

P3
MATHEMATICS
CURRICULUM
BRIEFING



Curricula Goal

Competent Problem-Solvers

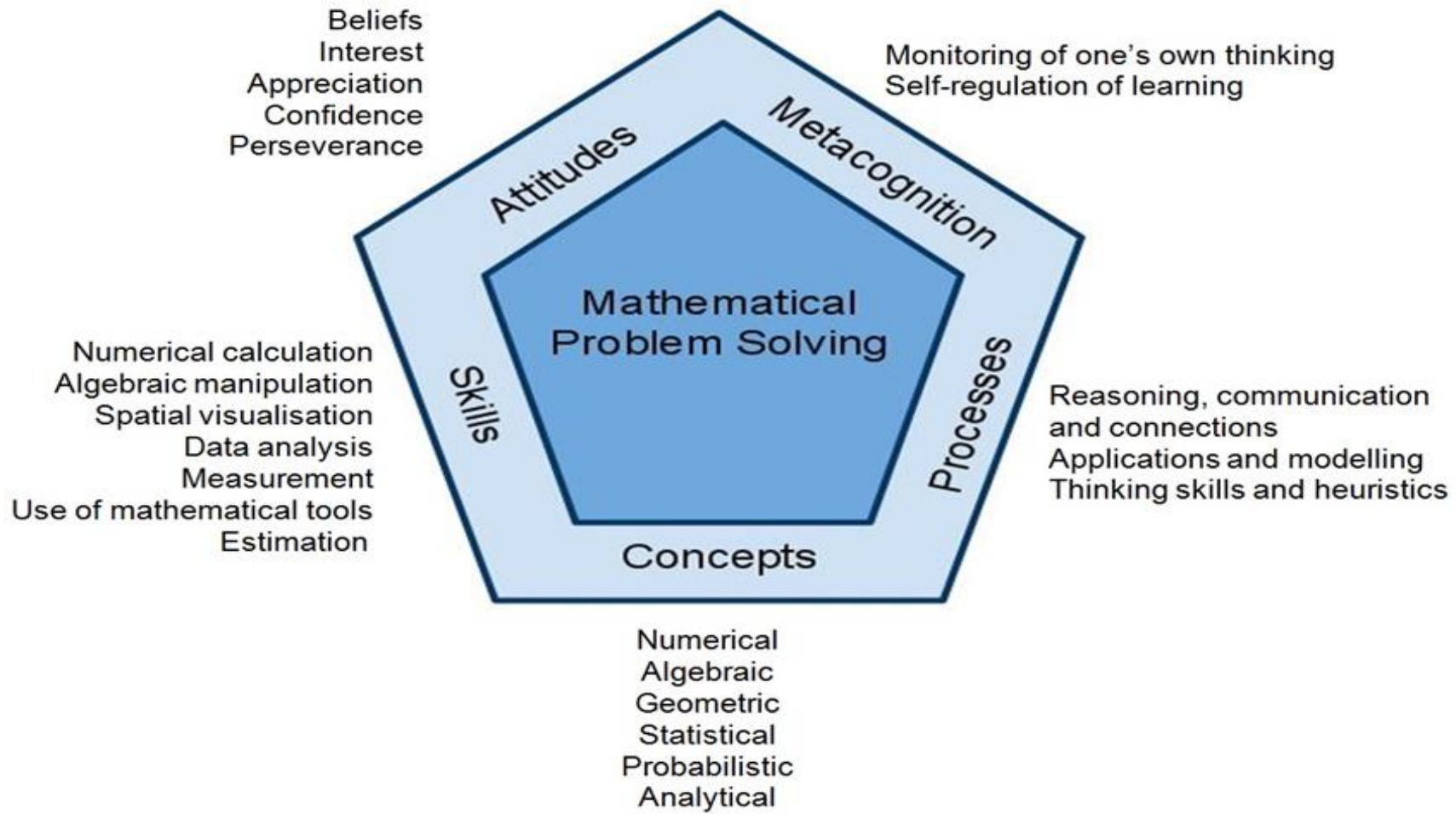
- attained a level of mastery of and interest in Mathematics.
- strong foundation for them to pursue Mathematics at the secondary level and beyond.

Curricula Goal

Competent Problem-Solvers

- The development of mathematical problem solving ability is dependent on five inter-related components, namely, *Concepts, Skills, Processes, Attitudes* and *Metacognition*.

The Mathematics Framework



Primary 1

Whole Numbers

Measurement

Geometry

Data Analysis

Primary 2/3

Whole Numbers

Measurement

Geometry

Data Analysis

Fractions

Primary 4

Whole Numbers

Measurement

Geometry

Data Analysis

Fractions

Decimals

Primary 5

Whole Numbers

Measurement

Geometry

Data Analysis

Fractions

Decimals

Percentage

Ratio

Primary 6

Whole Numbers

Measurement

Geometry

Data Analysis

Fractions

Decimals

Percentage

Ratio

Speed

Primary Maths Curriculum

Focus

P1 - P2

Building on
Foundation
in Numeracy

P3 - P4

Leverage on
Strengths
and Work on
Weaknesses

P5 - P6

Mastery in
Preparation
for PSLE

How we are going to ACHIEVE

P3 - P4

- ❖ Strengthening concepts, skills and processes
- ❖ Developing problem solving strategies
- ❖ Developing analytical and logical reasoning
- ❖ Developing the habit of self-regulating of learning progress

Focus

P1 - P2

Building on
Foundation
in Numeracy

P3 - P4

Leverage on
Strengths
and Work on
Weaknesses

P5 - P6

Mastery in
Preparation
for PSLE

P3 Maths Assessments

- Common Test1 (Term 1)
- Mid-Year Examination
- Common Test 2 (Term 3)
- End-of-Year Examination

P3 Maths Assessments

- Assess the extent which students have achieved the learning outcomes specified in the syllabus.
- Pencil and Paper assessments to be completed within 1 hr 30 minutes to 1 hr 45 minutes depending on the type of assessments.

P3 Maths Assessment Plan

Format of Assessment

Common Item Types

Multiple Choice Questions (MCQ)	<ul style="list-style-type: none">• 1 to 2 marks per question• Four options are provided of which only one is correct
Short Answer Questions (SAQ)	<ul style="list-style-type: none">• 1 to 2 marks per question• Workings are optional but preferred• Marks are awarded for the correct answer written in the answer space provided.
Long Answer Questions (LAQ) Problem Sums	<ul style="list-style-type: none">• 3 to 5 marks per question• Workings are to be shown• Method marks are awarded for critical steps of workings



Cognitive Levels	Standard Mathematics
Knowledge (K)	Recall specific mathematical facts, concepts, rules and formulae to perform straightforward computations .
Comprehension (C)	Interpret data and use mathematical facts, concepts, rules and formulae to solve routine and familiar mathematical problems .
Application and Analysis (A)	Analyse data and/or apply mathematical facts, concepts, rules and formulae in a complex situation and solve unfamiliar problems .

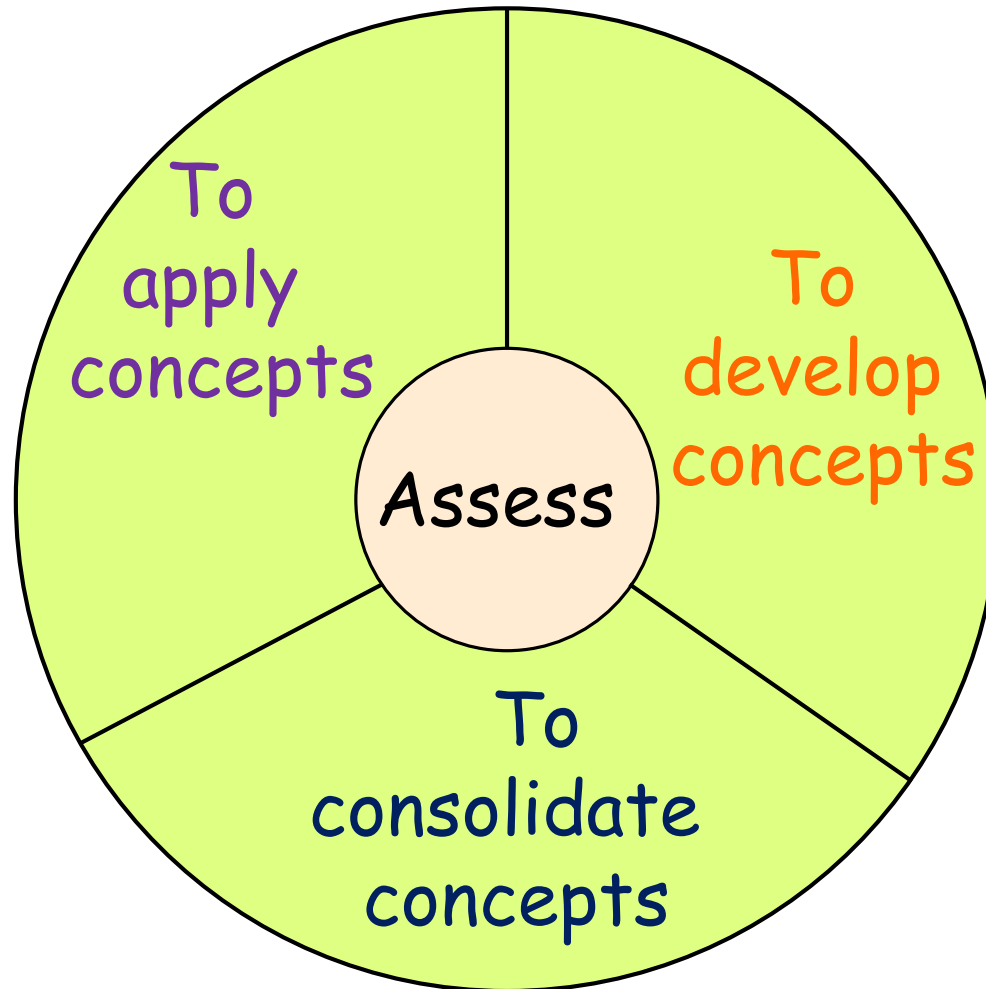
Distribution of KCA Questions

Class Level	K	C	A
P1	80%	20%	0%
P2	60%	30% - 35%	5% - 10%
P3	40%	40% - 45%	15% - 20%
P4	30%	40% - 45%	25%- 30%
P5 standard	25% - 30%	35%	35%-40%
P6	25%	35%	40%

Difficulty levels of items

- ❖ Mathematical concepts and skills assessed also contribute to the difficulty of each item.
- ❖ Not all the A questions are equally difficult and not all the K and C questions are equally easy.

Types of Lessons



Develop Problem Solving Skills

❖ **Teaching of Heuristics**

- Heuristics are strategies that are essential to problem solving
- Focuses on the underlying processes in problem solving.

Develop Problem Solving Skills

❖ **Heuristics for P3**

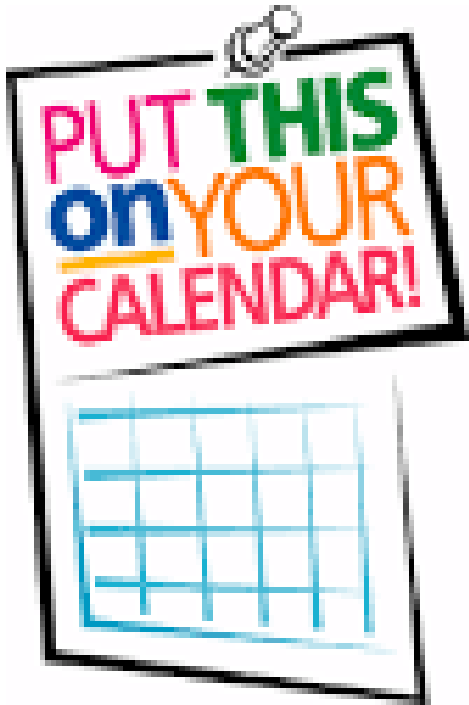
- Model Drawing
- Systematic Listing
- Look for a Pattern
- Work Backwards

Develop Thinking Skills

❖ **Thinking Skills**

- Comparing
- Analysing parts and whole
- Identifying Pattern and Relationship
- Deduction

P3 Maths Workshop



Day/Date : Friday, 8 April

Time: 7.30pm

Topics:

- Problem – Solving
 - Teaching of Heuristics

