MATHEMATICS

Information for Primary 5 Parents

Outline

- Aims
- Vision
- Framework
- Syllabus
- Heuristics
- Phases of Learning
- Programmes
- How you can help your child

Primary Mathematics (Laying a strong foundation)

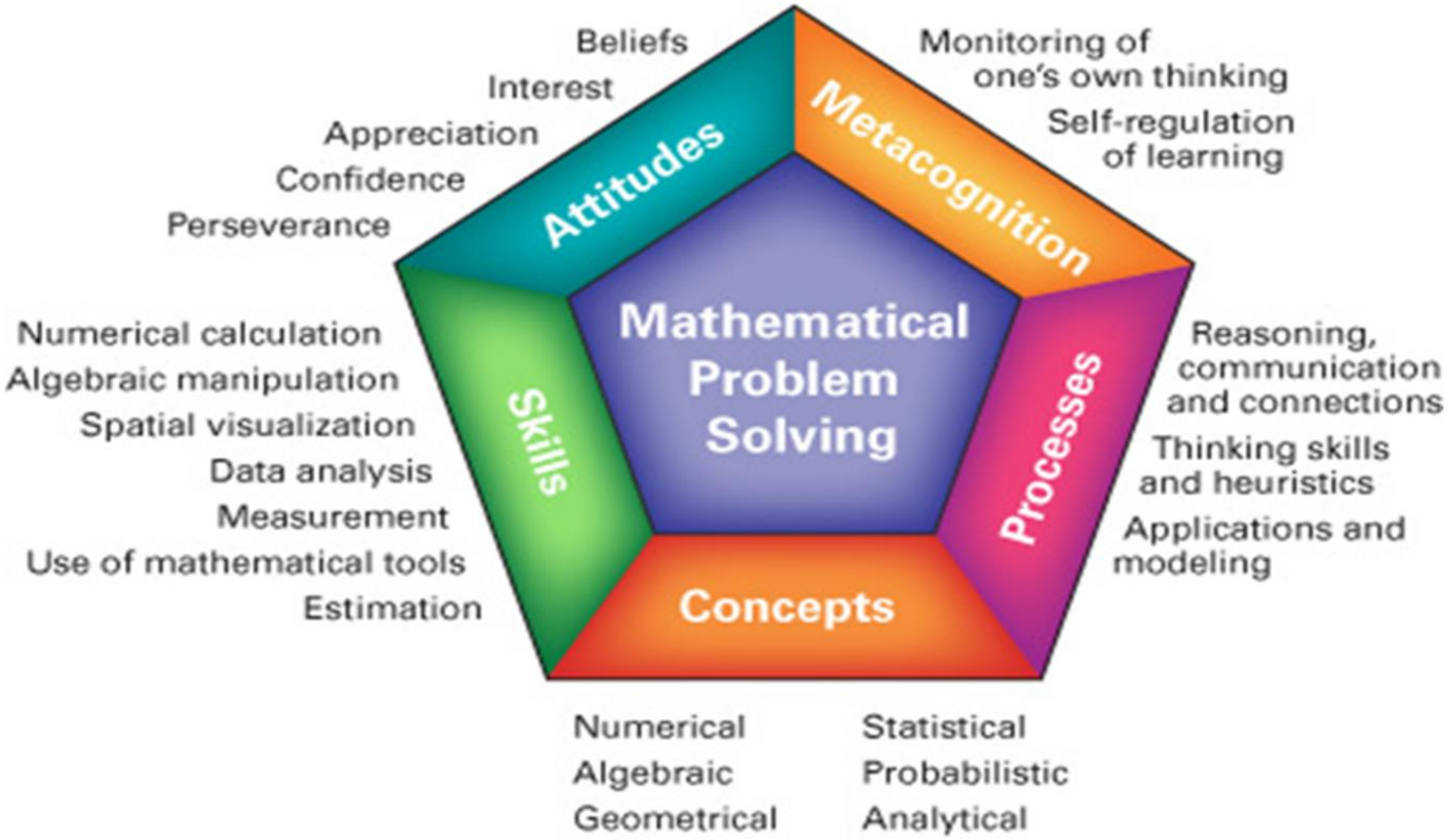
The Primary Mathematics syllabus aims to enable all students to:

- 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	**Measurement and Geometry**	**Statistics**
• Numbers Up to 10 Million • Four Operations – Whole Numbers • Fraction and Division • Four Operations – Fraction • Four Operations - Decimals • Percentage • Ratio • Rate	• Area of Triangle • Volume of Cube and Cuboid • Angles • Triangles • Parallelogram, Rhombus and Trapezium	• Average of a set of data
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.

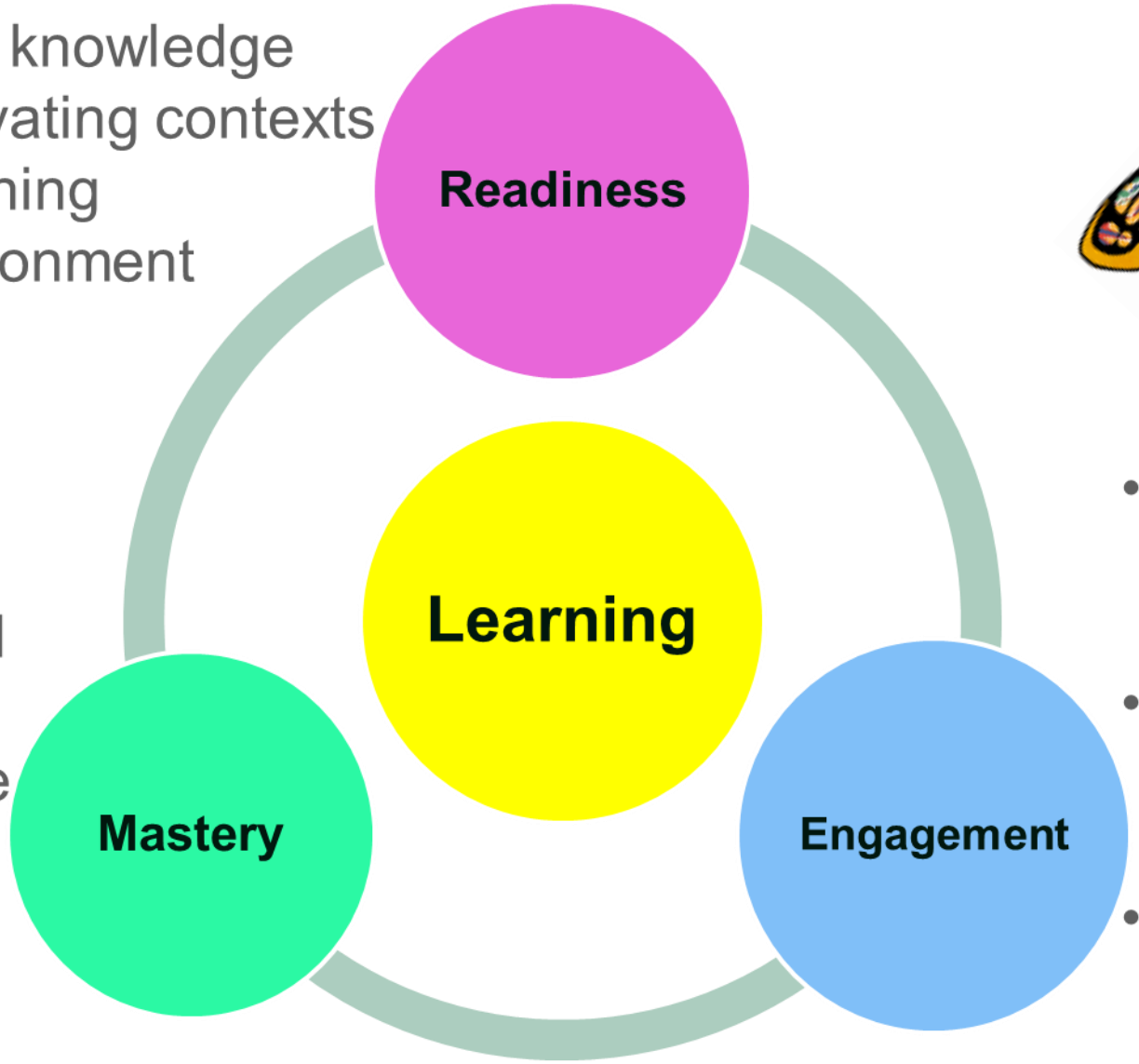
3 Content Strands + 1 Process Strand		
Number and Algebra	**Measurement and Geometry**	**Statistics**
• Numbers Up to 10 Million • Four Operations – Whole Numbers • Factors and Multiples • Concepts of Fractions • Equivalent Fractions • Mixed Numbers and Improper Fractions • Four Operations – Fractions • Decimals Up to 3 Decimal Places • Four Operations – Decimals • Rate	• Time • Area and Perimeter • Volume of Cube and Cuboid • Perpendicular and Parallel Lines • Angles • Rectangle and Square	• Tables, Bar Graphs and Line Graphs
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

- Prior knowledge
- Motivating contexts
- Learning environment



- Activity-based learning
- Teacher-directed inquiry
- Direct instruction

- Motivated Practice
- Reflective Review
- Extended Learning

Checkpoints

Daily assignments

Experiential Learning activities

Math Alive

Class, group and individual tasks

Diagnostic Package

Open Ended Tasks

Weighting

Term 1	Term 2	Term 3	Term 4
10%	15%	10%	65%
1 WA	1 WA	1 WA	SA2

Weighted Assessment – WA

Semestral Assessment 2 – SA2

Format – P5(S)

Paper 1 (Booklet A)	Paper 1 (Booklet B)	Paper 2
Duration: 1 Hour		Duration: 1 Hour and 30 Minutes
No calculator allowed		Calculator allowed
15 Multiple Choice Questions	15 Short-Answer Questions	• 5 Short-Answer Questions • 12 Long-Answer Questions
20 Marks	25 Marks	55 Marks

Format – P5(F)

Paper 1 (Booklet A)	Paper 1 (Booklet B)	Paper 2
Duration: 1 Hour		Duration: 1 Hour
No calculator allowed		Calculator allowed
20 Multiple Choice Questions	10 Short-Answer Questions	• 10 Short-Answer Questions • 6 Long-Answer Questions
30 Marks	20 Marks	40 Marks

Department Programmes

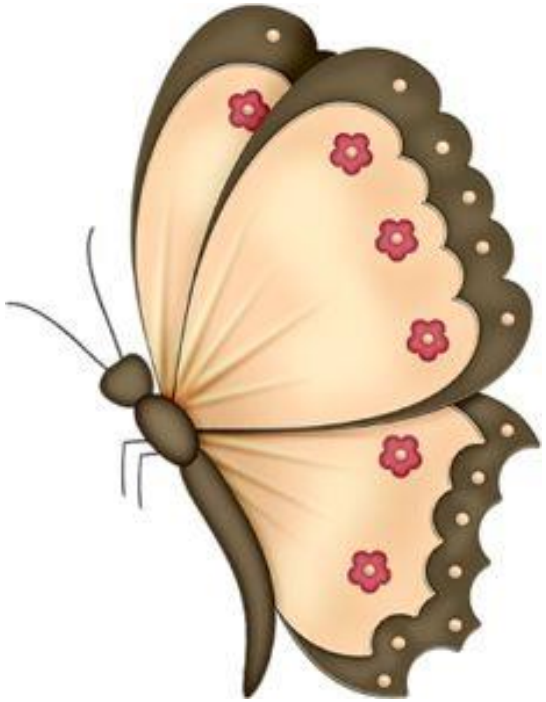
Reasoning Cartoon

Math Alive

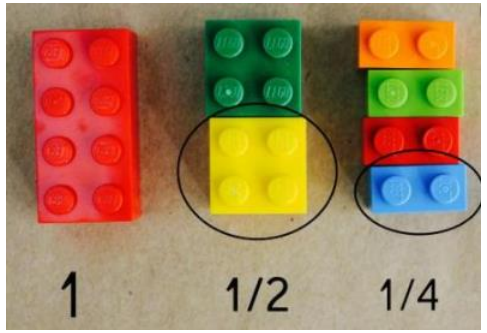
Integrated Trail

Talent Development

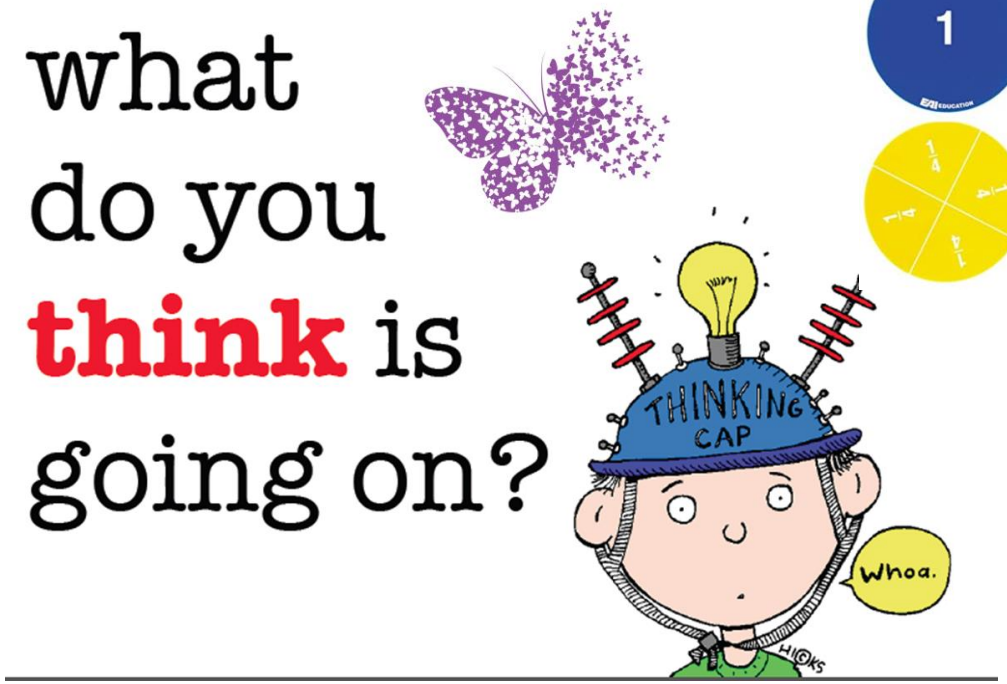
- E2K
- Math Olympiad

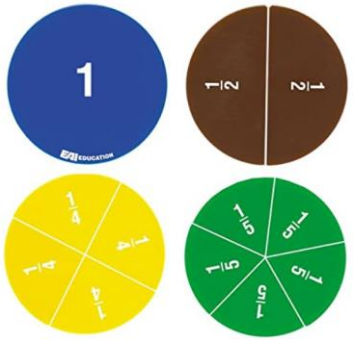


How can you help your child in Mathematics



Concrete Approach (Fractions Disc/ Lego)
Ma Games
Model Drawing (Heuristics)
Making Thinking Visible





CONTACT DETAILS

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