



# Primary 4 Mathematics Curriculum Information

2024



# Curriculum



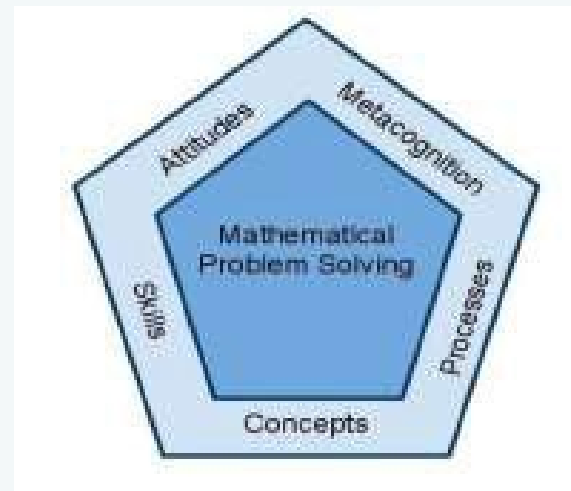
*Love to Learn Maths*  
*Learn to Love Maths*



# 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 4 Primary Mathematics Textbooks**





## Numbers up to 100 000

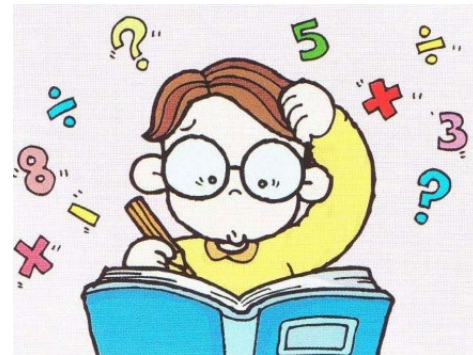
- Number notation, representations and place values  
(ten thousands, thousands, hundreds, tens, ones)
- Reading and writing numbers in numerals and in words
- Comparing and ordering numbers
- Patterns in number sequences
- Rounding numbers to the nearest 10, 100 or 1000
- Use of  $\approx$



# Syllabus: Learning Outcomes for P4

## Factors and Multiples

- Factors, multiples and their relationship
- Determining if a 1-digit number is a factor of a given number within 100
- Finding the common factors of two given numbers
- Determining if a number is a multiple of a given 1-digit number
- Finding the common multiples of two given 1-digit numbers



# Syllabus: Learning Outcomes for P4

## Four Operations of Whole Numbers

- ❑ Multiplication algorithm
  - Up to 4 digits by 1 digit
  - Up to 3 digits by 2 digits
  
- ❑ Division algorithm
  - Up to 4 digits by 1 digit



## Tables and Line Graphs

- Completing a table from given data
- Reading and interpreting data from tables/ line graphs

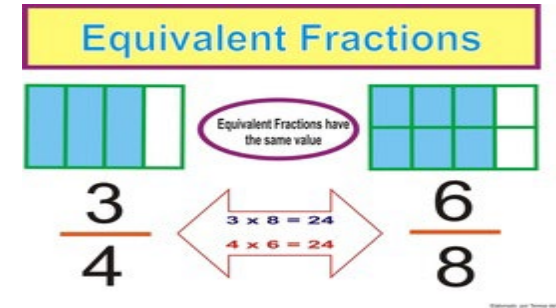




# Syllabus: Learning Outcomes for P4

## FRACTIONS

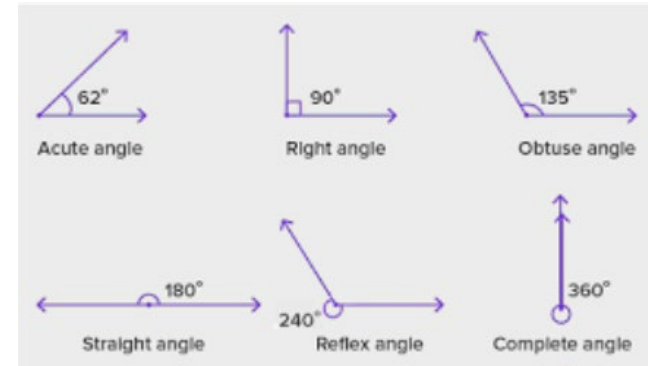
- Equivalent Fractions
- Recall of Mixed Numbers and Improper Fractions
- Recall of Comparing and Ordering Fractions
- Addition and Subtraction of Fractions
- Fraction of a set



# Syllabus: Learning Outcomes for P4

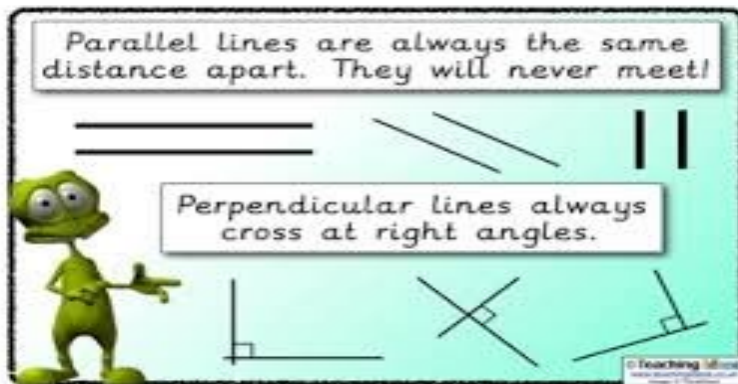
## ANGLES

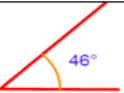

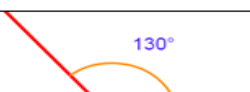

- Naming, measuring and drawing Angles



## RECTANGLES AND SQUARES

- Properties of Rectangles and Squares
- Drawing Rectangles and Squares



Type of Angle	Description	Example
Acute Angle	An angle that is less than $90^\circ$	
Right Angle	An angle that is exactly $90^\circ$	
Obtuse Angle	An angle that is greater than $90^\circ$ and less than $180^\circ$	
Straight	An angle that is exactly $180^\circ$	

# Syllabus: Learning Outcomes for P4

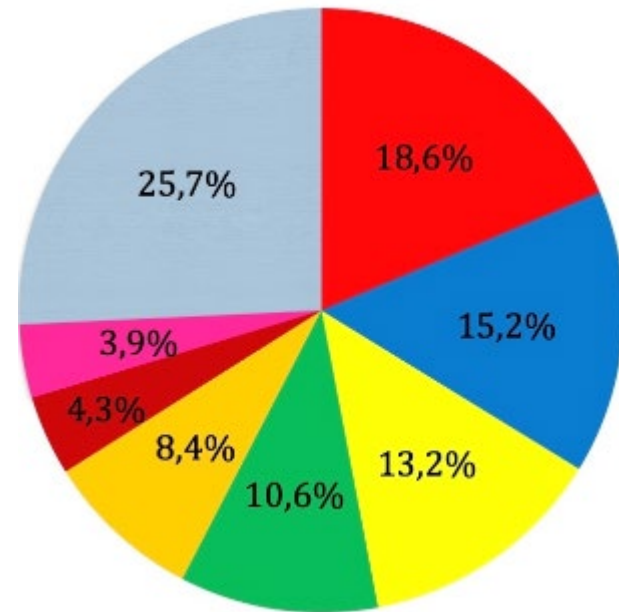
## DECIMALS

- Tenths, Hundredths, Thousandths
- Comparing and ordering Decimals
- Rounding Decimals
- Expressing a Decimal as a Fraction and vice versa
- 4 operations of Decimals

5.6 3.1 2.65  
9.3 0.7 1.24  
8.2 0.1 2.2  
0.12 7.7 0.3



## PIE CHARTS



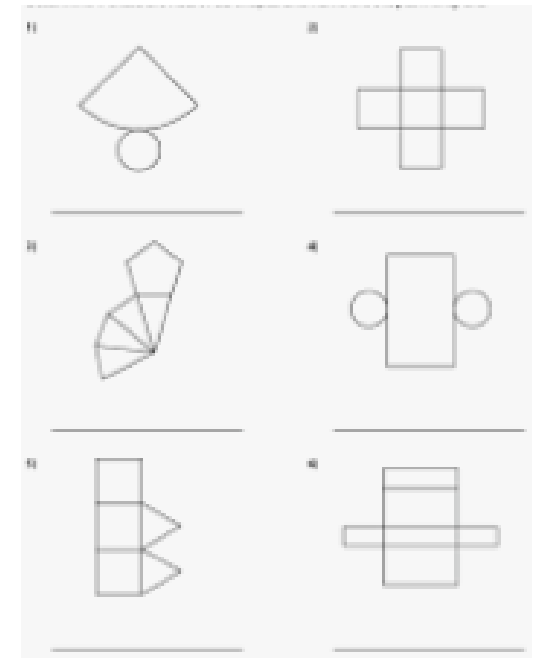
## AREA AND PERIMETER

- Finding the length of squares
- Finding unknown sides of Rectangles
- Perimeter and Area of Composite Figures



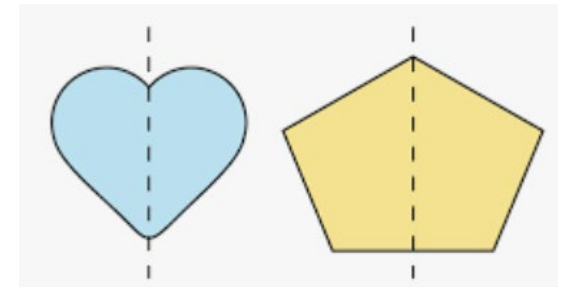
## NETS

- Geometric Figures
- Identifying Nets of Geometric Figures
- Drawing Geometric Figures on Isometric Grids



## SYMMETRY

- Symmetric Figures and Lines of Symmetry
- Completing Symmetric Figures on Grids





# Pedagogy



*Love to Learn Maths*  
*Learn to Love Maths*



TAO  
Established in 1904



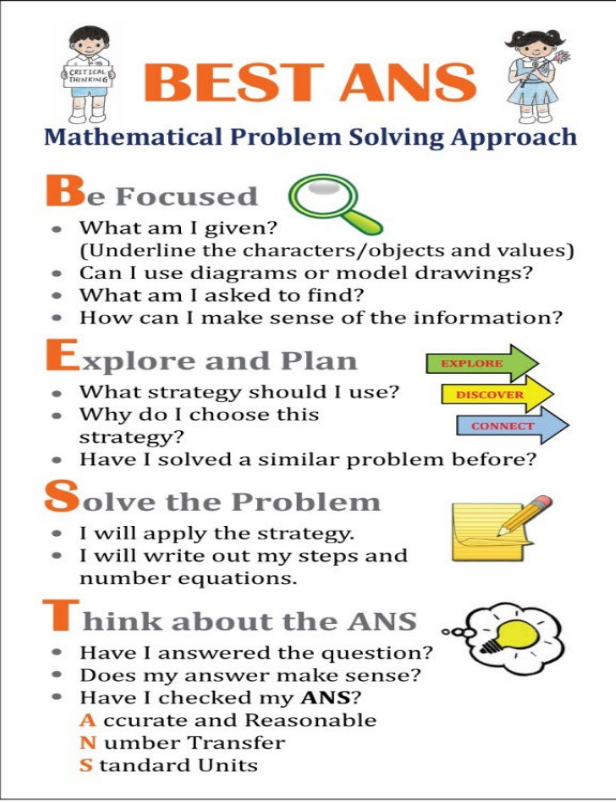
## Learner-centred pedagogy

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<sup>ANS</sup> problem solving strategy
- Provide Critical Thinking exercises to equip students with problem solving heuristics




**BEST ANS**  
Mathematical Problem Solving Approach

**B**e 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?

**E**xplore and Plan 

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

**S**olve the Problem 

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

**T**hink 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



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## P4 Mathematics Assessment [Formative & Summative]

### **NO Mid-Year Examination**

1 Weighted Assessment [WA] / 1 Performance Task [PT]  
End-of Year Examination

- ✓ Formative Assessment (FA) strategies [non-weighted] monitor 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, e-learning, etc.

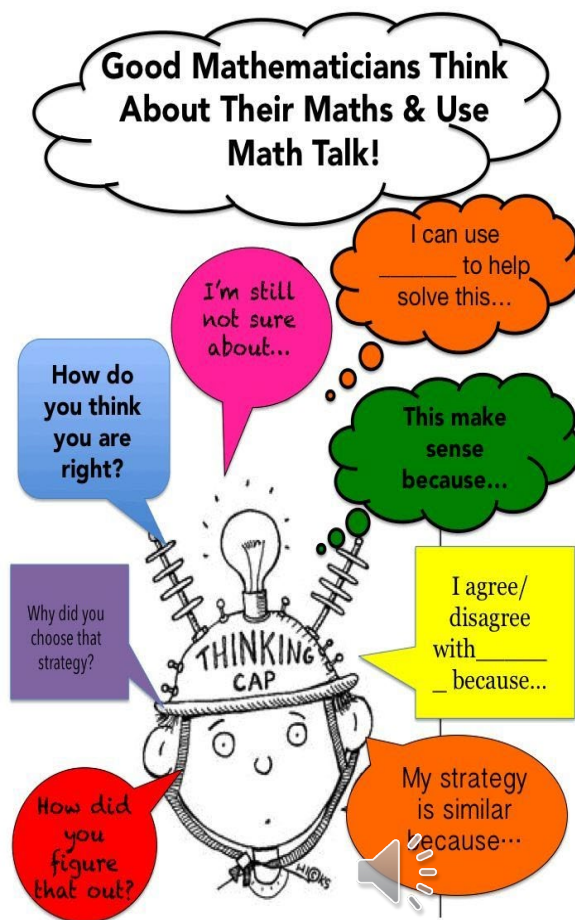


# Formative Assessment [FA] to gauge learning

## Maths Talk / Class Discussion

## Learning experiences

## Collaborative Work



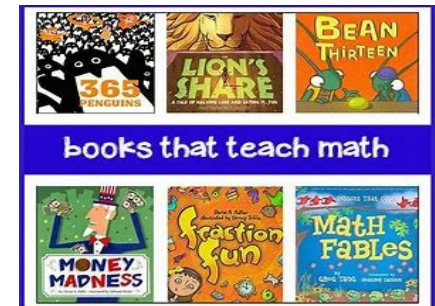
# P4 Mathematics School-based Assessment

Components	Weighting	Timeframe
<b>Formative Assessment:</b> Journal Hands-on Activities Review Exercises	<b>Non-Weighted</b>	<b>Whole Year</b>
<b>Summative Assessment:</b> 1 Weighted Assessment (WA) 1 Performance Task (PT)	15%	Term 2
	15%	Term 3
End-of-Year Examination	70%	Term 4
Overall	100%	



# Level-Specific Programme Highlights

	School-based
1	FunMath@Class Activities
2	ALP – Coding Programme
3	P4 Mathematics Quizzes



## Mathematics Competitions - Optional

For interested students

(registration required, self-funded, details will be given at a later date)

### Annual Mathlympics





# Home-School Partnership



## How can parents help?

Please ensure that your child has a good mastery of the **P3** basic concepts and skills:



- Whole Numbers
- Fraction
- Data Analysis
- Geometry
- Measurement (Length, Time, Money)
- Area & Perimeter

(Details can be found in the P3 textbooks)





Parents can help to monitor/reinforce

Pupils should have mastery in:

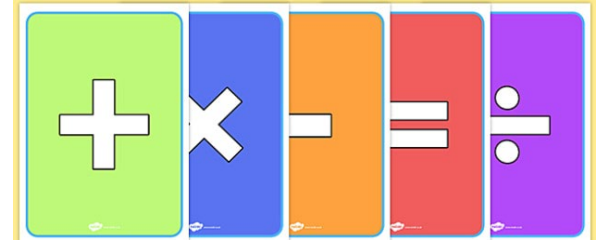
## (P3) **Addition and Subtraction**

- Addition and subtraction of numbers up to 4 digits
- Use of the terms 'sum' and 'difference'
- Solving up to 2-step word problems involving addition and subtraction.



Pupils should have mastery in:

## **(P3) Multiplication and Division**



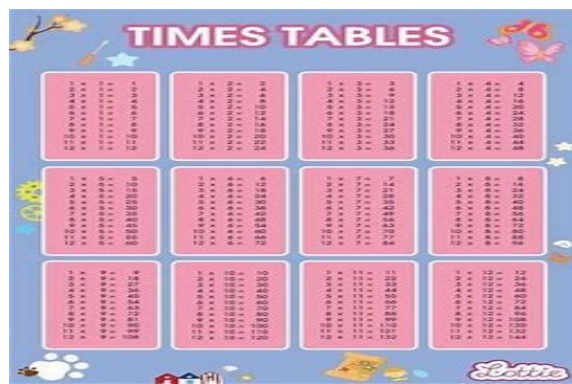
- Committing to memory the multiplication tables of 6, 7, 8 and 9
- Use of the terms 'product', 'quotient' and 'remainder'
- Multiplication and division within the multiplication tables
- Division with remainder
- Multiplication and division of numbers up to 3 digits by 1 digit
- Solving up to 2-step word problems involving the 4 operations

Parents can help to monitor/reinforce

Pupils should have mastery in:

## (P3) Mental Calculation

- ❑ Addition and subtraction involving two 2-digit numbers
- ❑ Multiplication and division within the multiplication table



### Mental Maths Near Doubles Strategy

When adding numbers that follow each other, use the knowledge of doubles to help add the numbers.

$$5 + 6 = \quad \text{This is the same as:} \\ 5 + 5 + 1 = 11 \quad \text{or} \quad 6 + 6 - 1 = 11$$



# Home-School Partnership

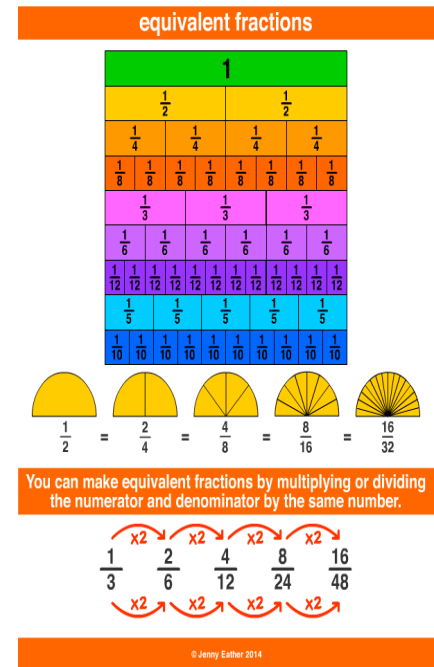
Pupils should have mastery in:

## (P3) FRACTIONS

### ➔ Equivalent fractions

- ❑ Recognising and naming equivalent fractions
- ❑ Listing the first 8 equivalent fractions of a given fraction
- ❑ Expressing a fraction in its simplest form
- ❑ Comparing fractions with respect to half
- ❑ Comparing and ordering unlike fractions

### ➔ Addition and Subtraction of fractions



Pupils should have mastery in:

**(P3) MEASUREMENT:** Length, Mass and Volume

- Measurement of length in kilometres (km), volume of liquid in millilitres (ml)
- Measurement of length/mass/volume (of liquid) in compound units
- Conversion of a measurement in compound units to the smaller unit and vice versa
  - kilometres and metres
  - metres and centimetres
  - kilograms and grams
  - litres and millilitres
- Solving word problems involving length/ mass/ volume/capacity

Pupils should have mastery in:

## (P3) **TIME**



- Telling and writing time to 1 minute
- Use of the terms 'noon', 'a.m. and p.m.', 'past' and 'to'  
e.g. '10 minutes past 5', '15 minutes to noon'
- Measurement of time in hours and minutes
- Conversion of time in hours and minutes to minutes only, and vice versa
- Finding the duration of a time interval
- Finding the starting time/ finishing time
- Solving word problems involving addition and subtraction of time given  
in hours and minutes

Pupils should have mastery in:

## (P3) MONEY

- ❑ Addition and subtraction of money in decimal notation
- ❑ Solving word problems involving addition and subtraction of money in decimal notation



Pupils should have mastery in

## **(P3) AREA AND PERIMETER**

- Concepts of area and perimeter of a plane figure
- Measurement of area in square units
- Measurement of area in square centimetres ( $\text{cm}^2$ ) / square metres ( $\text{m}^2$ )
- Calculation of the perimeter of rectilinear figures, rectangles, squares
- Use of formula to calculate the area of a rectangle/ square
- Solving word problems involving the area/ perimeter of squares and rectangles





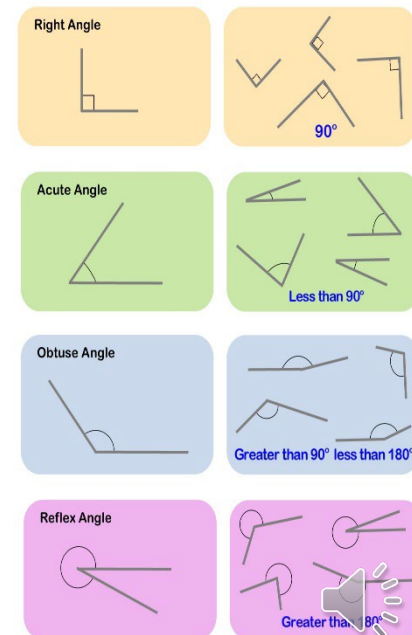
Pupils should have mastery in:

## (P3) GEOMETRY : Angles & Perpendicular and Parallel Lines

- ❑ Identifying and naming perpendicular and parallel lines
- ❑ Drawing perpendicular and parallel lines on square grids
- ❑ Angle as an amount of turning
- ❑ Identifying angles in 2-D and 3-D objects
- ❑ Identifying angles in 2-D figures
- ❑ Identifying right angles, angles greater than/ smaller than a right angle

Types of Angles

[www.cazoomaths.com](http://www.cazoomaths.com)

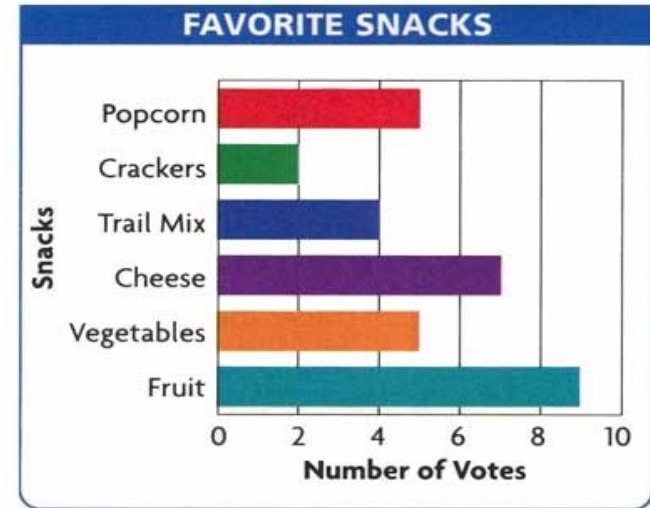


Pupils should have mastery in:

## (P3) DATA ANALYSIS

### Bar Graphs

- Reading and interpreting bar graphs in both horizontal and vertical forms, reading scales
- Completing a bar graph from given data
- Solving problems using information presented in bar graphs



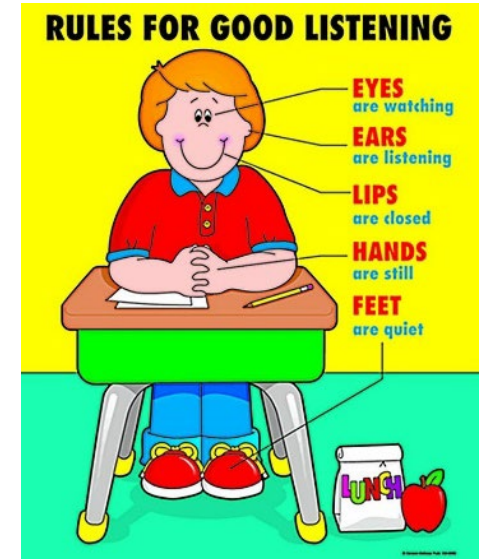
## How can parents help?

**Mastery in P3 concepts and skills  
will enhance  
your child's success  
in achieving  
the learning outcomes  
for P4 Mathematics.**



## *Instill in your child positive learning attitude and good habits to maximize learning*

- ☑ Behave, Focus and Participate
- ☑ Listen and Speak at appropriate times
- ☑ Be organized
- ☑ Write with good handwriting
- ☑ *Bring necessary **stationery***
- ☑ *Be accustomed to sitting for 1 hour*



## How can parents help?



- ✓ **Revise concepts and skills learnt in P3, especially the multiplication table**
- ✓ **Does and show you his schoolwork Regularly check your child's books/file**

### ➔ **Books for Primary 4**

Primary Maths Textbooks 4A & 4B

Practice Books 4A & 4B



Enrichment :

Critical Thinking & STRETCH Exercises

**\* Keep all P4 books and materials**

for reference in P5/2025 and P6/2026



## Recommended Optional Supplementary Materials (available from the school bookshop)

Targeting Maths Companion 4A & 4B

STRETCH Mathematics Book 3

My Pals! Testbook 4 & Homework Book 4A & 4B

Amazing Mathematics Book 4A & 4B



**+Venture In Maths! Magazine**

Subscription:

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

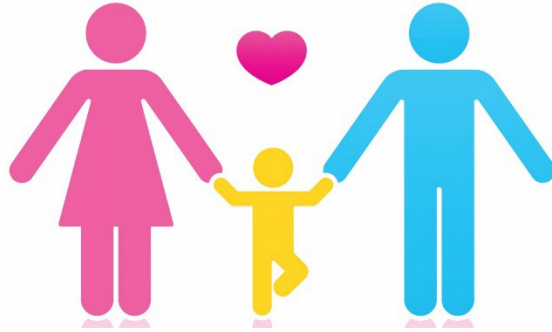


**Smart Mathematician Magazine**

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<https://youngscientistsreader.com.sg>



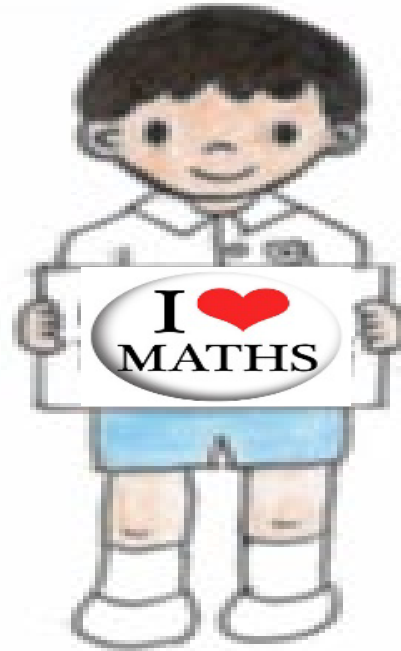


# Parents' Support

Parents play an important role  
in fostering the  
**Joy of Learning.**

Support your child in developing  
dispositions for **lifelong learning.**





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

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

