

### Primary Mathematics (Laying a strong foundation)

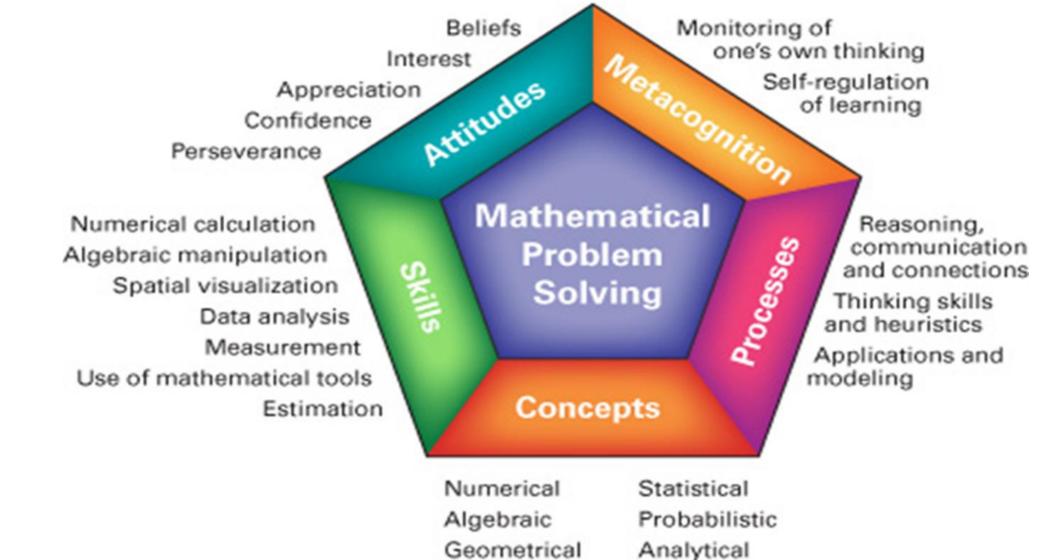
- The Primary Mathematics syllabus aims to enable all students to:
- •Acquire mathematical concepts and skills for everyday use and for continuous learning in Mathematics.
- •Develop thinking, reasoning, communication, application and metacognitive skills through a mathematical approach to problem solving; and
- •Build confidence and foster interest in Mathematics

#### Ma Department Vision

A Creative, Innovative and Effective Mathematics Problem Solver



## Ma Framework



#### From the Singapore Ministry of Education

# Ma Syllabus Organisation (S)

The syllabus is organised along three content strands with a listing of mathematical processes that cut across the 3 strands.

3 Content Strands + 1 Process Strand			
Number and Algebra	<b>Measurement and Geometry</b>	Statistics	
<ul> <li>Four Operations – Fractions</li> <li>Percentage</li> <li>Ratio</li> <li>Distance, Time and Speed</li> <li>Algebra</li> </ul>	<ul> <li>Area and Circumference of Circle</li> <li>Volume of Cube and Cuboid</li> <li>Special Quadrilaterals</li> <li>Nets</li> </ul>	Pie Charts	

#### **Mathematical Processes**

Reasoning, Communication, Connection, Application, Thinking Skills and Heuristics

# Ma Syllabus Organisation (F)

The syllabus is organised along three content strands with a listing of mathematical processes that cut across the 3 strands.

3 Content Strands + 1 Process Strand			
Number and Algebra	Measurement and Geometry	Statistics	
<ul> <li>Fraction and Division</li> <li>Four Operations – Fractions</li> <li>Multiplication and Division – Decimals</li> <li>Percentage</li> </ul>	<ul> <li>Area of Triangle</li> <li>Volume of Cube and Cuboid</li> <li>Rectangle, Square and Triangle</li> </ul>	<ul> <li>Pie Charts</li> <li>Average of a set of data</li> </ul>	

#### **Mathematical Processes**

Reasoning, Communication, Connection, Application, Thinking Skills and Heuristics

## Heuristics (P1 to P5)

#### Draw a diagram/ model

Make a systematic list/ tabulation

Look for patterns

**Guess and Check** 

Act it Out

Use Before-and-After Concept

Work Backwards

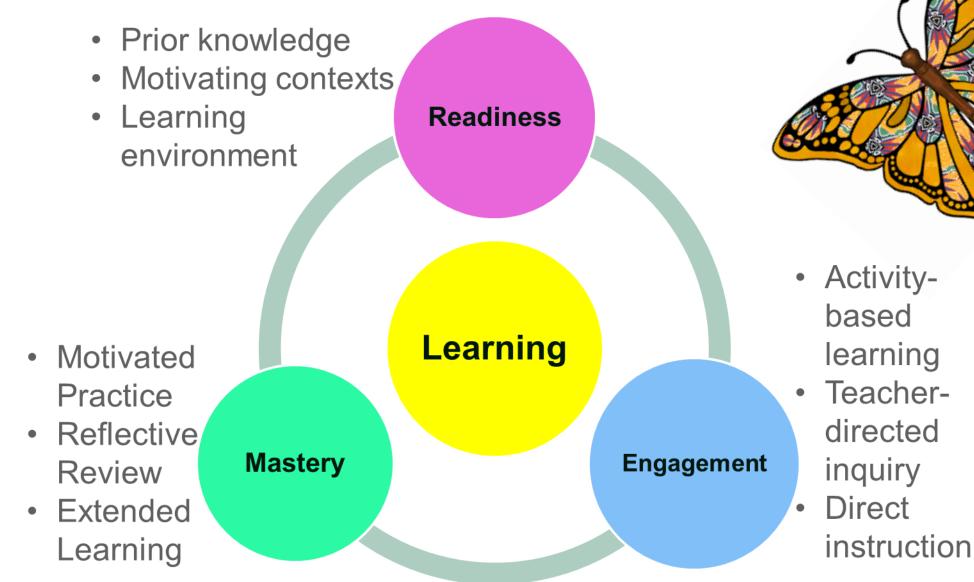
Restate the problem in another way

Simplify the problem

Make suppositions



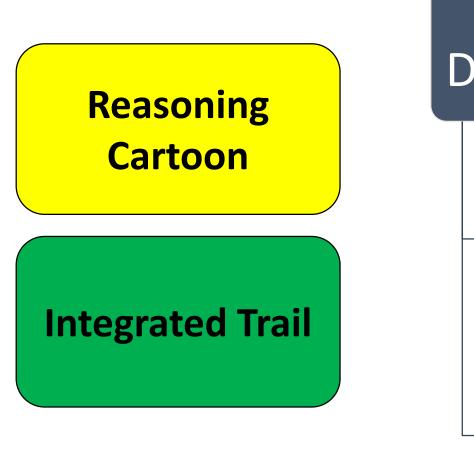
## **Phases of Learning**



#### **Experiential Learning Activities**

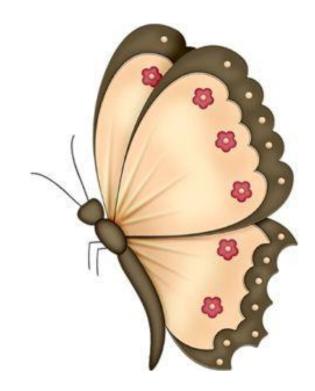


### **Department Programmes**

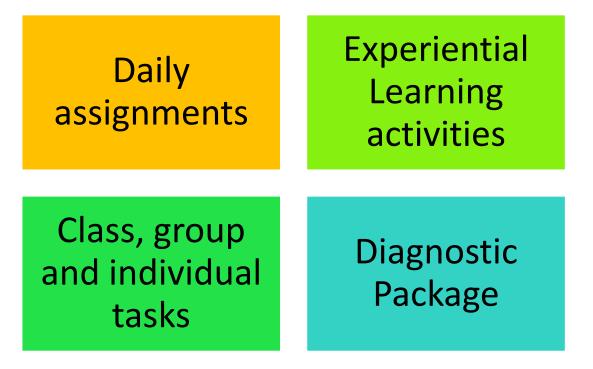


Talent Development

Math Olympiad



## Checkpoints





Open Ended Tasks

#### How can you help your child in Mathematics

what do you think is CAP going on? Whoa



**HOD Mathematics** 

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