



Primary 2

Mathematics

Curriculum Information

2024





Curriculum



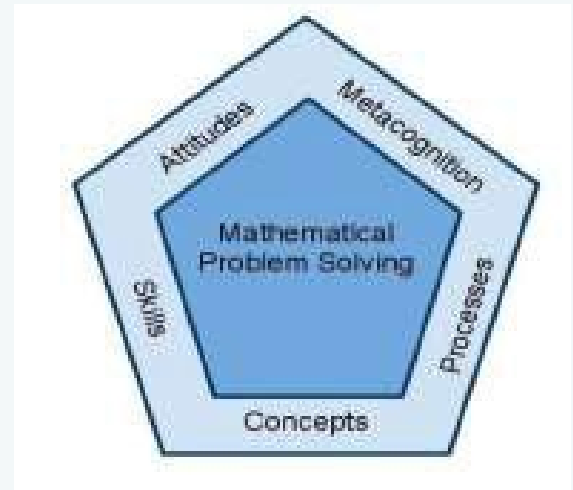
Love to Learn Maths
Learn to Love Maths

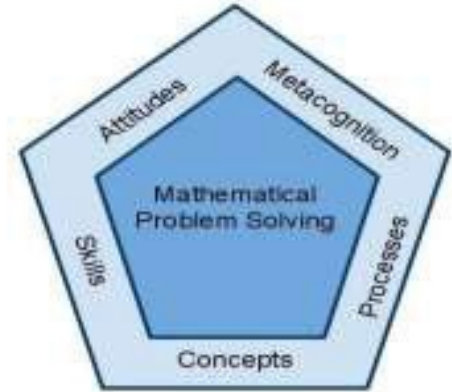


Primary Mathematics (2021) Syllabus

The Primary Mathematics Syllabus aims to enable all students to:

- acquire mathematical concepts and skills for everyday use and continuous learning in mathematics
- develop thinking, reasoning, communication, application and metacognitive skills through a mathematical approach to problem-solving; and
- build confidence and foster interest in mathematics.





Primary Mathematics (2021) Syllabus

The document is available from MOE Website

Specific topics to be covered are in the
Primary 2 Primary Mathematics Textbooks.



Pedagogy



Love to Learn Maths
Learn to Love Maths

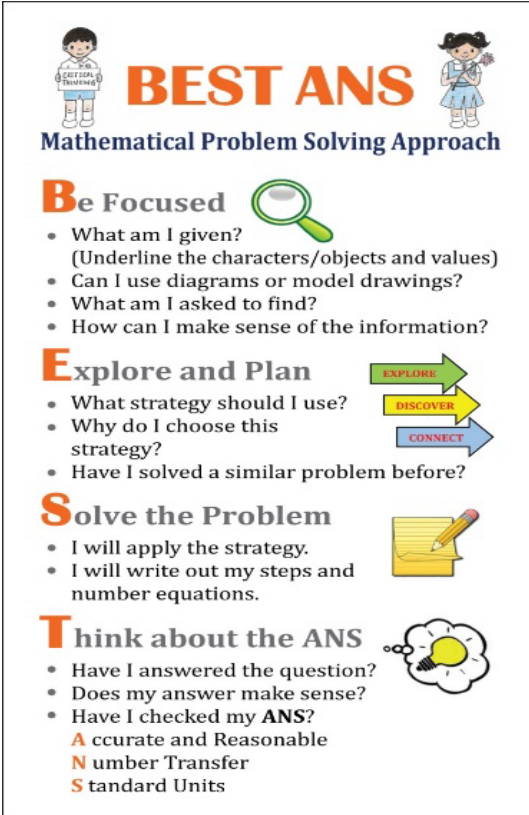


Learner-centred pedagogy


Teachers will use appropriate pedagogical approaches:

- Concrete-Pictorial-Abstract approach (C-P-A)
- Hands-on learning experiences
- Co-operative learning, opportunities for collaborative work
- Differentiated Instruction (DI - Content, Process, Product)
- E-learning, SLS Lessons, etc


- Informal Formative Assessment (FA) strategies to monitor and deepen students' learning
- Guide students in using BEST^{ANS} problem solving approach
- Provide Critical Thinking exercises to equip students with problem solving heuristics




BEST ANS
Mathematical Problem Solving Approach

Be Focused 


- What am I given?
(Underline the characters/objects and values)
- Can I use diagrams or model drawings?
- What am I asked to find?
- How can I make sense of the information?

Explore and Plan 

- What strategy should I use?
- Why do I choose this strategy?
- Have I solved a similar problem before?

Solve the Problem 

- I will apply the strategy.
- I will write out my steps and number equations.

Think about the ANS 

- Have I answered the question?
- Does my answer make sense?
- Have I checked my ANS?

Accurate and Reasonable
Number Transfer
Standard Units



Assessment



Love to Learn Maths
Learn to Love Maths



P2 Mathematics Assessment for Holistic Development

NO Mid-Year or End-of-Year Examinations

3 Bite-sized Reviews/ Performance Tasks

- ✓ Assess students' progress at different phases of learning during lessons
- ✓ Triangulate students' learning from multiple sources of assessment information such as through observation in class, written work, classroom discussion/ Maths Talk, Journal, Mental Sums, e-learning, etc.
- ✓ Use of learning outcomes (LOs) to give feedback to parents on students' learning progress



- Report of child's **attainment level of LOs** at the end of Semester 1 and Semester 2
- Use **3 levels of qualitative descriptors** to determine the level of attainment
 - *Developing, Competent, Accomplished*



P2 Learning Outcomes

1. Understand numbers up to thousand.
2. Solve mathematical problems involving addition and subtraction.
3. Multiply and divide numbers within multiplication tables.
4. Identify, name, describe and sort shapes and objects.
5. Tell time to 5 minutes.
6. Compare and order objects by length, mass, or volume.
7. Read and interpret picture graphs with scales.
8. Understand fractions.

Qualitative Descriptors for Learning Outcomes

Example

	Learning Outcome	Qualitative Descriptors		
		Developing	Competent	Accomplished
1	Understand numbers up to thousand.		✓	
2	Tell time to 5 minutes	✓		

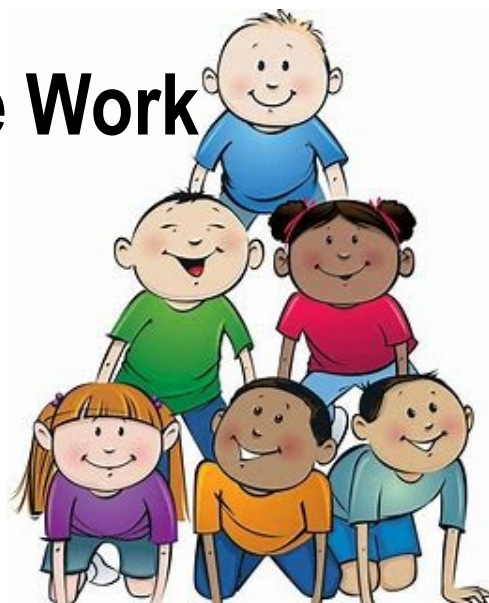


Formative Assessment [FA] to gauge learning

Learning experiences

Collaborative Work

Maths Talk



MATH TALK SENTENCE STARTERS

- *I solved the problem by...
- *The strategy I used was...
- *Another strategy you could use would be...
- *The best way to solve this problem would be...
- *I know the answer is reasonable because...
- *I can check my answer by...
- *I can prove my thinking by...
- *I discovered that...
- *I noticed that...
- *I learned...
- *I wonder...
- *I compared...
- *I added/subtracted/multiplied/divided...

Formative Assessment [FA] to gauge learning

Mental Sums

Class observation of pupils' mental calculation ability in **Oral Maths and Mental Calculation Exercises**

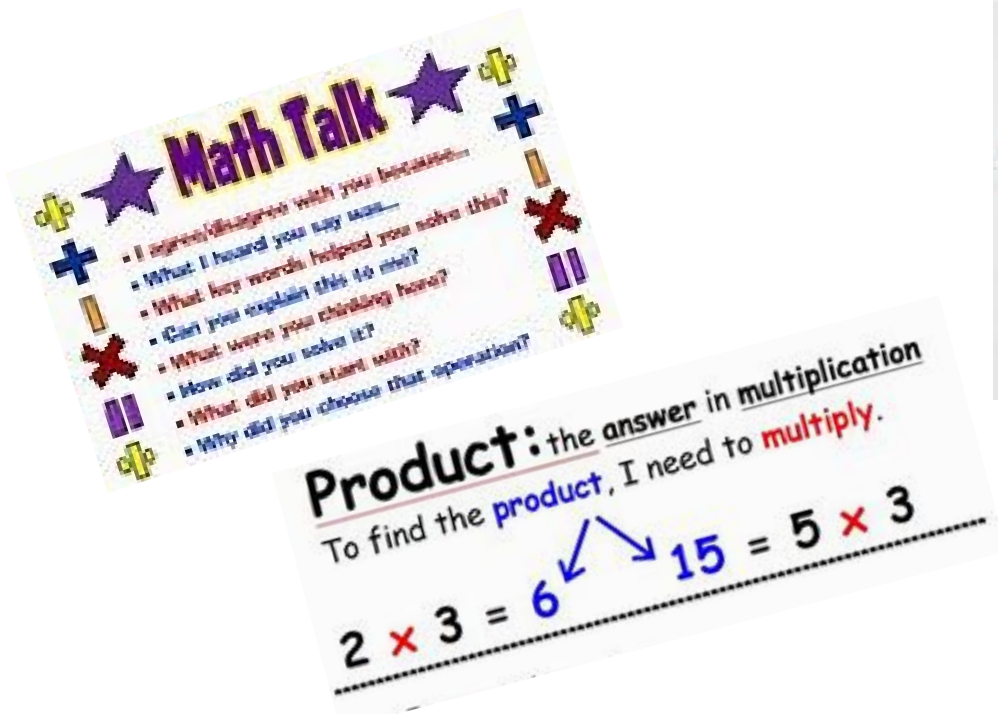
Examples

- Addition and subtraction involving 2-digit numbers
- Multiplication : 5 groups of 2
- 10 more than 9 is 19
- 1 less than 10 is 9
- 16 is ten more than 6

Formative Assessment [FA] to gauge learning

Journal and Maths Communication

Your child's ability to express understanding through representation, diagrams, mathematical terms, verbal and written communication, etc.



Math Talk

- I agree/disagree with you because...
- What I heard you say was...
- What key words helped you solve this?
- Can you explain this to me?
- What were you thinking here?
- How did you solve it?
- What did you start with?
- Why did you choose that operation?

Product: the answer in multiplication
To find the product, I need to multiply.

$2 \times 3 = 6$ $15 = 5 \times 3$



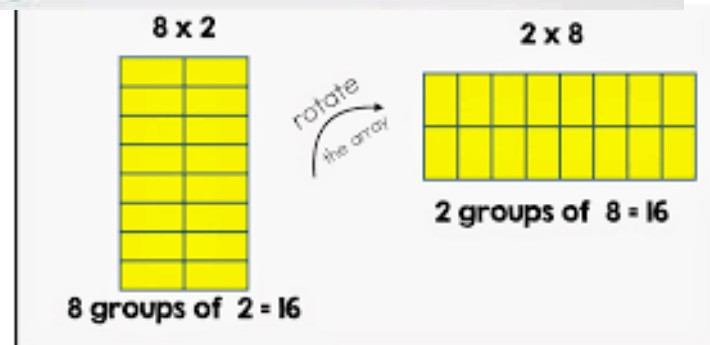
SOLVING 2-STEP WORD PROBLEMS

ANSWER STATEMENT: The total cost of tickets is \$95.00

$10 \times 8 = 80$
 $80 + 15 = 95$

MENTAL MATH: make 10

I'VE GOT THIS!



8×2 2×8

8 groups of 2 = 16 rotate the array 2 groups of 8 = 16





Home-School Partnership



*Parents can help to **reinforce concepts learnt in Primary 1:***

WHOLE NUMBERS : Numbers up to 100

- Counting to tell the number of objects in a given set
- Comparing the number of objects in two or more sets
- Use of ordinal numbers (first, second, up to tenth) and symbols (1st, 2nd, 3rd, 4th, etc.)



*Parents can help to **reinforce concepts learnt in Primary 1:***

WHOLE NUMBERS : Numbers up to 100

- Number notation and place values (tens, ones)
- Reading and writing numbers in numerals and in words
- Comparing and ordering numbers
- Number patterns

Parents can help to reinforce concepts learnt in Primary 1:

Concepts of Addition and Subtraction

- ❑ Use of the addition symbol (+) or subtraction symbol (-) to write a mathematical statement for a given situation
- ❑ Comparing two numbers within 20 to tell how much one number is greater (or smaller) than the other
- ❑ Recognising the relationship between addition and subtraction
- ❑ Building up the addition bonds up to $9 + 9$ and committing to memory



Parents can help to reinforce concepts learnt in Primary 1:

Concepts of Addition and Subtraction

- ❑ Addition of more than two 1-digit numbers
- ❑ Addition and subtraction within 100 involving
 - * a 2-digit number and ones
 - * a 2-digit number and tens
 - * two 2-digit numbers
- ❑ Addition and subtraction using formal algorithms

*Parents can help to **reinforce concepts learnt in Primary 1:***

Multiplication

- Multiplication as repeated addition (within 40)

- Use of the multiplication symbol (\times) to write a mathematical statement for a given situation

- Division of a quantity (not greater than 20) into equal sets:
 - * given the number of objects in each set/group
 - * given the number of sets/groups

- Solving 1-step word problems with pictorial representation



*Parents can help to **reinforce concepts learnt in Primary 1:***

Length

- Measurement and comparison of the lengths of two or more objects in non-standard units

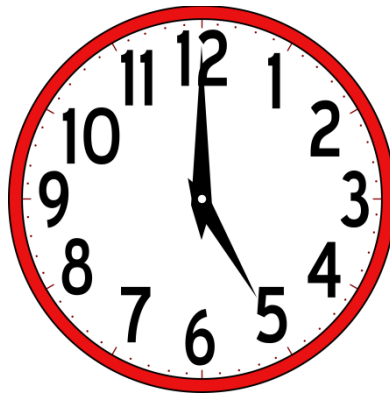
- Use of the following terms:
 - long, longer, longest
 - short, shorter, shortest
 - tall, taller, tallest
 - high, higher, highest



Parents can help to reinforce concepts learnt in Primary 1:

Time

- Telling and writing time to the hour/ half hour / quarter hour



Parents can help to reinforce concepts learnt in Primary 1:

Money

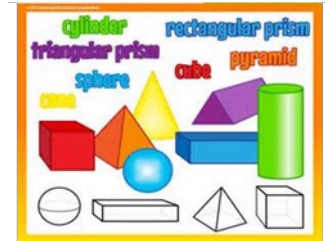
- Identifying coins and notes of different denomination
- Matching a coin/ note of one denomination to an equivalent set of coins/ notes of another denomination
- Telling the amount of money
- Use of the symbols \$ and ¢
- Solving word problems involving addition and subtraction of money in dollars only (or in cents only)



Parents can help to **reinforce concepts learnt in Primary 1:**

Geometry

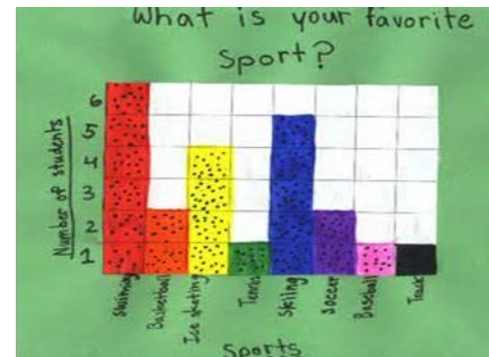
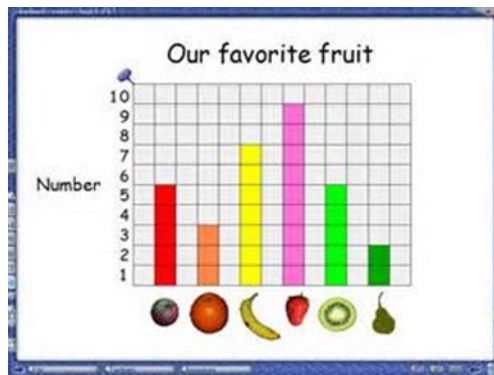
- Basic shapes: rectangle, square, circle, triangle
- Identifying and naming the 4 basic shapes from 2-D and 3-D objects
- Describing and classifying shapes
- Patterns: making/ completing patterns with 2-D cut-outs according to one or two of the following attributes
 - * shape
 - * size
 - * colour
- Making/completing patterns with 3-D models:
 - * cube
 - * cuboid (rectangular block)
 - * cone
 - * cylinder



Parents can help to **reinforce concepts learnt in Primary 1:**

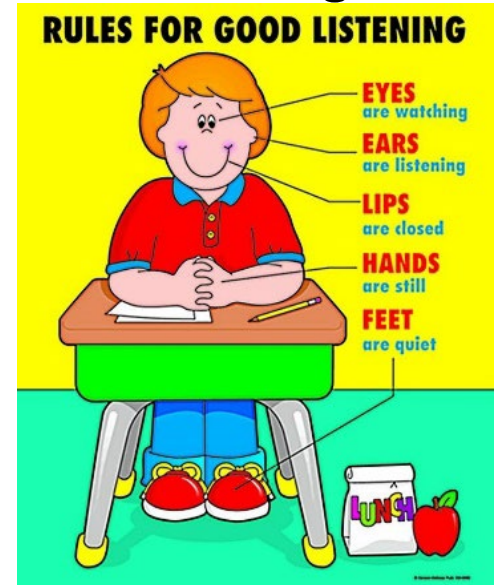
Statistics : Data Analysis

- ❑ Collecting and organising data
- ❑ Making picture graphs
- ❑ Use of a symbol/picture to represent one object
- ❑ Reading and interpreting picture graphs in both horizontal and vertical forms



Instill in your child good habits to maximize learning

- ☑ Behave, Focus and Participate
- ☑ Listen and Speak at appropriate times
- ☑ Be organized
- ☑ Good handwriting
- ☑ *Necessary stationery (pencil, ruler, eraser, sharpener)*
[No need fanciful stationery that can distract]



Books for Primary 2

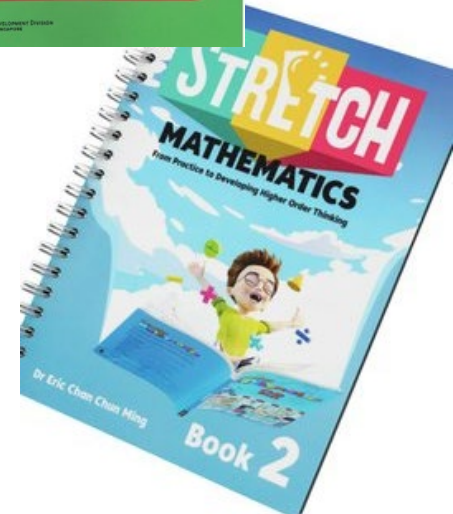
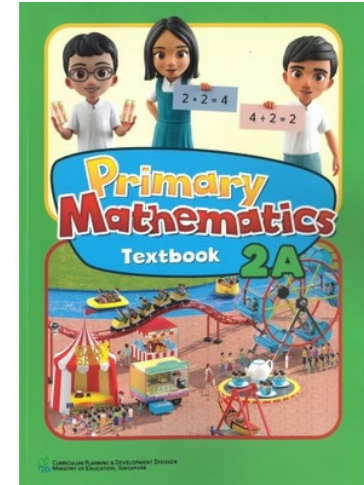
Primary Mathematics Textbooks 2A & 2B

Practice books 2A & 2B (Parts 1 & 2)

Enrichment :

Critical Thinking & STRETCH Exercises

Please ensure that your child shows you his/her work regularly.



Optional Supplementary Materials

(available from the School Bookshop)

Targeting Maths Companion 2A and 2B

My Pals! Test Book 2, Homework Book 2A and 2B

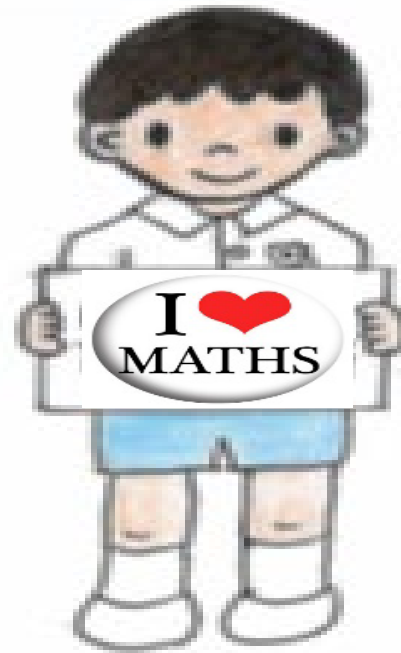


+Venture In Maths! Magazine

Subscription:

<https://www.add-venture.com.sg>





**In Partnership with
Parents to Develop
your child to their**

**Fullest Potential: Every student a Creator, Connector,
Contributor**

