

# Curriculum Briefing

## Primary 2

### Mathematics



# Vision

A community of confident and motivated pupils who are both **effective problem-solvers** and **team-players**.

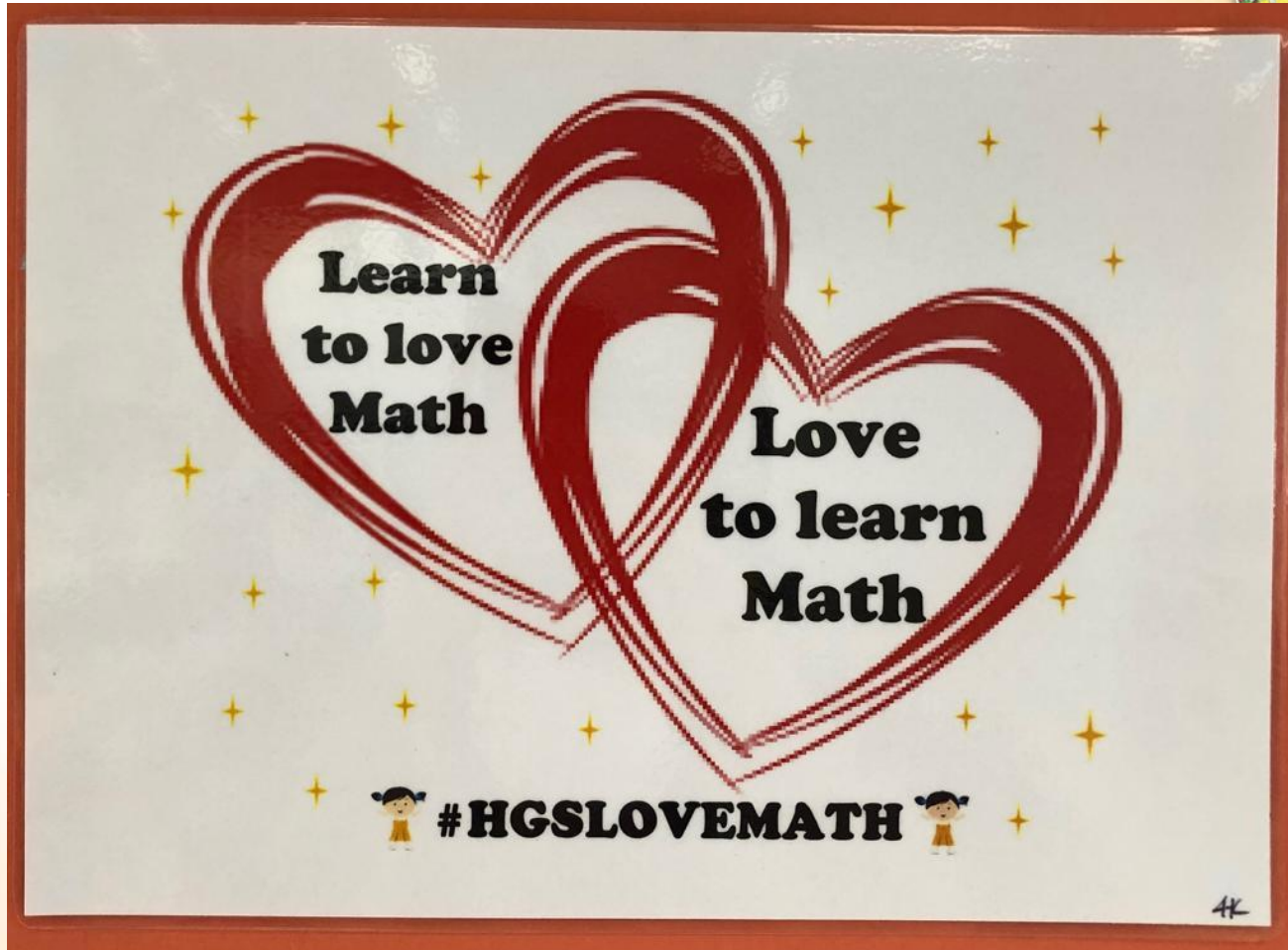


# Mission

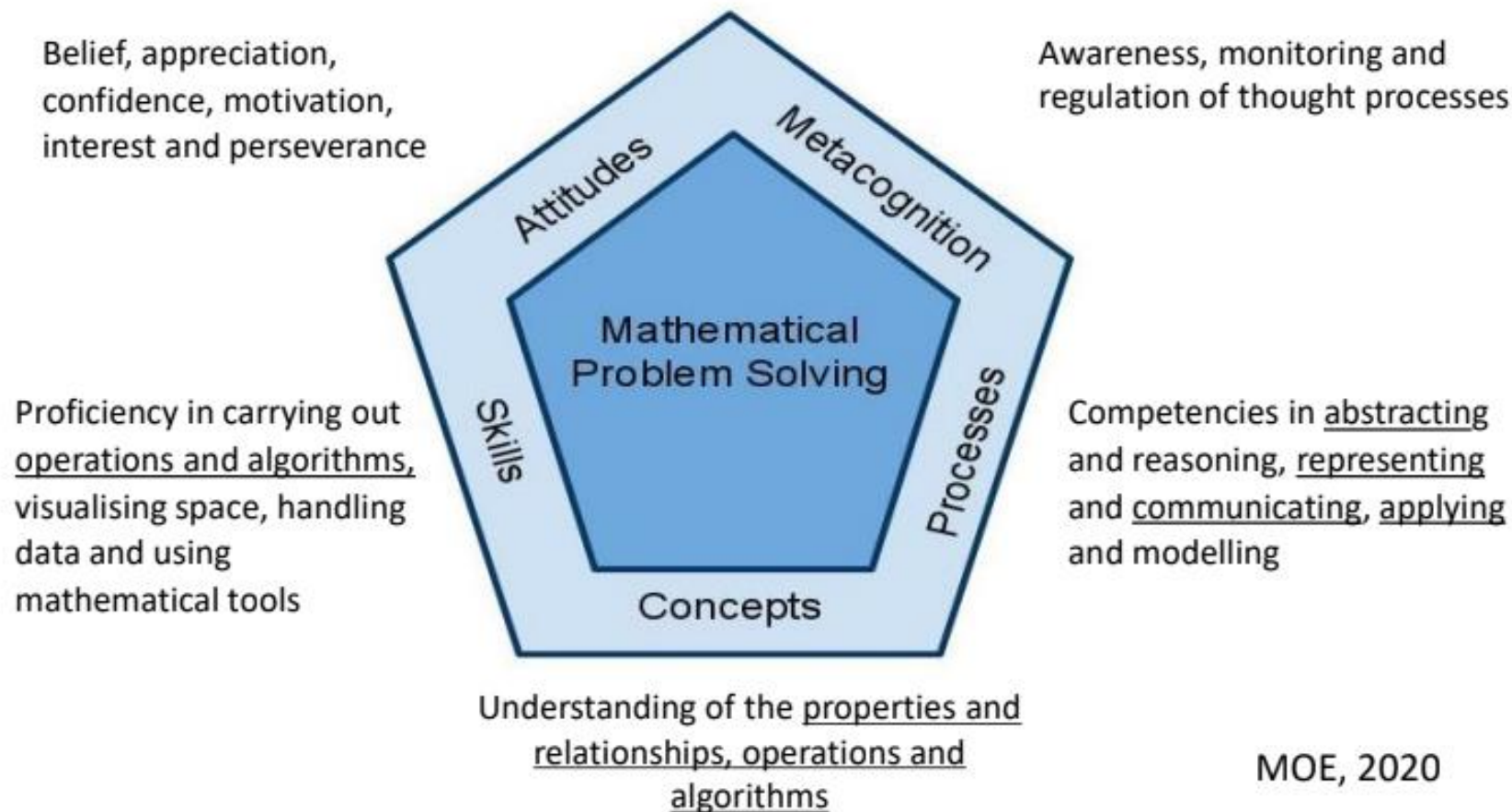
To equip pupils with the necessary mathematical knowledge and skills for **everyday life** and for **continuous learning** in mathematics and related disciplines.



We hope our girls will...



# MOE Mathematics Curriculum Framework



MOE, 2020

## 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



**Spiral Approach in Math Curriculum**  
Concepts taught are built on concepts taught in previous years.

# P2 Math Syllabus

Numbers	Measurement and Geometry	Statistics
Numbers up to 1000	Length	Picture Graphs
Addition and Subtraction	<b>Mass*</b>	
Multiplication and Division	<b>Volume*</b>	
<b>Fraction*</b>	Time	
Money	<b>2D and 3D*</b> shapes	



\* New Topics in P2

# Learning Outcomes

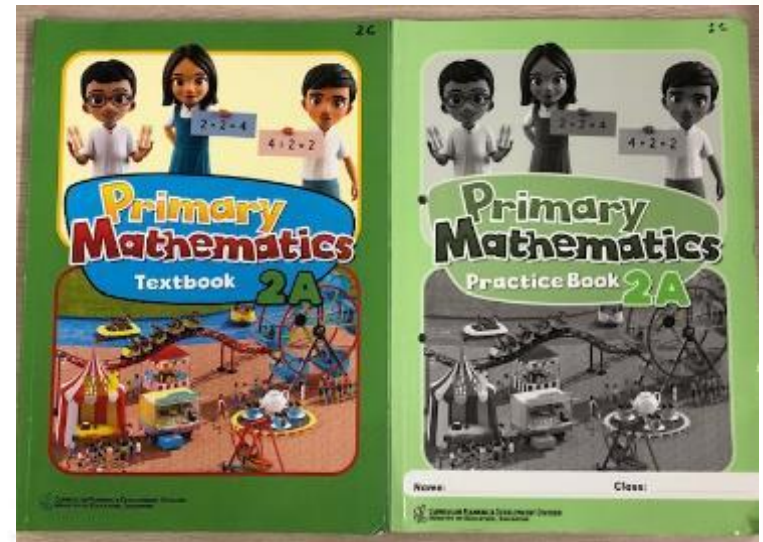
Semester 1	Semester 2
Understand numbers up to thousand	Identify, name, describe and sort shapes and objects
Solve mathematical problems involving addition and subtraction	Tell time to the minute.
Multiply and divide numbers within multiplication tables	Compare and order objects by length, mass, or volume
	Read and interpret picture graphs with scales
	Understand fractions





# Books and Materials Used

- ❖ Pri. Mathematics Textbook 2A and 2B
- ❖ Pri. Mathematics Practice Book 2A and 2B
- ❖ Topical Worksheets
- ❖ P2 Heuristics Worksheets
- ❖ Math File (red folder)



## Heuristics:

A heuristics is a method or strategy used to solve a Math problem.

In Haig Girls, the teaching of heuristics will be covered at the appropriate levels in increasing depth and to enable pupils to consolidate the concepts and skills learnt.



# Whole School Heuristics Approach

No.	Heuristics	P1	P2	P3	P4	P5	P6
1	Model Drawing: Part and Whole	✓	✓				
2	Model Drawing: Comparison	✓	✓	✓			
3	Model Drawing: Multiplication and Division		✓	✓			
4	Model Drawing: Before and After				✓	✓	✓
5	Systematic Listing	✓	✓	✓			
6	Find a Pattern	✓	✓	✓	✓	✓	✓
7	Draw a Diagram	✓	✓	✓			
8	Restate The Problem		✓	✓			
9	Guess and Check			✓	✓	✓	✓
10	Working Backwards			✓	✓	✓	✓
11	Make an Assumption				✓	✓	✓

# Checking our students' understanding

- Math Practices  
(e.g. practice book exercises, heuristics worksheets)
- Questioning and Feedback during lessons  
(e.g. use of mini-whiteboards)
- Non-Weighted Assessments  
(e.g. Topical Worksheets, Practice Papers)
- Hands-on activities  
(e.g. use of manipulatives such as mini-clocks)
- Performance Tasks  
(eg. Use of weighing scales to measure mass of objects)



# Marking Annotations

- Teachers will use these annotations when marking the pupils' work.

## 1) CC – Careless Calculation

(2) Farisha buys 17 hairclips.  
Sarah buys 3 more hairclips than Farisha.  
How many hairclips does Sarah buy?

Sarah  $\rightarrow 17 + 3 = 19$  X CC  
(20) c

Sarah buys  $\frac{19}{(20) c}$  hairclips.

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Lesson 4 Solving Word Problems: Addition



## 2) ME – Missing Equation

- (5) Jane collects 7 erasers.  
Raju collects 9 more erasers than Jane.  
How many erasers does Raju collect?

(  $Raju \rightarrow 7 + 9 = 16$  ) ME

Raju collects 16 erasers.



# WORD PROBLEMS! HOW?





USE:



# CUBES



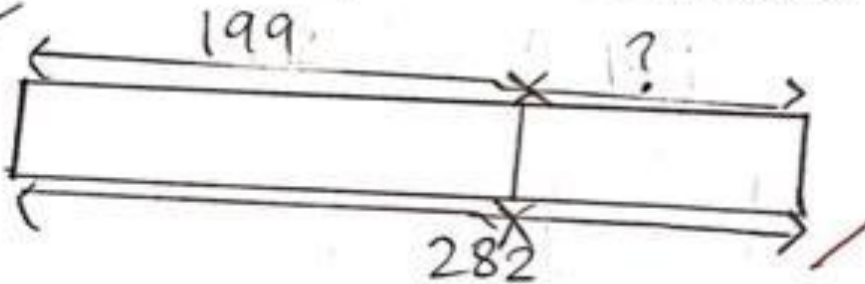
1. **C**ircle numbers. 
2. **U**nderline *opposite* <sup>BOYS</sup>  
<sub>GIRLS</sub>  
helpful words
3. **B**ox — what to find? 
4. **E**quation & working  $2 + 1 = 3$
5. **S**tatement  
Answer question



# An example of application of 'CUBE' in word problems

C ✓  
u ✓  
B ✓  
e ✓  
e

(6) There were 282 members in Sunshine Sailing Club.  
199 members were men.  
How many members were women?



$$\begin{array}{r} 282 \\ - 199 \\ \hline 083 \end{array}$$

Women  $\rightarrow 282 - 199 = 83$  ✓

83 ✓ members were women.





# Expectations of our students

- **Listen** and **participate** actively
- **Be on task**
- **Be prepared**
  - bring the necessary books
  - handing in work **on time**
- **Ask** when in doubt
- Take **pride** in her work
  - check through, neat handwriting
- **Persevere** – Keep Trying and Don't Give Up



# How Parents Can Help



- Work and **communicate** with your child's **Math Teacher**. 
- **Monitor/Follow up on homework** – When your child encounters difficulties with homework, ask questions that guide without telling them what to do
- Train your child to show proper and detailed **working** steps.
- Ensure your child knows the **multiplication tables of 2, 3, 4, 5 and 10**.
- **Relate** Math concepts to **daily life examples**. E.g mass of a packet of rice, cutting the pizza into equal parts is about fractions, 3D objects around us 
- Provide a positive environment – **encourage** and **praise** your child's effort.

2 X 2 = 4	3 X 2 = 6	4 X 2 = 8	5 X 2 = 10
2 X 3 = 6	3 X 3 = 9	4 X 3 = 12	5 X 3 = 15
2 X 4 = 8	3 X 4 = 12	4 X 4 = 16	5 X 4 = 20
2 X 5 = 10	3 X 5 = 15	4 X 5 = 20	5 X 5 = 25
2 X 6 = 12	3 X 6 = 18	4 X 6 = 24	5 X 6 = 30
2 X 7 = 14	3 X 7 = 21	4 X 7 = 28	5 X 7 = 35
2 X 8 = 16	3 X 8 = 24	4 X 8 = 32	5 X 8 = 40
2 X 9 = 18	3 X 9 = 27	4 X 9 = 36	5 X 9 = 45
2 X 10 = 20	3 X 10 = 30	4 X 10 = 40	5 X 10 = 50



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