- Aims of Mathematics Education
- Mathematics Framework
- P1 Mathematics Syllabus
- P1 Math Programmes
- Samples of P1 Learning Objectives
- Relate Mathematics in Daily Life

# Laying a Strong Foundation

Aims of the Primary Mathematics Syllabus:

For students to:

 Acquire mathematical concepts and skills for everyday use and continuous learning in mathematics

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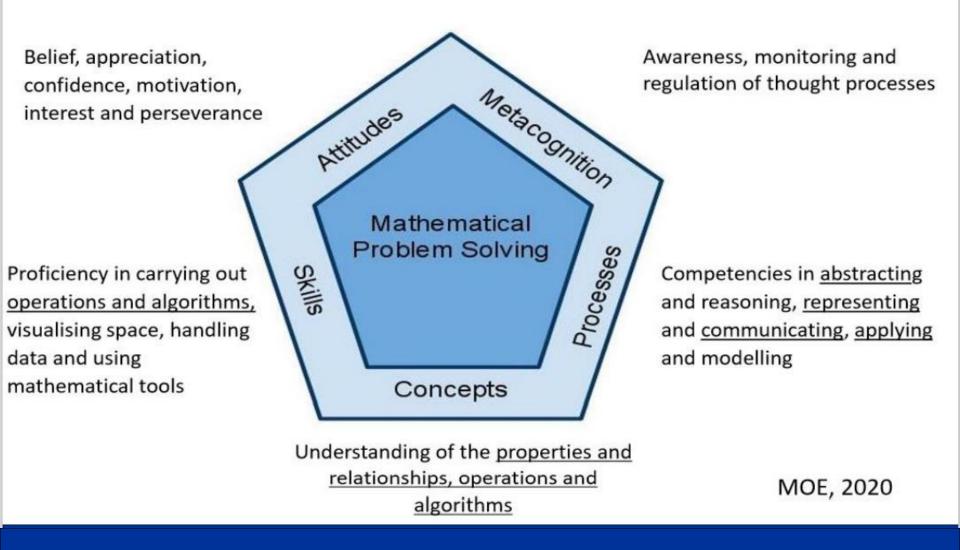
# Laying a Strong Foundation

 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 Framework**



## P1 Syllabus

Whole Numbers

Numbers up to 100 Addition and subtraction Multiplication and division

<u>Measurement</u>

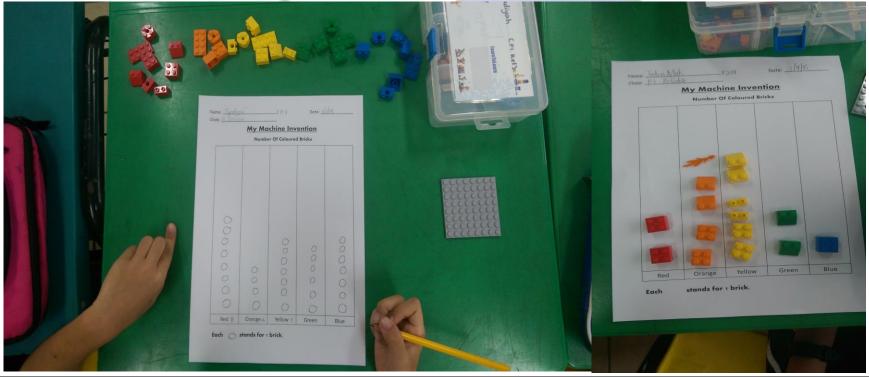
Length, time, money

<u>Geometry</u>

Shapes and patterns

 Data Analysis READY TO SERVE Picture graphs

- Learner-centred activities: Concrete-Pictorial-Abstract approach (CPA)
- Use of math manipulative for hands-on activities.



• Use of manipulatives in Mathematics



\*STAR approach to Problem Solving:

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- S Study the question
- T Think of a plan
- A Act on the plan
- **R** Reflect on your answer

John has \$28.			
Peter has \$3 less than John.			
How much does Peter have?			
Study the problem	Think of a plan		
J – \$28 P – \$3 less than J	Is it a addition problem? Is it a subtraction problem?		
Reflect on your answer-	Act on the Plan		
Have I answered the question? <u>Number</u> (Does the final answer make sense?) <u>Transfer</u> (Did I transfer the numbers correctly?)	28 – 3 = 25		
<u>U</u> nits (Did I leave the final answer in the correct units?)	Peter has <u>\$25.</u>		
<b><u>C</u>alculations (Did I miscalculate?)</b>			

#### Math Factual Fluency

- What is math factual fluency?
- Math factual fluency is the ability to recall the answers to
- basic math facts automatically and without hesitation.



#### **Factual Fluency**

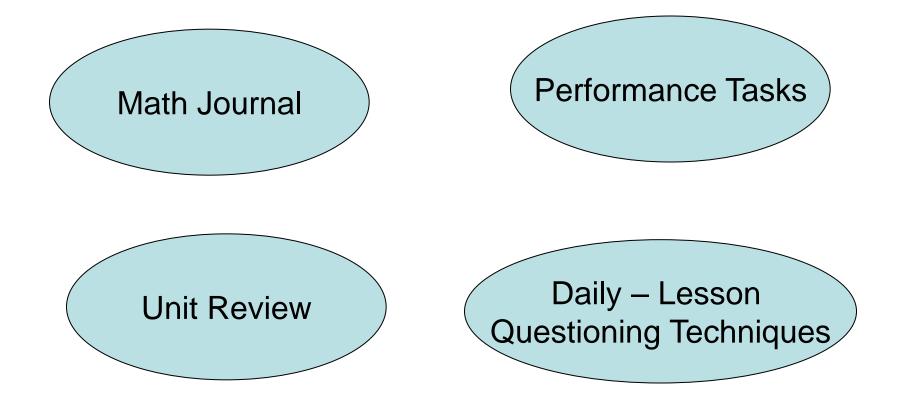
- Why is math fact fluency important?
- Without the ability to retrieve facts directly or
- automatically, students are likely to experience a high
- cognitive load as they perform a range of complex tasks.
- The added processing demands resulting from inefficient methods such as counting (vs. direct retrieval) often lead to procedural errors.

Learning Support Programme

Small group teaching More hands-on activities

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#### **Formative Assessment**



### **Sample of a Unit Review**

#### Teacher's Assessment

Your child is able to:	Question	Getting there	Got it!
Subtract by 'taking away' from a set.	1		
Associate addition and subtraction with the part- whole concept of number bond.	2, 3		
Use the subtraction symbol (-) to write a mathematical equation.	4, 5, 6		

Teacher's Feedback (if any):

#### Sample of P1 Learning Objectives (LO)

- Understand numbers up to hundred.
- Understand addition and subtraction.
- Add and subtract numbers.
- Understand multiplication and division.
- Identify, name, describe and sort shapes.
- Tell time to the hour/half hour.
- Measure and compare lengths using everyday objects.
- Read and interpret picture graphs.

## Math in Daily Life

- Talk to your children about mathematics and help them to see the usefulness of math in our daily life.
- Addition and subtraction of money when your child purchase things

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Telling time

### Thank you

#### **Contact details**

Ms Jau Hsiao Chien jau\_hsiao\_chien@schools.gov.sg Tel: 6481 2273 Mdm Jesslyn Goh goh\_jielin\_jesslyn@schools.gov.sg Tel: 6481 2273 Mr Tan Kian Tiong ADY TO SERVE tan\_kiang\_tiong@schools.gov.sg

Tel: 6481 2273