H	Number & Place Value CONSOLIDATE Addition (simple repeated addition single digit & subtraction) Extend to 1000 & 100 000 (VCMNA132) (VCMNA133) Mental Strategies E, F		Number & Algebra Represent money in multiple ways Count Change (VCMNA137)			Measurement & Geometry Symmetry Slide & Turns (VCMMG144) (VCMMG145)			Assessment Mental Strategies E, F, G, H	
Year 4	Number & Algebra Vertical addition and subtraction (renaming and regrouping) Balancing equations using partitioning (VCMNA153) (VCMNA163) Mental Strategies N		Number & Algebra EXTEND Fractions (number line, equivalence, mixed, improper, adding, subtracting) (VCMNA157) (VCMNA158) Mental Strategies M		Measurement & Geometry Symmetry and Angles (VCMMG173) (VCMMG174)			Number & Algebra Solve problems involving purchases (VCMNA160) Mental Strategies N		Mental Strategies H	
Year 5	Statistics & Probability Chance (VCMSP203) (VCMSP204)	Number & Algebra Multiplication & Division (VCMNA183) (VCMNA184) Mental Strategies L, H		Number & Algebra Fractions & Decimals Beyond Hundredths (VCMNA189) (VCMNA190)			Number & Algebra Money and Financial Maths (VCMNA191)	Number & Algebra Order of Operations (VCMNA193) (VCMNA220)		Measurement & Geometry Capacity, Volume and Mass (VCMMG195)	
Year 6	Number & Algebra CONSOLIDATE Fractions & Decimals Multiplying Decimals (VCMNA215) (VCMNA216)		Number & Algebra Fractions Review addition & subtraction related denominators include (NCMNA219) Addition Mixed Numbers (VCMNA212) Mental Strategies Q		Number & Algebra Fractions of a Quantity Connections between fractions, decimals & percentages (VCMNA213) (VCMNA217)		Financial Maths Percentage Discounts (VCMNA218) Mental Strategies S,		Statistics & Probability Chance (VCMSP234)	Number & Algebra Sequences Difference Strategy (VCMNA219)	Measurement & Geometry Capacity & Mass (VCMMG222) (VCMMG223)
Year 7	Mental strategies K, O	Number & Algebra Best Buys (VCMNA250)		Statistics & Probability Mean, Median, Mode, Stem & Leaf Plots (VCMSP269) (VCMSP270) (VCMSP271)			Number & Algebra Rates and Ratios (VCMNA249)		End of year review, including, feedback, mental strategies, personal learning goal and problem-solving activities.		
Year 8	Measurement & Geometry Area & Volume to include circles & irrational numbers (VCMNA275) (VCMMG286) (VCMMG287) (VCMMG288) (VCMMG289)				Measurement & Geometry Congruence (VCMMG291) (VCMMG292) (VCMMG293)				End of year review, including, feedback, mental strategies, personal learning goal and problem-solving activities.		

The proficiency strands
Understanding, Fluency, Problem Solving and Reasoning
 are an integral part of the Maths curriculum across the three content strands: Number & Algebra, Measurement & Geometry and Statistics & Probability
 The four processes will continue to be embedded across each term.

Year 9		Number & Algebra Money and Financial Maths (VCMNA304)	Statistics & Probability Chance (VC MSP321) (VC MSP322) (VC MSP323)	Number & Algebra Rates and Proportion (VCMNA301)	End of year review, including, feedback, mental strategies, personal learning goal and problem-solving activities.
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Last updated 27 July 2021