

# P6 SUBJECT BRIEFING FOUNDATION MATHEMATICS

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学计学校 CHENG CHENG SCHOOL

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#### **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

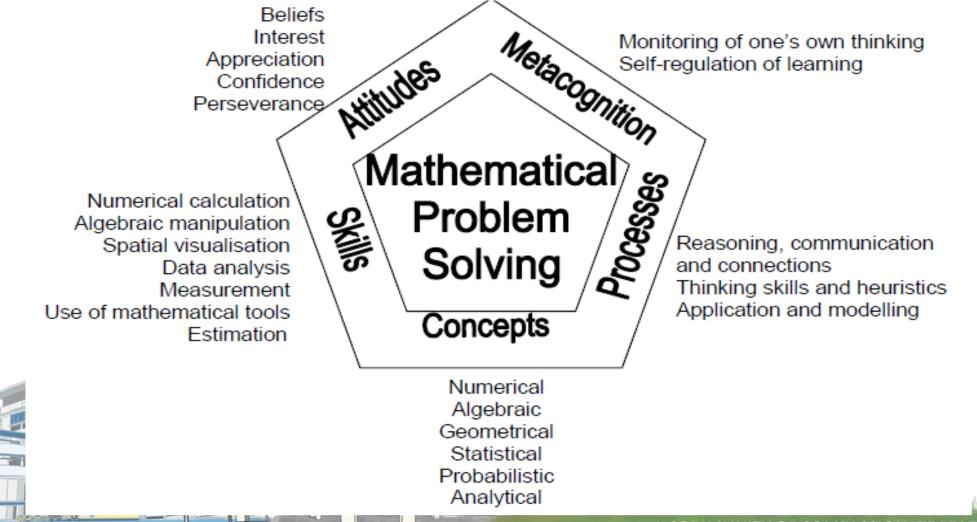
- Acquire mathematical concepts and skills for everyday use and for continuous learning in mathematics.
- Develop thinking, reasoning, communication, application and metacognitive skills through a mathematical approach to problem-solving.

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• Build **confidence** and **foster interest** in mathematics



#### **Mathematics Curriculum Framework**



#### P6 Foundation Mathematics Programmes & Activities

- Learning for Conceptual Understanding
- Developing 21<sup>st</sup> Century Competencies
- Maths & Science Fiesta



#### P6 Foundation Mathematics Assessment

Term 1	Term 2	Term 3
Timed Assessment 1 Wk 8	Timed Assessment 2 Wk 7	Preliminary Examination Wk 9



#### **Common Item Types In Mathematics**

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

## Timed Assessment 1 Format (TERM 1)

TITLET

#### 1 h (No Calculator)

Item Types	No. of Questions	Marks Per Question	Marks
Booklet A	10	1	10
Multiple Choice	10	2	20
Booklet B Short Answer	10	2	20
Total	30		50

# 1 hTimed Assessment 2 Format (TERM 2)(CalculatorAllowed)

Item Types	No. of Questions	Marks Per Question	Marks
Section A Short Answer	10	2	20
Section B	4	3	12
Structured	2	4	8
Total	16	and the second second states and the second states and the second second states and the second second second s	40

#### **Preliminary Examination Format**

Paper	Booklet	Item Type	No. of Qn	No. of Marks per Qn	Number of Marks	Duration
1	A	Multiple Choice	10	1	10	1 h
			10	2	20	
	В	Short Answer	10	2	20	
2		Short Answer	10	2	20	1 h
		Structured	6	3, 4	20	
	Tota	al	46		90	2 h

Both papers will be scheduled on the same day with a break between the two papers. The use of an approved calculator is allowed in Paper 2 but not in Paper 1.

#### **Types of Marks in Mathematics**

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

#### **Important Information**

Grades for Foundation	Foundation Ray Mark Range	Equivalent Standard Level AL			
Α	75 – 100	6			
В	30 – 74	7			
С	< 30	8			
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### **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, especially MCQ and short-structured questions.
- Master basic mathematical facts. (e.g. 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
- Use calculator only when doing Paper 2
- 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**

#### How to improve in Paper 2?

- Ensure your child has a strong foundation of Mathematics concepts
- Expose your child to different question types and different ways of testing the same question type so that your child will be able to apply the heuristics aptly in order to solve the questions
- Teach your child a problem solving process to analyse, understand and solve the problems
- Provide your child with sufficient practice.
- Redo the questions that your child was unable to do after the teacher has explained it in class.

