



# **Primary 3**

# **Mathematics**

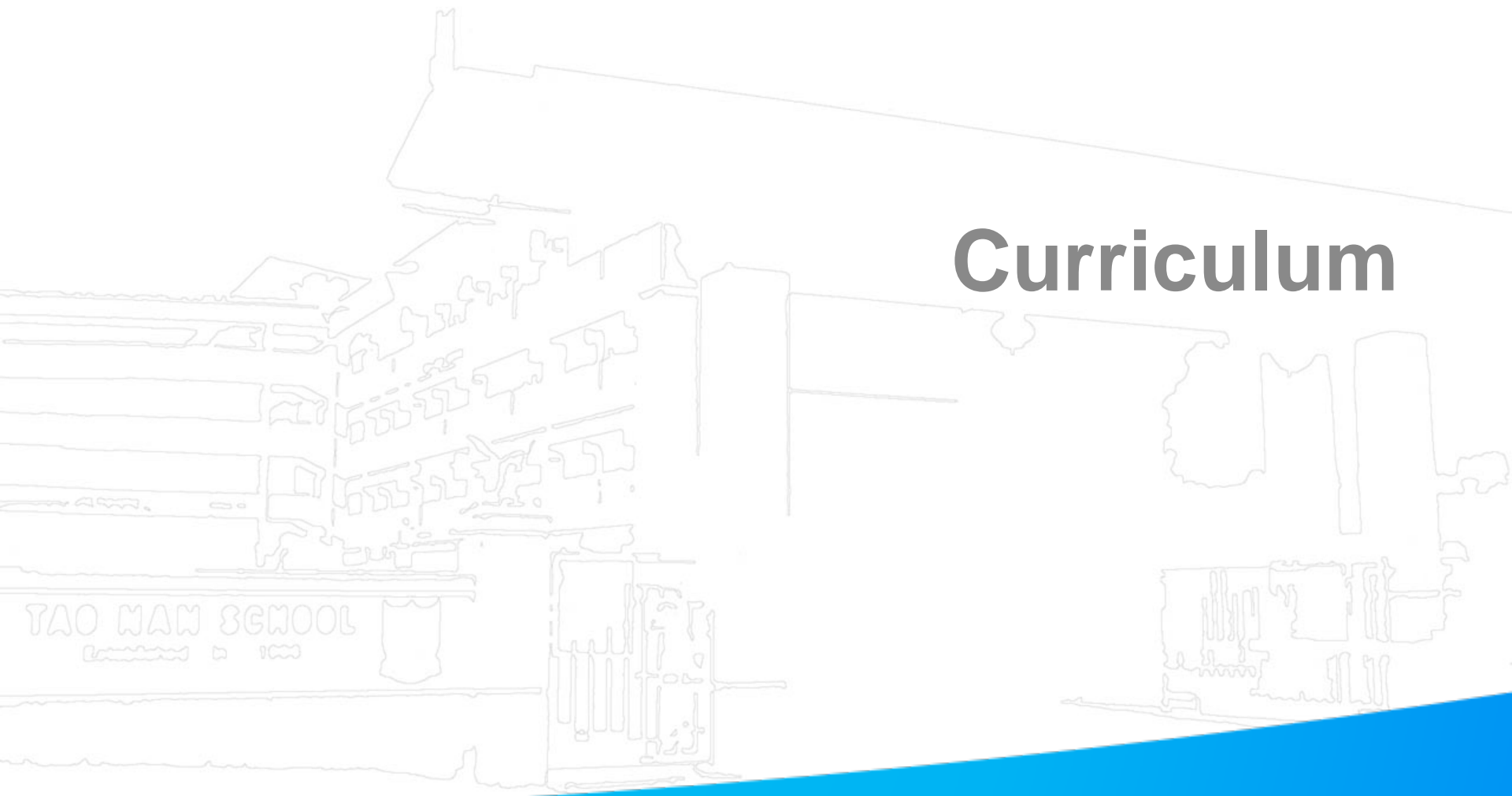
# **Curriculum Information**

2023

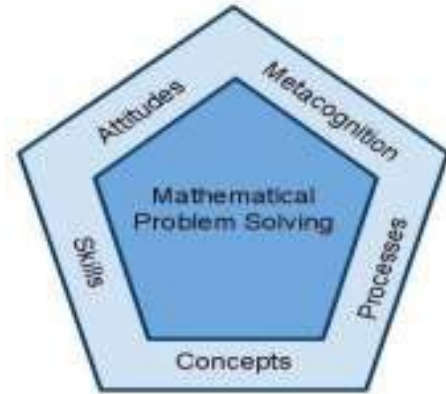




# Curriculum



# Objectives



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 3 Primary Mathematics Textbooks.**



# Syllabus: Learning Outcomes for P3

## Numbers up to 10 000

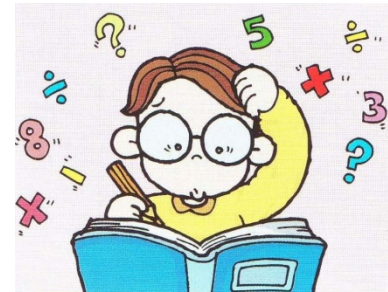
- ❑ Counting in hundreds/thousands
- ❑ Number notation, representations and place
- ❑ Values (thousands, hundreds, tens, ones)
- ❑ Reading and writing numbers in numerals and in words
- ❑ Comparing and ordering numbers
- ❑ Patterns in number sequences



# Syllabus: Learning Outcomes for P3

## Addition and Subtraction

- ❑ Addition and subtraction algorithms (up to 4 digits)
- ❑ Solving up to 2-step word problems involving
- ❑ **Mental calculation** involving addition and subtraction of two 2-digit numbers



## 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



# Syllabus: Learning Outcomes for 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.

$5 + 6 =$  This is the same as:  
 $5 + 5 + 1 = 11$  or  $6 + 6 - 1 = 11$





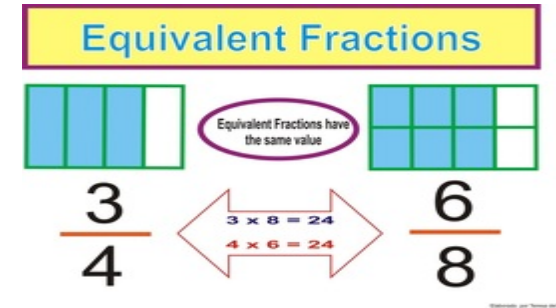
# Syllabus: Learning Outcomes for P3

## FRACTIONS

### Equivalent Fractions

- ☐ Recognising and naming equivalent fractions
- ☐ Listing equivalent fractions of a given fraction
- ☐ Writing the equivalent fraction of a fraction given the denominator or the numerator
- ☐ Expressing a fraction in its simplest form
- ☐ Comparing and ordering unlike fractions

### Addition and Subtraction of Fractions

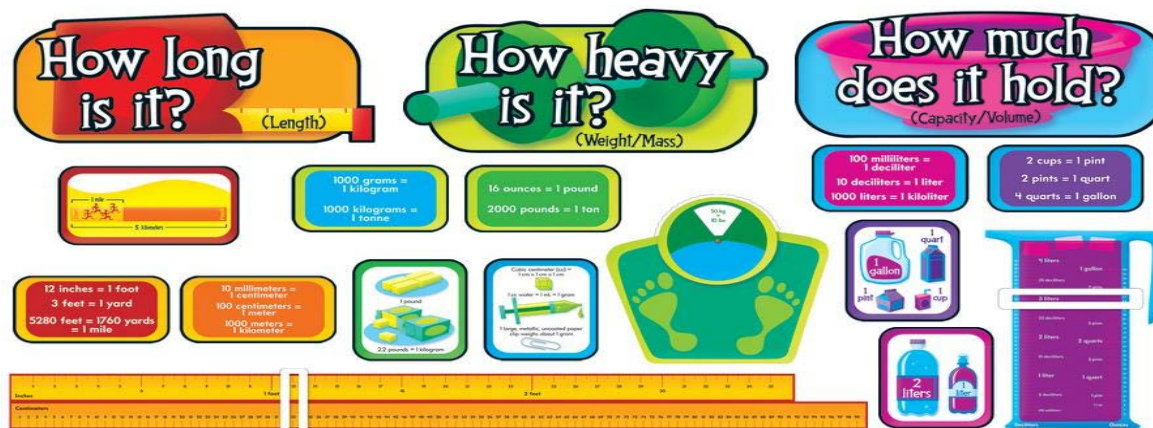


# Syllabus: Learning Outcomes for P3

## MEASUREMENT

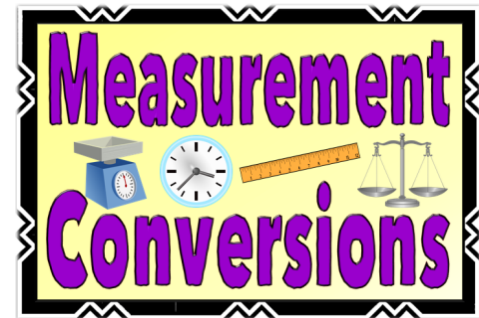
### Length, Mass and Volume

- ❑ Measurement of length in kilometres (km), volume of liquid in millilitres (ml)
- ❑ Measurement of length/mass/volume (of liquid) in compound units



## **MEASUREMENT:** Length, Mass and Volume

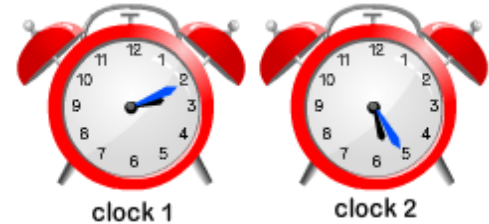
- ❑ Conversion of a measurement in compound units to the smaller unit and vice versa
  - kilometres and metres
  - metres and centimetres
  - kilograms and grams
  - litres and millilitres
  
- ❑ Solving word problems involving length/ mass/ volume/capacity



# Syllabus: Learning Outcomes for P3

## TIME

- ☐ Time in Seconds
- ☐ 24-hour Clock
- ☐ Starting & Finishing Time, Duration
- ☐ Conversion of time in hours, minutes & seconds
- ☐ Solving word problems involving time



# Syllabus: Learning Outcomes for P3

## MONEY



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



# Syllabus: Learning Outcomes for P3

## AREA AND PERIMETER

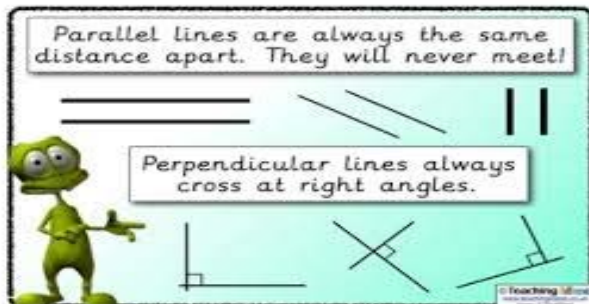
- ☐ Concepts of area and perimeter of a plane figure
- ☐ Measurement of area in square units
- ☐ Measurement of area in square centimetres ( $\text{cm}^2$ ) / square metres ( $\text{m}^2$ )
- ☐ Calculation of the perimeter of rectilinear figures, rectangles, squares
- ☐ Use of formula to calculate the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



# Syllabus: Learning Outcomes for 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
- ❑ Acute angle, Right angle, Obtuse angle

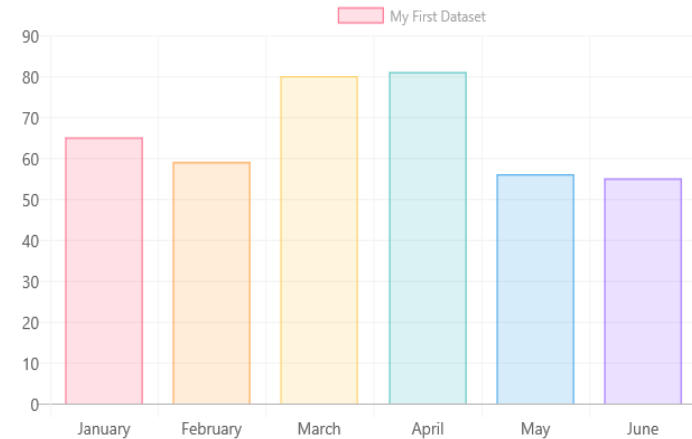


Type of Angle	Description	Example
Acute Angle	An angle that is less than $90^\circ$	
Right Angle	An angle that is exactly $90^\circ$	
Obtuse Angle	An angle that is greater than $90^\circ$ and less than $180^\circ$	



## 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







# Pedagogy



# Learner-centred pedagogy

Teachers will use appropriate pedagogical approaches:

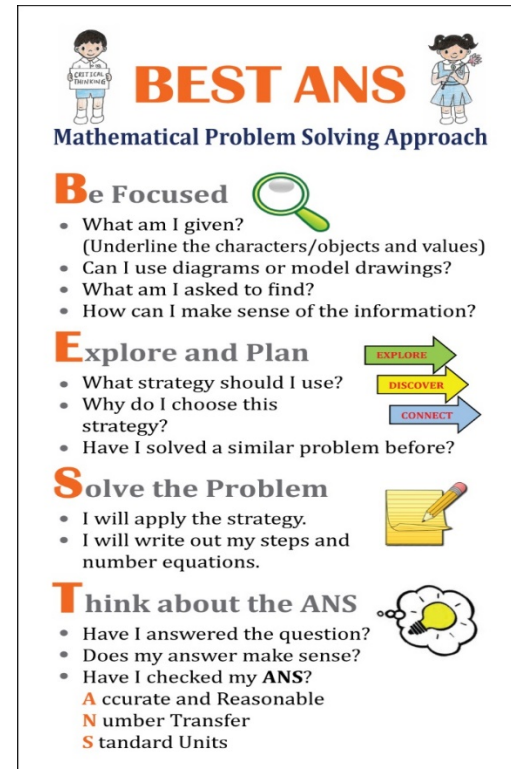
Concrete-Pictorial-Abstract approach (C-P-A)

Hands-on learning experiences

Co-operative learning

E-learning, SLS Lessons , etc

- Use formative assessment (FA) strategies to monitor 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





# Assessment

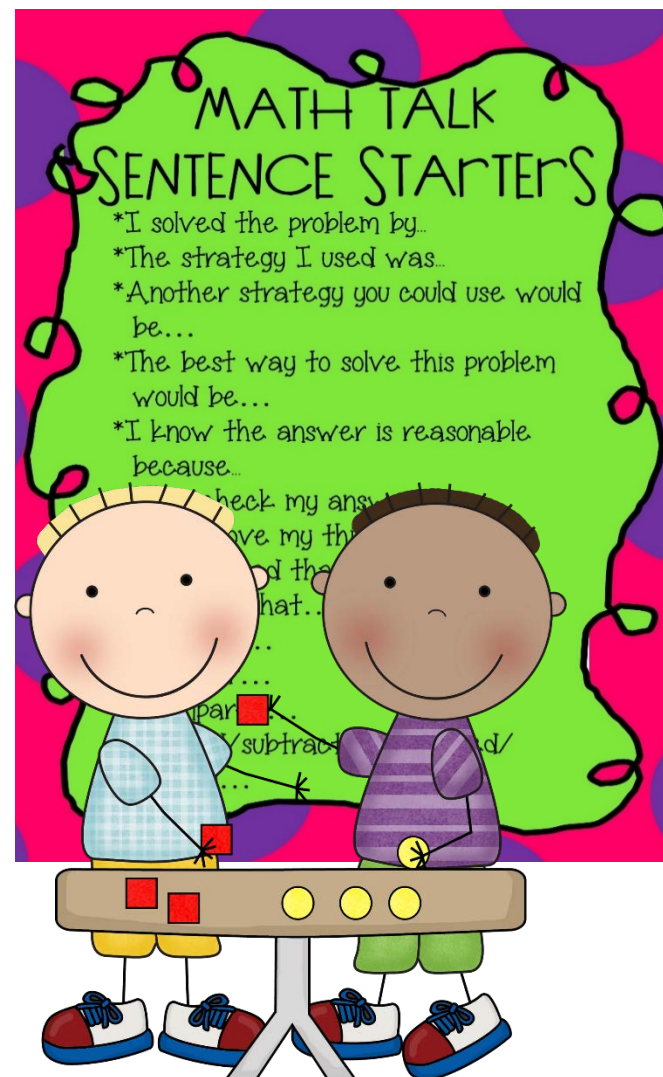
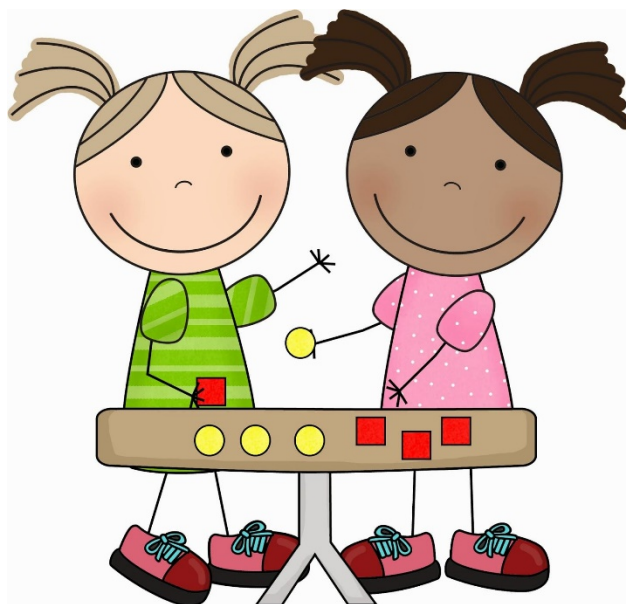


# Informal modes of assessment to gauge students' learning

Maths Talk/Class Discussion

Learning experiences

Collaborative Work



## P3 Formative Assessment

Learning experiences /activities such as:

Using the weighing scale  
Measuring volume, length  
Completing patterns  
Time etc.



# P3 Mathematics School-based Assessment

Components	Weighting
Formative Assessment Journal Hands-on Activities Review Exercises	Non-Weighted
Weighted Assessments (WA1 & WA2)	30%
End-of-Year Examination	70%
Overall	100%



# Primary 3 Mathematics Written Assessment

School-based Assessment	Weighted Assessments	End-of-Year Examination
Weighting	30%	70%
Time-frame	<b>Term 2</b> (WA1 - 15%) <b>Term 3</b> (WA2 - 15%)	<b>Term 4</b>





# Primary 3

## Weighted Assessment: Format

WA1/WA2	Item-Type	Number of Q
	Short-Answer Questions	10
	Long-Answer Questions	5

End-of-Year Exam	Item-Type	Number of Q
	Multiple Choice Questions	8
	Short-Answer Questions	8
	Long-Answer Questions	8





# Home-School Partnership



## How can parents help?

Please ensure that your child has mastery in these (P2) topics:

- ☐ Addition & Subtraction
- ☐ Multiplication
- ☐ Length
- ☐ Mass & Volume
- ☐ Time
- ☐ Money
- ☐ Picture Graphs
- ☐ 2-D/3-D Figures
- ☐ Patterns

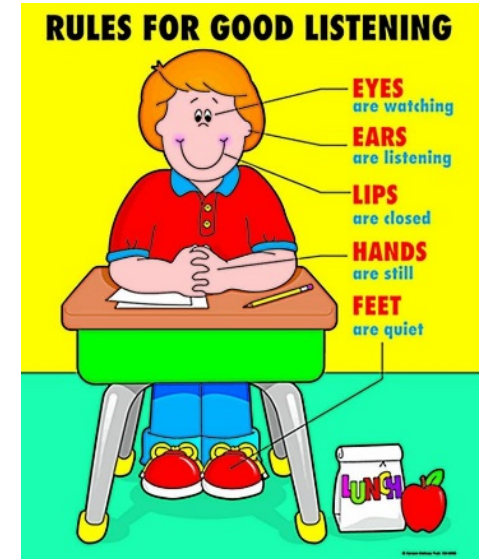


(Details can be found in the P2 textbooks)



*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*



## Books for Primary 3

Primary Maths Textbooks 3A & 3B

Practice Books 3A & 3B

Enrichment :

Critical Thinking & STRETCH Exercises



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



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

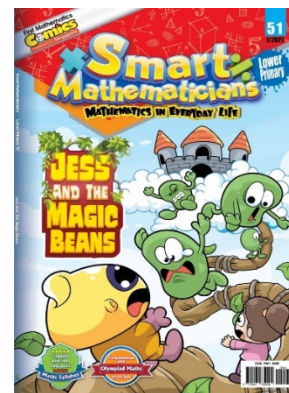
Targeting Maths Companion 3A & 3B

My Pals! Test Book 3 & Homework Book 3A & 3B

Amazing Mathematics Book 3A & 3B



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In Partnership with  
Parents to Develop  
your Children  
to their Fullest Potential

