P3 SUBJECT BRIEFING MATHEMATICS

A COMMUNITY OF COMPASSIONATE LEADERS AND INNOVATORS

Importance of Learning Mathematics

- Mathematics contributes to the development and understanding in many disciplines and provides the foundation for many of today's innovations and tomorrow's solutions.

- It also underpins many aspects of our everyday activities, from making sense of information around us to making informed decisions about personal finances.

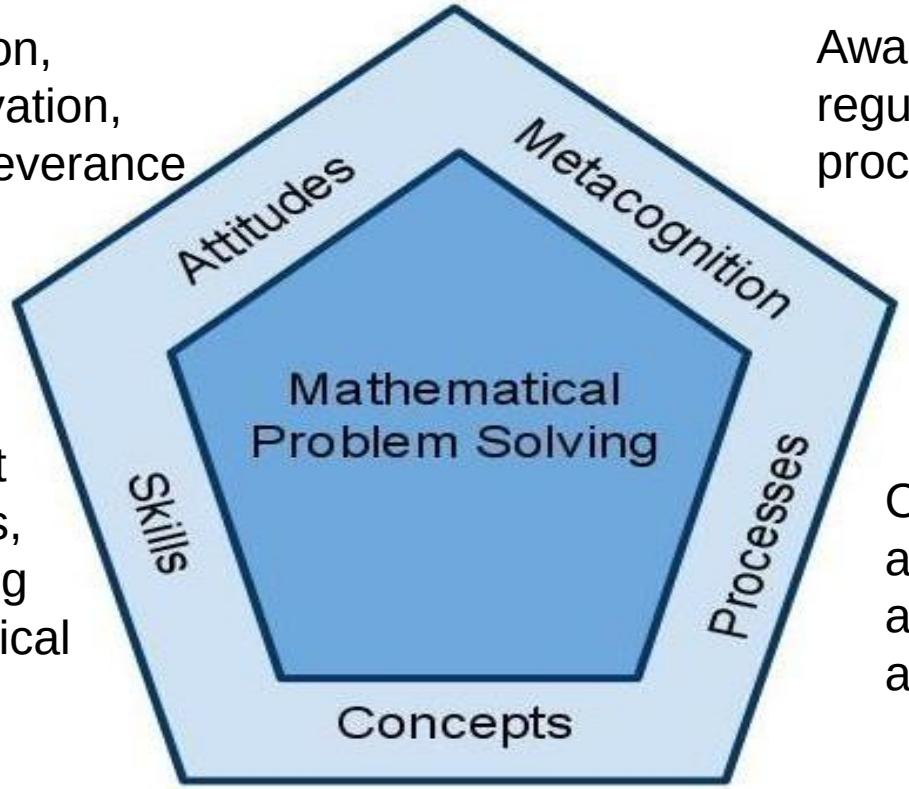
Objectives of Primary Mathematics Syllabus

- 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.
- Build **confidence** and **foster interest** in mathematics

Mathematics Curriculum Framework

Belief, appreciation, confidence, motivation, interest and perseverance

Awareness, monitoring and regulation of thought processes



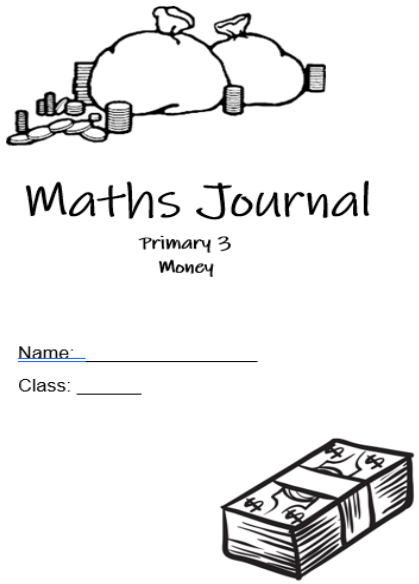
Proficiency in carrying out operations and algorithms, visualising space, handling data and using mathematical tools

Competencies in abstracting and reasoning, representing and communicating, applying and modelling

Understanding of the properties and relationships, operations and algorithms

P3 Mathematics Programmes & Activities

- Learning for Conceptual Understanding
- Mathematics Around Us
- Maths Journalling
- Maths & Science Fiesta



I bought 10 books.
It is not enough for my brother and I as we both want 6 books.
6×2=12
I need to buy 2 more books so my brother and I can get 6 books each.

Oh no! 1 out of 4 of an apple is eaten ! I need to share this apple with my family ! There's 4 people in my family , that means I will need 4 slices of apples! What can I do? Can you help me to find the culprit?

P3 Mathematics Assessment

- To inform teachers about students' learning so as to guide the design and delivery of their lessons.
- Modes of assessment
  - Checkpoints
  - Learning sheets
  - Students' responses
  - Weighted Assessment (WA)
  - End-of-Year Examination (EYE)

P3 Mathematics Assessment

	Term 1	Term 2 (15%)	Term 3 (15%)	Term 4 (70%)
Weighted Assessment	-	Term 2 WA Wk 7	Term 3 WA Wk 8	-
End-of-Year Examination	-	-	-	✓ Wk 7
Checkpoints & Learning Sheets	Non-weighted (On-going)	Non-weighted (On-going)	Non-weighted (On-going)	Non-weighted (On-going)

Common Item Types In Mathematics

Item Types	Descriptors
Multiple Choice Questions	• 1 – 2 marks per question • Four options are provided of which only one is correct
Short Answer Questions	• 1 – 2 marks per question • Workings and number equations are to be shown • Marks are awarded for correct method even if answer is wrong
Long Answer / Structured Questions	• 3 – 4 marks per question • Workings and number equations are to be shown • Marks are awarded for correct method even if answer is wrong • **Only answer mark awarded if answer is correct but no workings are provided**

Weighted Assessment Format

45min

Item Types	No. of Questions	Marks Per Question	Marks
Section A Multiple Choice Questions	5	2	10
Section B Short Answer Questions	6	2	12
Section C Long Answer / Structured Questions	2	4	8
Total	**13**		**30**

End-of-Year Examination Format

1h 15min

Item Types	No. of Questions	Marks Per Question	Marks
Section A Multiple Choice Questions	10	1 – 2	15
Section B Short Answer Questions	15	1 – 2	25
Section C Long Answer / Structured Questions	3	3 – 4	10
Total	**28**		**50**

Types of Marks in Mathematics

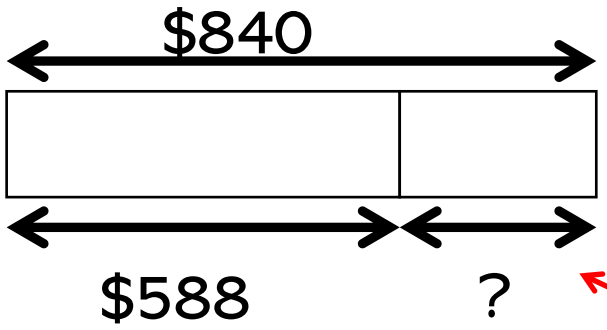
Mark Types	How They are Given
Method Mark (**M** Mark)	• Awarded for correct method • Not lost for numerical errors, algebraic slips or errors in units • Not given for an incorrect method even if it arrives at a correct answer • Awarded for comparable steps in alternative solutions • Awarded for follow-through computational errors in previous steps when necessary
Accuracy or **A**nswer Mark (**A** Mark)	• Awarded for a numerically correct answer • Not given for 'correct' answers obtained from mathematically illogical method

Presentation of Work

Siti had $840. She bought a bag and had $588 left.

How much did the bag cost?

Write units only when it is standard units e.g. cm, kg, ℓ, cm^2. NO need to write for non-standard units e.g. boys, apples



Model

Bag = 840 – 588

= 252

Write label to help organise train of thoughts

No need to write units in number equation e.g.

$840 – $588 = $252

840

– 588

252

Workings on the right side

Final answer with units

Ans: $252

Tips for Parents

- Get your child to understand the problem and how to make sense of the problem
- Get your child to show you the whole process of solving the problem, not just the solutions, e.g. explain the steps and sequence
- Guide your child to look for alternative methods and then choose the most appropriate method
- Allow your child to reason his / her thinking
- Show all workings clearly and label the number equations
- Teach your child how to check his / her answers. Check for reasonableness

Tips for Parents

- Encourage your child to persevere in solving the questions
- Try all questions
- Master basic mathematical facts. (e.g. number bonds within 10, multiplication table)
- Set your child a time limit when doing practice papers

Tips for Parents

- Review what they have learnt in class – spending at least 15 to 30 minutes every day to revise their daily work or concepts
- If your child has made a mistake in a specific question, allow him / her to redo it without referring to the answer provided by the teacher
- Targeted practice
- Do not over teach. Refer to primary mathematics syllabus on MOE website (https://www.moe.gov.sg/primary/curriculum/syllabus)

Frequently Asked Question

How are marks allocated? Would it be unfair to my child if he used a method that is not in the marking scheme?

Marks are awarded for essential steps that will help the child arrive at the answer. If the child used another method, marks will still be allocated if the method is mathematically logical. During marking the teachers will standardise the marking scheme and discuss mark allocation at comparable steps for different methods.

Frequently Asked Question

Is model drawing necessary? Are marks awarded for drawing model?

While marks are not awarded for models drawn, it is a useful heuristics to help students understand and solve mathematical problems. Students are highly encouraged to draw models to help them analyse, scaffold and solve the problems. Students need to learn basic model drawing skills at mid-primary level so that they can draw more complex models when they move to a higher level.


Thank you