# Primary 3
# Mathematics
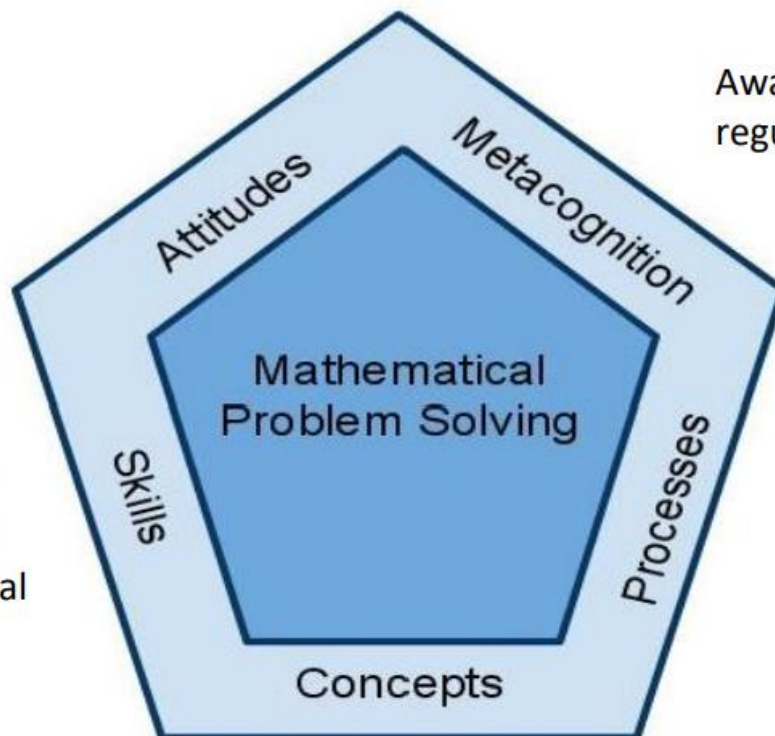# Curriculum Briefing

# 2026

# Outline

- Mathematics Curriculum Framework

- Mission

- Approach to Teaching & Learning

- Assessment

# MOE 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

Attitudes

Metacognition

Mathematical Problem Solving

Skills

Processes

Concepts

# Mission

To enable our students to master mathematical concepts and skills for everyday life and to equip them with process skills to solve mathematical problems.
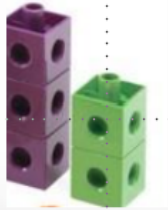
# Content Sequence for P3

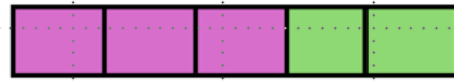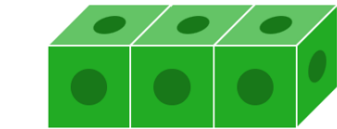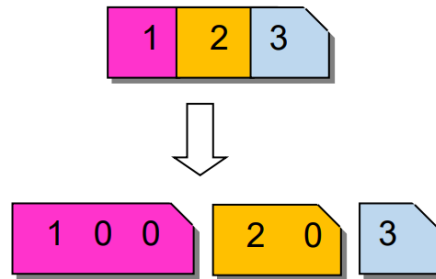| Semester 1 | Semester 2 |
|---|---|
| **Term 1**<br>Numbers to 10 000<br>Addition and Subtraction<br>Money<br>Multiplication Tables of 6, 7, 8 & 9 | **Term 3**<br>Fractions<br>Length<br>Mass<br>Volume |
| **Term 2**<br>Multiplication & Division<br>Bar Graphs<br>Angles<br>Perpendicular and Parallel Lines<br>Fractions | **Term 4**<br>Area and Perimeter<br>Time |

# Approach to Teaching & Learning

# Approach to Teaching & Learning

**Multilink Cubes**

**Number Discs**

**Fraction Discs**

Use of concrete manipulatives to develop conceptual understanding

6 in a pack

6 in a pack

Groups of 3's or Groups of 5's

**2 × 6 = 12**
**6 × 2 = 12**

**5 × 3 = 15**
**3 × 5 = 15**

# Experiential Learning

## Creating a Bar Graph

**Survey Question**: What is your favourite colour?

| Choices | Person 1 | Person 2 | Person 3 | Person 4 | Person 5 | Person 6 | Person 7 | Person 8 | Person 9 | Person 10 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pink | √ | | √ | | | | | √ | √ | | 4 |
| Yellow | | √ | | | | | √ | | | | 2 |
| Green | | | | √ | √ | | | | | | 2 |
| Orange | | | | | | | | | | √ | 1 |
| Blue | | | | √ | | | | | | | 1 |
| | | | | | | | | | | TOTAL | 10 |

### Combine the surveys of group members

- One member of the group will collect the survey results from all other members.

- She will add up the number of each choice and record it in the summary table on the back page of the survey.

- Each member was to survey 10 persons. 4 members would have surveyed 40 persons.

| Favourite Colour | Number of people |
|---|---|
| Pink | 12 |
| Yellow | 6 |
| Blue | 10 |
| Violet | 3 |
| Orange | 9 |
| | 40 |

Add all 4 members' total for each choice

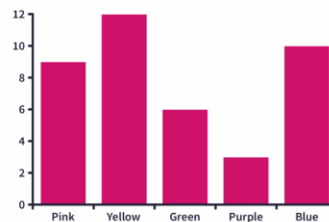### Create a Bar Graph In Polypad

Work in Pairs to create a Bar Graph in Polypad.

After creating the table and bar graph, take a screenshot in iPad, crop away the borders and save as jpeg in photo album.

Watch this video on how to use Polypad to create a Bar Graph.

## Group 2

| Colour | People |
|---|---|
| Pink | 9 |
| Yellow | 12 |
| Green | 6 |
| Purple | 3 |
| Blue | 10 |

Click on image to open video in Youtube
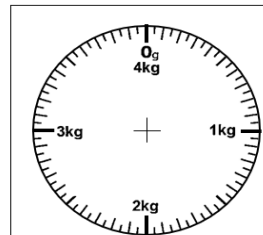
# Performance Task

## Measuring (Mass) performance task

A **Large interval** from **0 to 1 kg** is equal to **1000 g**

There are _____ **Medium intervals** from **0 to 1 kg (1000g)**

Each **Medium interval** is **1000 g** ÷ _____ = _____ g

Each Small interval (between Medium intervals) is 100 g ÷ 2 = _____ g

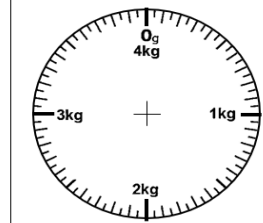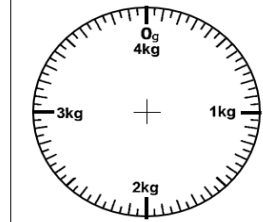| | |
|---|---|
|  | Place the **brass weights** at station 1 gently on the weighing scale. Carefully observe the position of the pointer and decide what is the mass of the brass weights. <br><br> Draw a line from the centre of the + to the marking where the pointer is pointing. <br><br> Count the number of Medium intervals from 0g : _____ <br><br> **At station 1, the mass of the brass weights is _____ g** |
|  | Place the **brass weights** at station 2 gently on the weighing scale. Carefully observe the position of the pointer and decide what is the mass of the brass weights. <br><br> Draw a line from the centre of the + to the marking where the pointer is pointing. <br><br> Count the number of Medium intervals from 0g : _____ <br><br> **At station 2, the mass of the brass weights is _____ g** |
|  | Place the **brass weights** at station 3 gently on the weighing scale. Carefully observe the position of the pointer and decide what is the mass of the brass weights. <br><br> Draw a line from the centre of the + to the marking where the pointer is pointing. <br><br> Count the number of Medium intervals *from 1 kg* : _____ <br><br> **At station 3, the mass of the brass weights is _____ kg _____ g** |

## Measuring (Volume) performance task

Use a RULER to DRAW a LINE to show the water level in each cup.
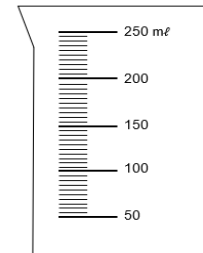Note: Check that the water level drawn is <u>horizontal.</u>
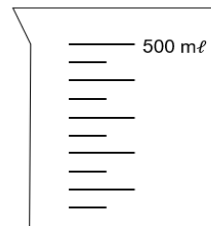
| Set-up A | |
|---|---|
|  500 mℓ | Number of **small intervals** from **0 to 500 mℓ** : _____ <br><br> Each **small interval** is _____ ÷ _____ = _____ <br><br> The volume of liquid in Set-up A is _____ |

| Set-up B | |
|---|---|
|  250 mℓ <br> 200 <br> 150 <br> 100 <br> 50 | The volume from **50 to 100 mℓ** is _____ mℓ <br><br> Number of **small intervals** from **50 to 100 mℓ** : _____ <br><br> Each **small** interval is _____ ÷ _____ = _____ <br><br> The volume of water in Set-up B is _____ |

| Set-up C | |
|---|---|
|  100 mℓ | Number of **small intervals** from **0 to 100 mℓ** : _____ <br><br> Each **small interval** is _____ ÷ _____ = _____ <br><br> The volume of water in Set-up C is _____ |
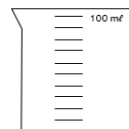
*Please note: Diagrams are not drawn to scale.



Learning how to measure mass using weighing skills and volume using beakers

# Activity-based lessons

Part 1: Bingo Game

| 5090 | 303 | 128 | 10 000 |
|------|------|------|--------|
| 5009 | 2020 | 932 | 7483 |
| 4783 | 766 | 2787 | 9011 |
| 7005 | 8824 | 8024 | 22 |

Part 2: List the numbers that you have crossed out in part 1 and write them in words.

_____ : _____

_____ : _____

_____ : _____

Part 3: Group the numbers listed in part 2 into two groups.

| Even Numbers | Odd Numbers |
|--------------|-------------|
|              |             |

Playing the BINGO game for 'Whole Numbers' topic

# Differentiated Instructions

## Choice Board (P3 Length, Mass & Volume)

- Question 5 must be completed
- Next, choose another 2 tasks to complete your tic-tac-toe.
- Highlight or circle the boxes you have completed.
- This choice board is due on _____.

| 1 | 2 | 3 |
|---|---|---|
| Use the internet to find the height and length of places in Singapore | Use the internet to find the height and length of places around the world | Use the internet to find the height and length of mountain and rivers around the world |
| 4 | 5 | 6 |
| Complete the word problems | Complete the summary | Create your own word problems |
| 7 | 8 | 9 |
| Drawing of scales of mass and volume | Reading the scales of mass and volume | Complete the Math Journal |

Giving students autonomy

## Activity 2

Use the internet to find the height and length of places around the world and complete the table.

| Landmark | Height in metres | Height in centimetres |
|---|---|---|
| Eiffel Tower in Paris | | |
| Petronas Twin Towers in Malaysia | | |

| Places | Length in kilometres | Length in metres |
|---|---|---|
| Great Wall of China | | |
| Amazon River in South America | | |

What I have learnt:

When converting from metres to centimetres, I _____.

When converting from kilometres to metres, I _____.

Using the internet to find out data related to real-world context

## Activity 9



The mass of the apples is 320kg.

Terri

Do you think Terri is correct? Please explain.
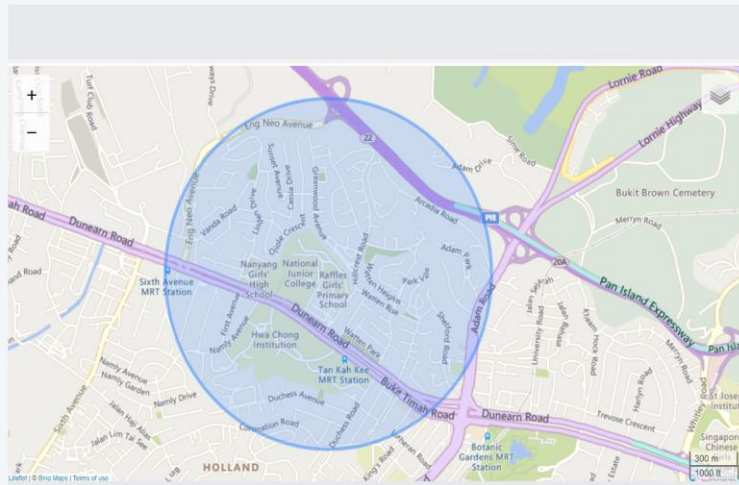
_____

_____

Thinking aloud, building metacognition competencies

# ICT Enriched Lessons

Relating to real-world context

Using videos for recap



**Recap: Measuring Length (Home)**

What is a metre?

**Activity 2: How Far is 1 Kilometre? (Class)**

Let's look at the map below.

The distance of the landmarks (within the BLUE circle) is less than 1 km from Raffles Girls Primary School, and the landmarks outside the blue circle is more than 1 km from Raffles Girls Primary School.

Refer to the the instruction below on how to use the map.

1. Type in the name of the landmark if more than one is shown.
2. Tap enter on your keyboard

3. Read the distance shown on the map. That is the distance between Raffles Girls Primary School and the landmark that you have searched for.

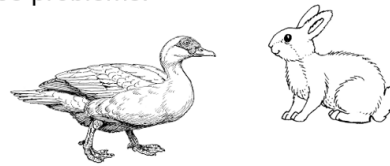Teaching pupils how to use google maps

# Heuristic Skills

## Guess and Check 1

Name: _____( ) P3 ( )        Date: _____

Use the guess and check method to solve these problems.

1. There are 20 rabbits and ducks.
   There are 54 legs altogether.
   How many ducks are there?

| Rabbits | legs | Ducks | legs | Total animals | Total legs | Check (54)? |
|---------|------|-------|------|---------------|------------|-------------|
|         |      |       |      |               |            |             |
|         |      |       |      |               |            |             |
|         |      |       |      |               |            |             |
|         |      |       |      |               |            |             |
|         |      |       |      |               |            |             |

Ans: _____

Guess and Check strategy

---

1) Mrs Tan sold **450** curry puffs on **Friday**.
   She sold **35 fewer** curry puffs on **Saturday than on Friday**.
   a) How many curry puffs did she sell on Saturday?
   b) How many curry puffs did she sell on both days?

**Step 1: Understanding the word problem**

On which days did she sell more curry puffs? On Friday or Saturday? _____

**Step 2: Plan**

What model do I draw? Part-whole or comparison? _____

Draw your model: Complete the model

Friday [                              ]

Saturday

**Step 3: Do**

Look at your model carefully and solve question (a) and (b).

_____ ◯ _____ = _____

_____ ◯ _____ = _____

- *Remember the 4 steps when you do word problems*
- *Underline your keywords*
- *Plan how to draw your model*
- *Make use of your model and solve the question*
- *Check your work* 😊

Ans: a) _____

b) _____

Using Polya's 4 steps method for problem-solving

# Polya's 4 Steps to Problem Solving

**UNDERSTAND** → **PLAN** → **SOLVE** → **CHECK**

| UNDERSTAND | PLAN | SOLVE | CHECK |
|---|---|---|---|
| • Read the question carefully<br>• Take note of key words / information<br>• What are you asked to solve? | • Think about similar problem you have solved before.<br>• Any clues to guide you on the strategy to be applied here?<br>e.g make a list, draw a model etc | • Follow your plan step by step.<br>• Write the equations and check each step as you | • Does your answer make sense?<br>• Does your answer fit the conditions given in the question?<br>• Do you need to include any units in your answer? |

# P3
# ZOO-MAZING



MAP of Singapore Zoo
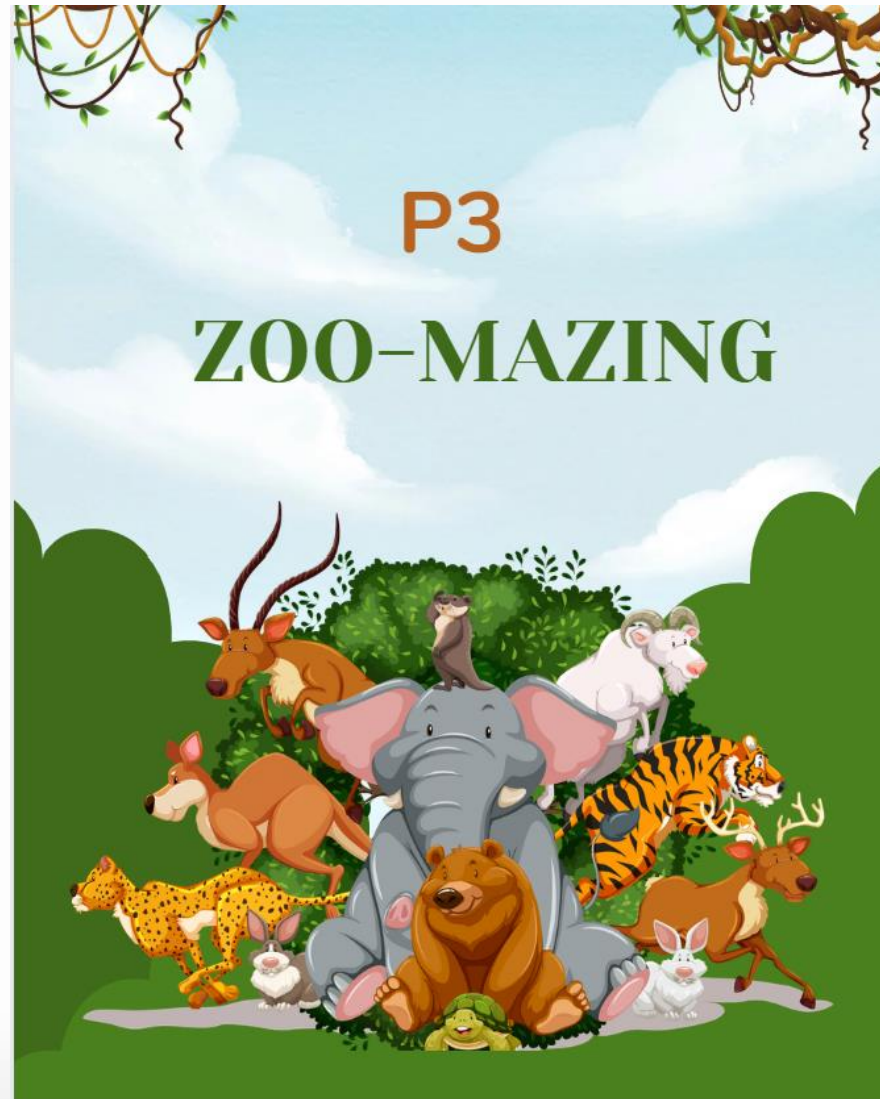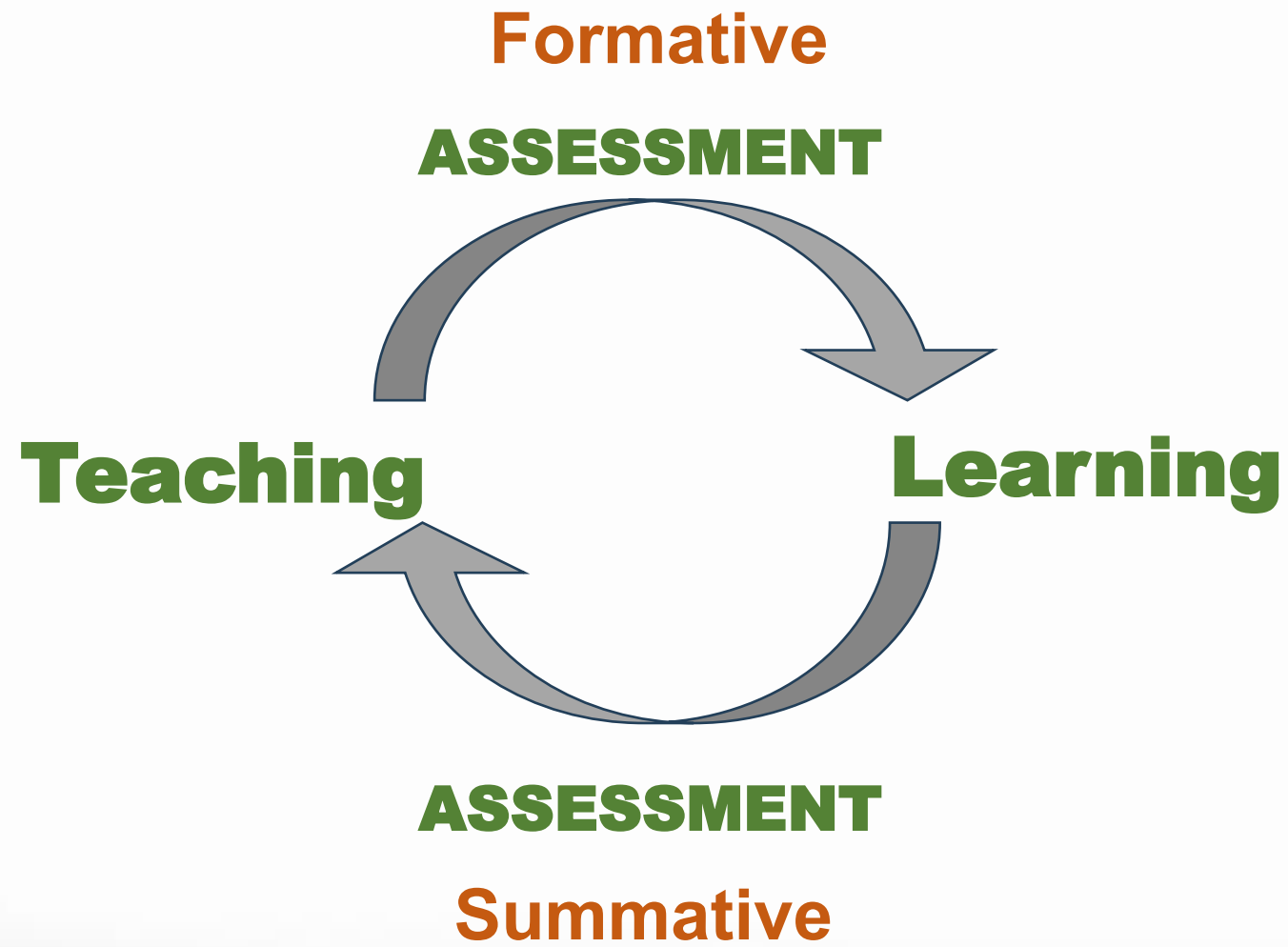
# Formative Assessment

➢ Daily work

➢ Performance Tasks

➢ Topical Review

➢ Teacher's observation and feedback

# Summative Assessment

| Weighted Assessment 1 | Weighted Assessment 2 | End-Year-Examination | Total |
|:---:|:---:|:---:|:---:|
| 15% | 15% | 70% | 100% |

| Weighted Assessment 1 | Weighted Assessment 2 |
|---|---|
| Term 2 Week 5 | Term 3 Week 5 |
| 25 marks | 25 marks |
| Topics<br>• Numbers to 10 000<br>• Addition & Subtraction<br>• Money<br>• Multiplication Tables of 6,7,8 and 9<br>• Multiplication and Division | Topics<br>• More Word Problems<br>• Bar Graphs<br>• Angles<br>• Perpendicular & Parallel Lines<br>• Fractions |

# P3 End-Year-Examination Format

**Duration: 1 h 30 min**

| Section | Item Type | No. of questions | Marks |
|---|---|:---:|:---:|
| **Section A** | Multiple choice | 10 | 15 |
| **Section B** | Short Answer Questions | 10 | 15 |
| **Section C** | Long Answer Questions | 5 | 20 |
| **Total** | | **25** | **50** |

# Empowering Math Learning at Home

- Show the relevance of Math in real-life

- Play Math Games

- Provide a supportive environment

- Encourage a Growth Mindset

Thank you!