Primary 2
Mathematics
# Curriculum Information

2023

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.
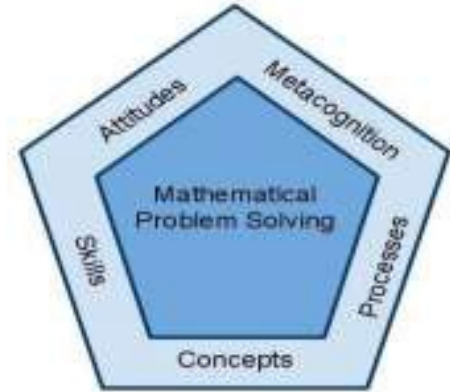
Primary Mathematics (2021) Syllabus

The document is available from MOE Website

Specific topics to be covered are in the
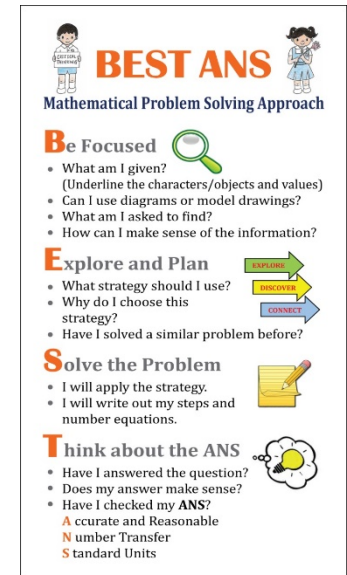**Primary Mathematics Textbooks 2A & 2B**.

Pedagogy

Learner-centred pedagogy

Teachers will use appropriate pedagogical approaches:

- Concrete-Pictorial-Abstract approach (C-P-A)

- Hands-on learning experiences

- Co-operative learning

- E-learning, SLS Lessons , etc

- Use formative assessment (FA) strategies to monitor 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 — EXPLORE / DISCOVER / CONNECT
- 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**?
  A ccurate and Reasonable
  N umber Transfer
  S tandard Units

Assessment

P2 Mathematics Assessment for Holistic Development

<u>NO</u> Mid-Year or End-of-Year Examinations

Formative : Learning experiences, Maths Talk,
Mental Sums, Journal
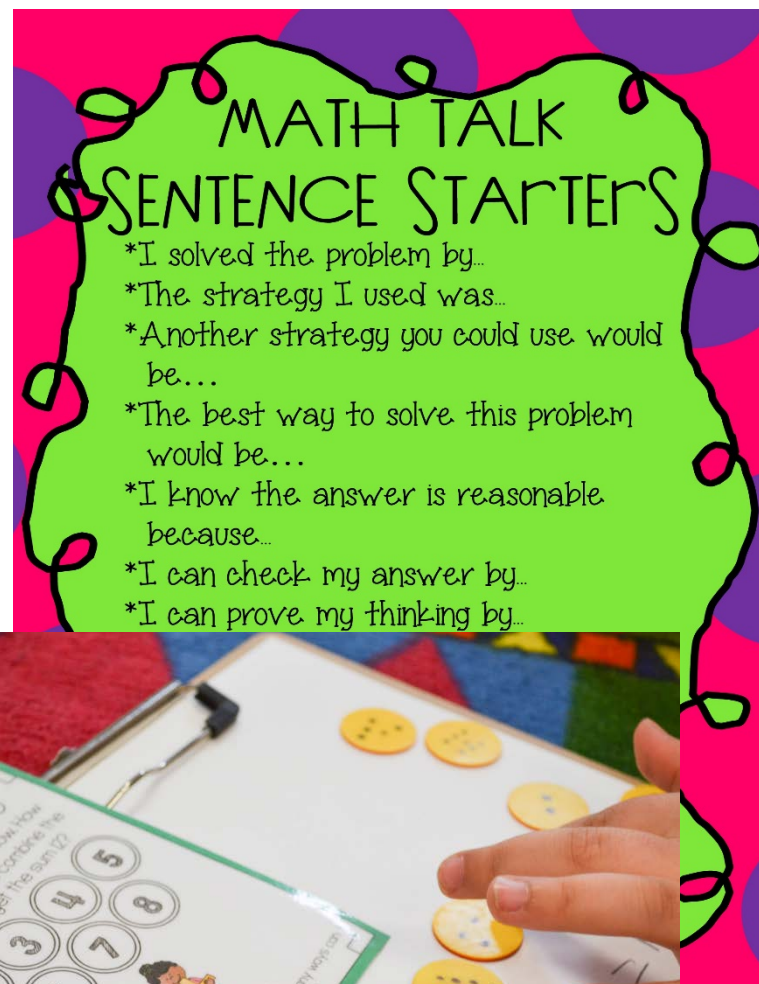
Written : **3 Bite-sized** Maths Review Tests

Informal modes of assessment to gauge students' learning

Maths Talk

Learning experiences

Collaborative Work

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

Journal and Maths Communication

Your child's ability to express understanding through representation, diagrams, mathematical terms, verbal and written communication, etc.
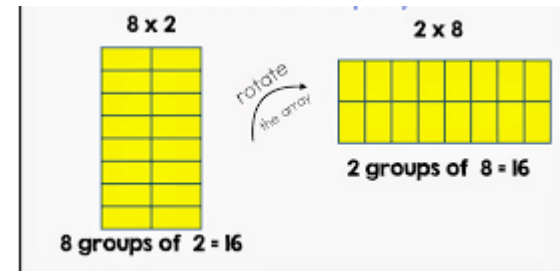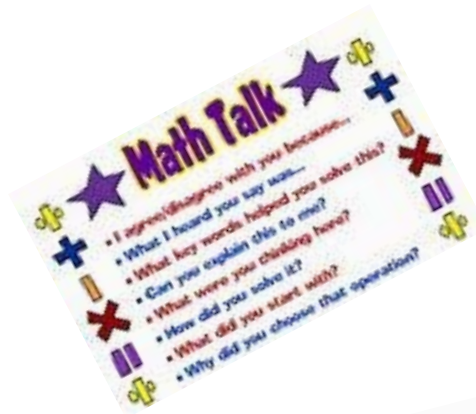
P2 Mathematics Assessment for Holistic Development

- **No Assessment in Term 1**

- **Learning outcomes (LOs) and qualitative descriptors to report P2 students' learning progress**

Details will be given by your child/ward's respective Math teacher.

Term 2 Review Test 1	Term 3 Review Test 2	Term 4 Review Test 3
Numbers to 1000 Addition & Subtraction within 1000 Multiplication Tables of 2, 5 & 10 Multiplication and Division within multiplication tables of 2,5 and 10	Numbers to 1000 Addition & Subtraction Multiplication Tables of 2, 3, 4, 5 & 10 Multiplication and Division Length Mass	Time Money Fractions Volume Picture Graphs Shapes Word Problems

Topics tested to be confirmed. More details will be given to your child.

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**	✓		

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.)

Home-School Partnership

*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

Home-School Partnership

*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

Home-School Partnership

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
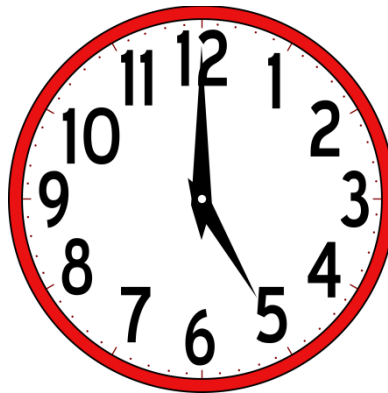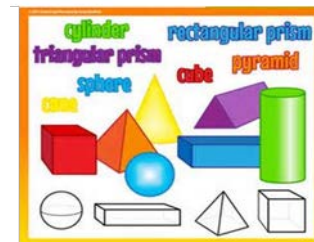
Parents can help to reinforce concepts learnt in Primary 1:

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
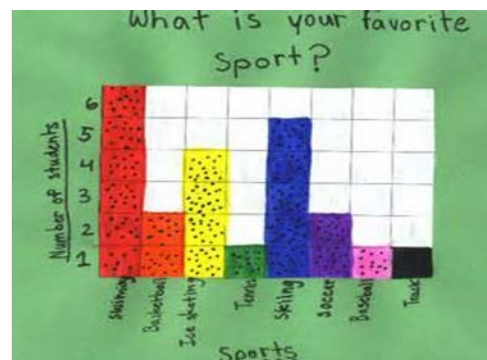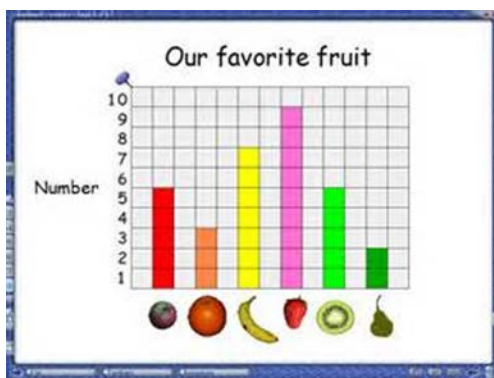
Instill in your child good habits to maximize learning

☑ Behave, Focus and Participate

☑ Listen and Speak at appropriate times

☑ Be organized

☑ Good handwriting

☑ *Necessary stationery (pencil, ruler, eraser, sharpener)*

☑ *Get your child accustomed to sitting for 1 hour*
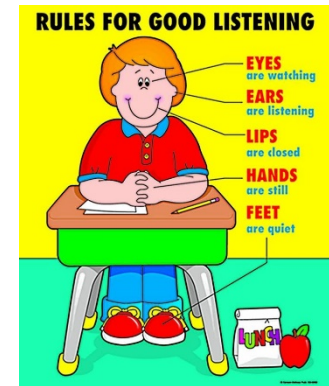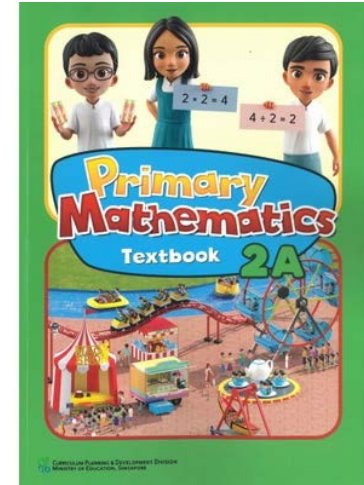
Books for Primary 2

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 Children
to their Fullest Potential