Primary 6

Mathematics

Curriculum Information

2023

Curriculum

Objectives

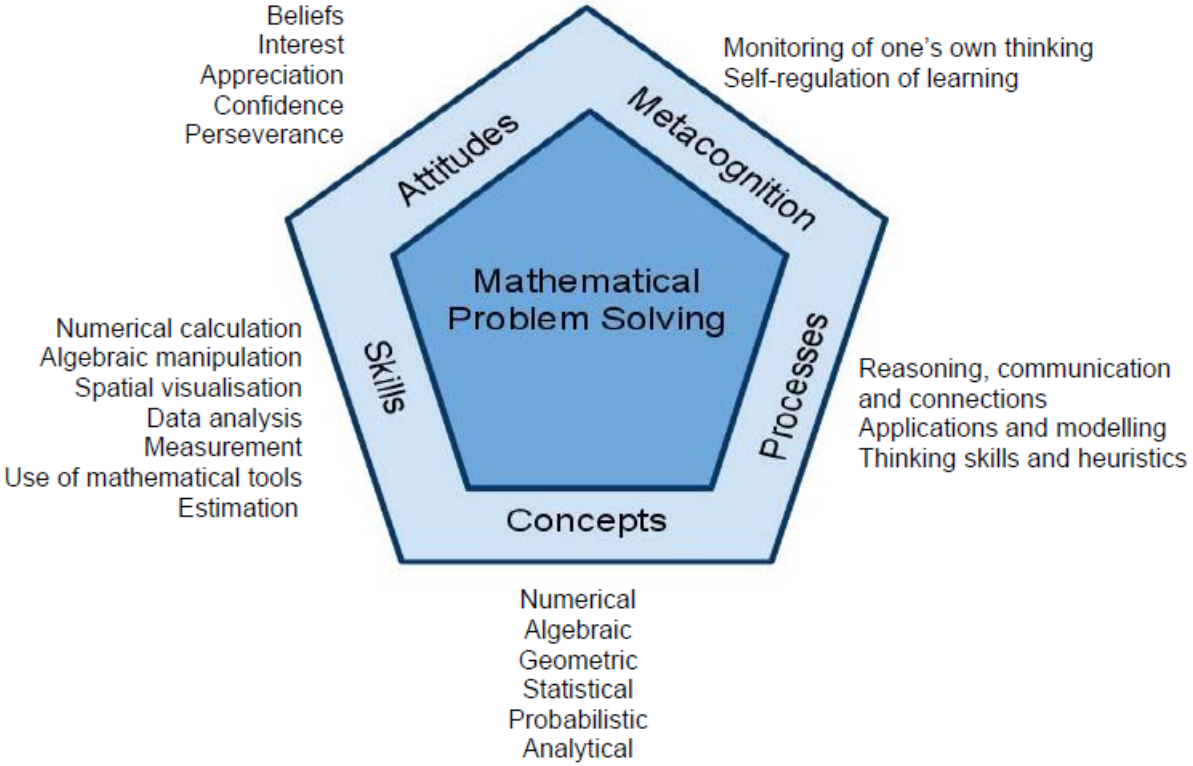
The **Primary Mathematics Syllabus** aims to enable all students to:

- 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.

Love to Learn Maths
Learn to Love Maths

Mathematics Syllabus

https://www.moe.gov.sg/primary/curriculum/syllabus



Standard Mathematics and Foundation Mathematics

- The P1 - P4 syllabus is common to all students.
- The P5 - P6 Standard Mathematics syllabus continues the development of the P1 - P4 syllabus, whereas the P5 - P6 Foundation Mathematics syllabus re-visits some of the important concepts and skills in the P1 - P4 syllabus.
- The new concepts and skills introduced in Foundation Mathematics is a subset of the Standard Mathematics syllabus

@ PRIMARY 4

Student sits for school-based examinations

School recommends a subject combination based on the student's results.

Parents fill up an option form indicating the preferred combination.

@ PRIMARY 5

Student takes subject combination chosen by parents

English Language, Mathematics, Science and Mother Tongue Language are available at standard and foundation levels.

Higher Mother Tongue Language is also available.

School assesses student's ability to cope with the current subject combination at the end of the year. Adjustments to the number of standard and foundation subjects can be made, if necessary.

@ PRIMARY 6

Student takes subject combination decided by his school and sits for the Primary School Leaving Examination (PSLE) at the end of Primary 6.

Some students are offering Foundation Mathematics.
This enables them to focus on building up strong fundamentals in the subject and better prepares their for progression to secondary school.

Pedagogy

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

- Use formative assessment (FA) strategies to monitor and deepen students' learning
- Guide students in using BEST ^{ANS} problem solving strategy
- Provide Critical Thinking exercises to equip students with problem solving heuristics

Assessment

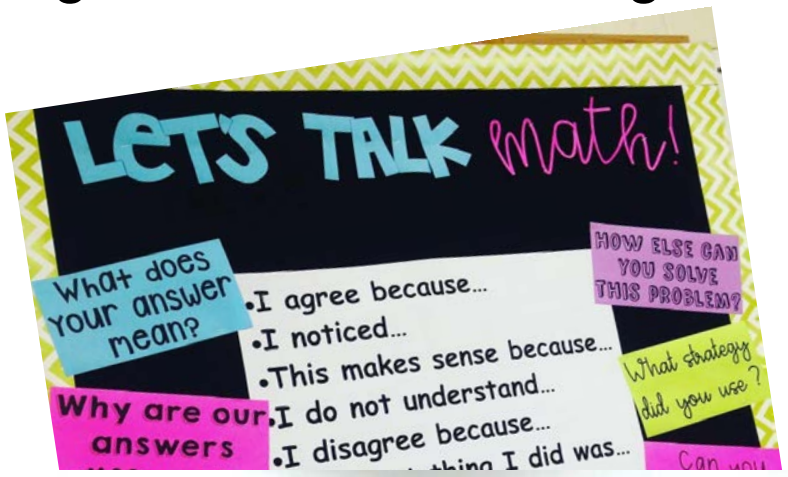
Informal modes of assessment to gauge students' learning

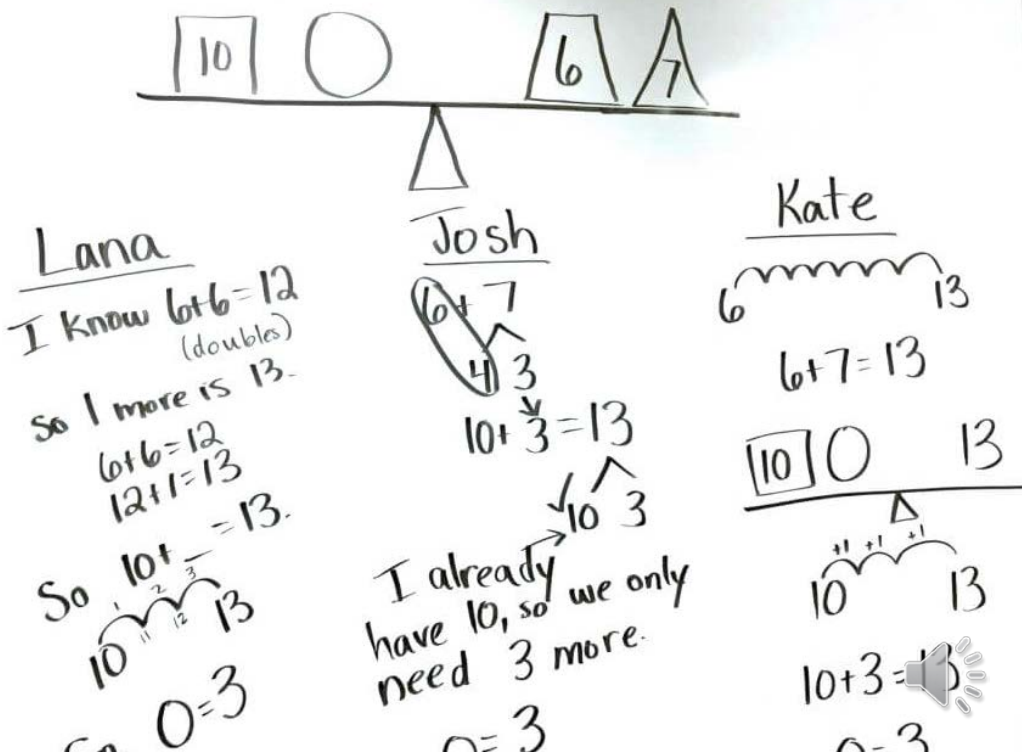
Maths Talk/Class Discussion

Learning experiences

Mathematics Project

Collaborative Work





P6 Mathematics School-based Assessment	
Preliminary Examination	100%

Term	Assessment
Term 2	Common-Timed Practice (non-weighted)
Term 3	Preliminary Examination
Term 4	PSLE

P6 Standard Mathematics Examination Format

	Number of questions	Marks per question	Number of Marks	Duration
Paper 1 Booklet A MCQ	10	1	10	Paper 1 Booklet A & B **1 hour** No calculators
	5	2	10	
Booklet B Short-answer Q	5	1	5	
	10	2	20	
Paper 2 Short-answer Q	5	2	10	Paper 2 **1 h 30 min** The use of calculators is allowed.
Structured/ Long-answer Q	12	3, 4 or 5	45	
Total	47	-	100	

P6 Standard Mathematics Examination Format

1. Both papers will be scheduled on the same day with a break between the two papers.

2. Paper 1 comprises two booklets.
   The use of calculators is not allowed.

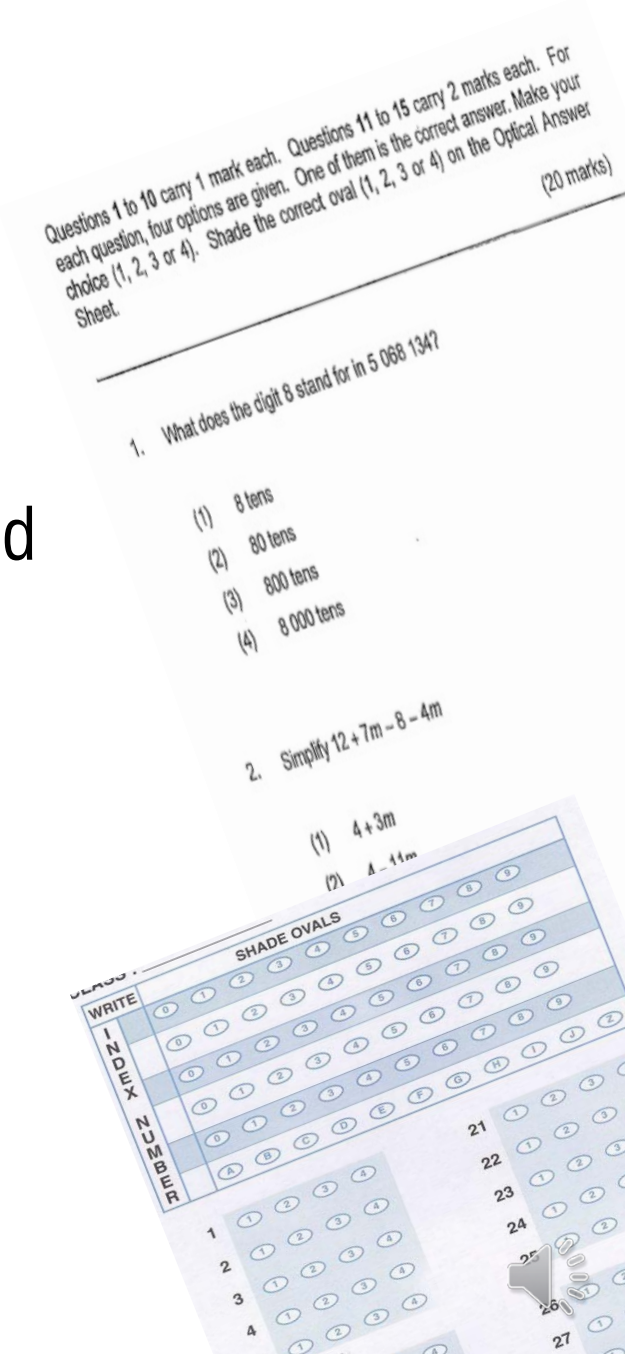
3. Paper 2 comprises one booklet.
   The use of calculators is allowed.

Item Types

Multiple-Choice Question

For each question, four options are provided of which only one is the correct answer.

The 1-mark multiple-choice questions will be straightforward questions that assess basic concepts and skills of the Primary Mathematics syllabus.


Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(20 marks)

1. What does the digit 8 stand for in 5 068 134?

(1) 8 tens
(2) 80 tens
(3) 800 tens
(4) 8 000 tens

2. Simplify $12 + 7m - 8 - 4m$

(1) $4 + 3m$

WRITE INDEX NUMBER

SHADE OVALS

Item Types

1-mark Short-Answer Question

For each question, a candidate has to write his answer in the space provided.
Marks are awarded for correct answers.
Any unit required in an answer is provided and a candidate has to give his answer in that unit.

The 1-mark short-answer questions will be straightforward questions that assess the basic concepts and skills of the Primary Mathematics syllabus.

2-mark Short-Answer question

The question may comprise one or two parts. For each question, a candidate has to write his answer(s) in the space(s) provided.

Marks are awarded as follows:

For questions with two parts, 2 marks are awarded for the correct answers, one mark for each part.

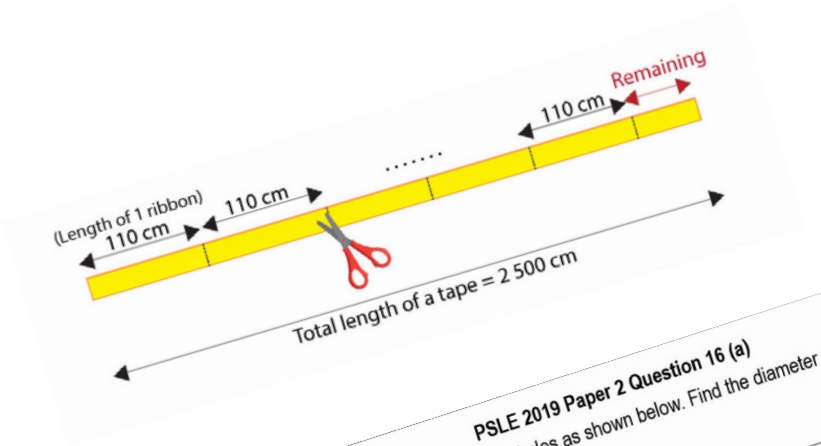
For questions with one part only, 2 marks are awarded for the correct answer.

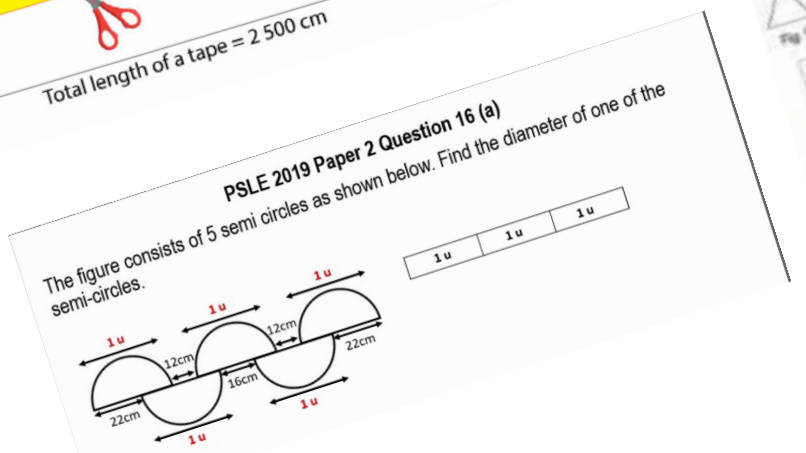
If an incorrect answer is given, 1 mark is awarded for the correct method or working shown.

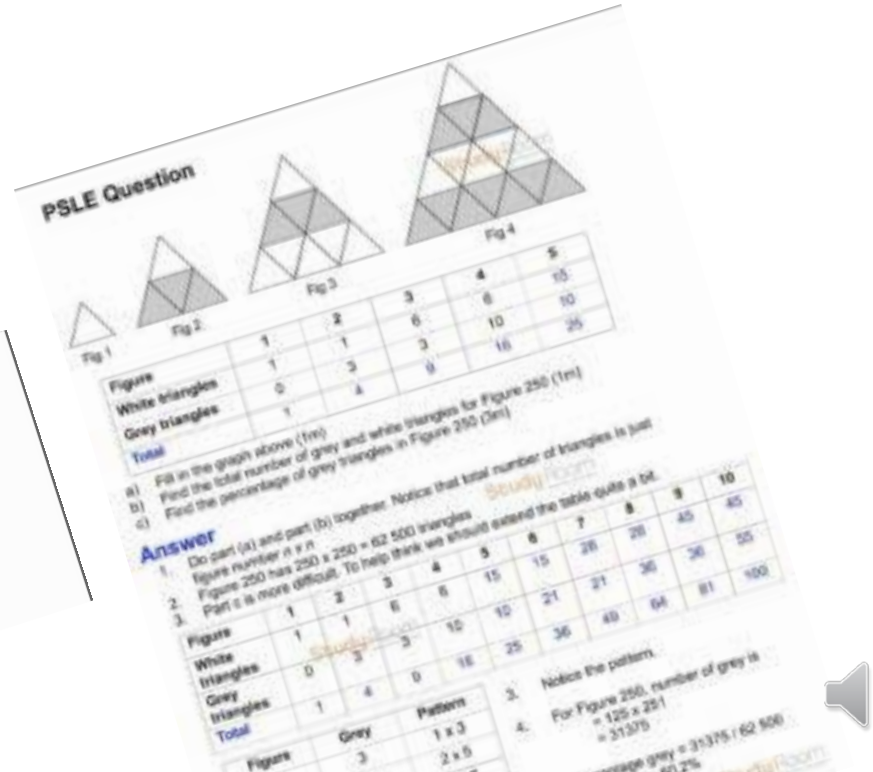
Any unit required in an answer is provided and a candidate has to give his answer in that unit.

Structured / Long-answer Question

For each question, a candidate has to
show his method of solution (working steps) clearly
and write his answer(s) in the space(s) provided.







Foundation Mathematics Examination Format

	Number of questions	Marks per question	Number of Marks	Duration
Paper 1 Booklet A MCQ	10	1	10	Paper 1 Booklet A & B 1 hour No calculators
	10	2	20	
Booklet B Short-answer Q	10	2	20	
Paper 2 Short-answer Q	10	2	20	Paper 2 1 hour The use of calculators is allowed.
Structured Q	6	3 or 4	20	
Total	46	-	90	

P6 Foundation Mathematics Examination Format

1. Both papers will be scheduled on the same day with a break between the two papers.

2. Paper 1 comprises two booklets.
   The use of calculators is not allowed.

3. Paper 2 comprises one booklet.
   The use of calculators is allowed.

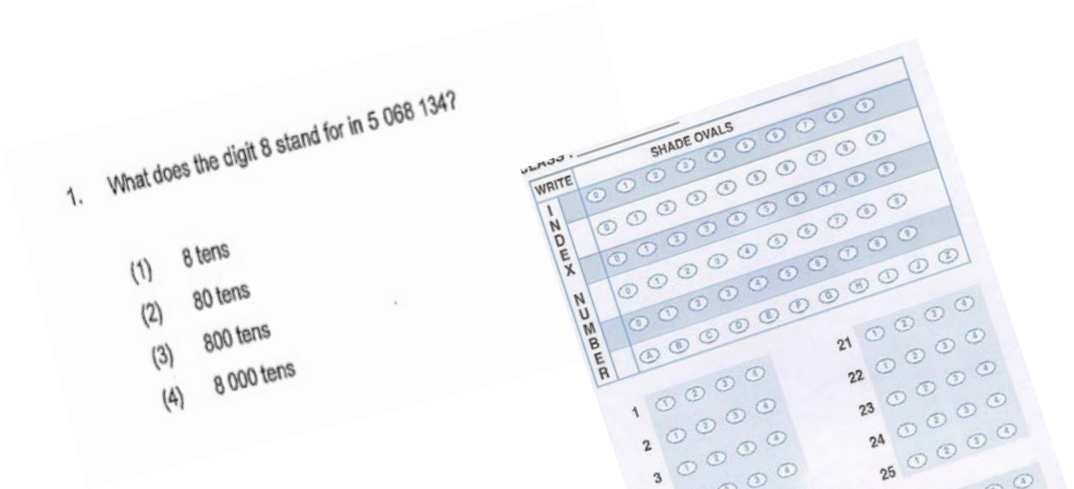
P6 Foundations Mathematics Examination Format

Item Types

Multiple-Choice Question

For each question, four options are provided of which only one is the correct answer.

The 1-mark multiple-choice questions will generally be short, simple and straightforward questions that assess basic concepts and skills of the Primary Foundation Mathematics syllabus.



Short-Answer Question

The question may comprise one or two parts. For each question, a candidate has to write his answer(s) in the space(s) provided.

Marks are awarded as follows:

For questions with two parts, 2 marks are awarded for the correct answers, one mark for each part.

For questions with one part only, 2 marks are awarded for the correct answer.

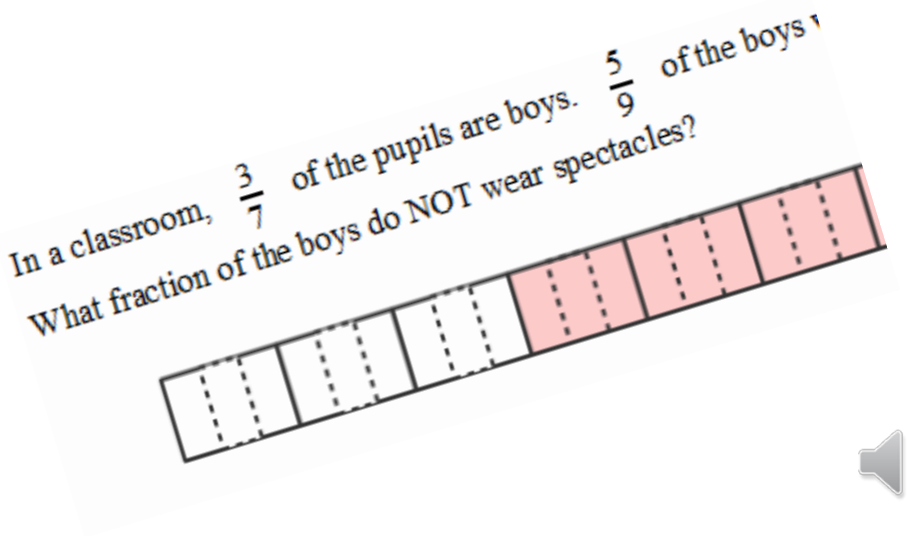
If an incorrect answer is given, 1 mark is awarded for the correct method or working shown.

Any unit required in an answer is provided and a candidate has to give his answer in that unit.

P6 Foundations Mathematics Examination Format

LAQ or Structured question

For each question, a candidate has to show his method of solution (working steps) clearly
and
write his answer(s) in the space(s) provided.



Use of Calculators

*Only calculators that are **approved** by the Singapore Examinations & Assessment Board (SEAB) will be allowed in the examination.*

The calculator must be:

- silent, with a visual display only.
- indicated clearly with the model number and brand for verification purposes.
- in working condition (including the power supply).
  This is the responsibility of the candidate.
- Your child **cannot share** calculators with other candidates during the examination.
- (More details are given in the “PSLE Instructions for Candidates”.)

Our students are using the following models:

CASIO fx 97SG X

CASIO fx 96SG PLUS

Grading for PSLE

Achievement Levels

AL	RAW MARK RANGE
1	90 – 100
2	85 – 89
3	80 – 84
4	75 – 79
5	65 – 74
6	45 – 64
7	20 – 44
8	< 20

Foundation Level AL Reflected on Result Slip	Foundation Raw Mark Range
A	75 – 100
B	30 – 74
C	< 30

	School-based
1	FunMath@Class Activities
2	P6 Mathematics Quiz

Mathematics Competitions - Optional

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

1	Visual-Spatial Mathlympics by Learners' Connection
2	RI Mathematics Contest by RI
3	SMOPS by HCI

Home-School Partnership

How can parents help?

Please ensure that your child has a good mastery of the basic concepts and skills (learnt in P4 & P5) for the following topics:

- Whole Numbers
- Fractions
- Ratio
- Decimals
- Geometry
- Measurement
- Data Analysis

*Details can be found in the P4 & P5 textbooks and materials

How can parents help?

- Monitor & ensure that your child does his schoolwork so that he has sufficient practice to acquire the necessary procedural skills, accuracy and speed

- Regularly check your child's books/file
  - My Pals Maths Test Book 6
  - Critical Thinking Booklet A, B, C & D
  - STRETCH Book 5
  - PSLE (2020-2022) Books
    SMA Book, FMA Book
  - Supplementary Worksheets, PSLE Practice Papers

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

My Pals! Homework Book 6A & 6B

A Maths Problem Booklets*

STRETCH Mathematics Book 6

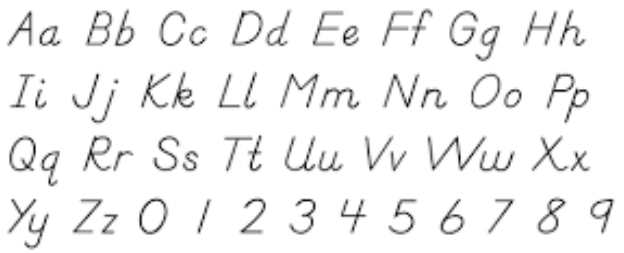
Smart Mathematician Magazine

Subscription:
https://youngscientistsreader.com.sg

Encourage your child to develop good work habits

- Overall presentation demonstrating good understanding of Mathematics concepts required to complete task

- Good handwriting



- *Complete written task*
- *Solve problems with accuracy*
- *Bring the necessary stationery*
  - ➡ *Pen, pencil, ruler, eraser, mathematical set, calculator*
- Use of correction tape is <u>not</u> allowed

How can parents help?

Discourage over-dependence on the use of calculators to ensure that your child is able to perform important computational skills with accuracy and speed.

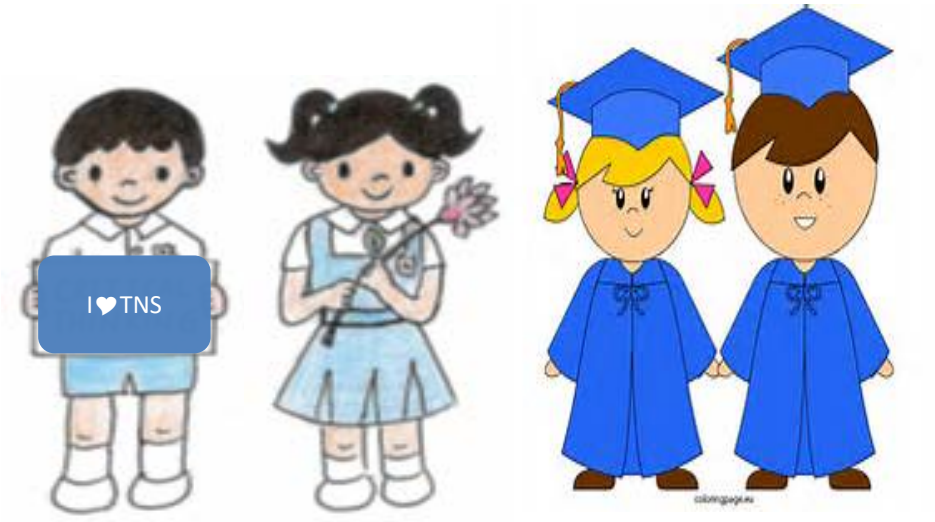
Get your child accustomed to sitting and focusing for a period of at least 1h 30 min

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 Children to their
Fullest Potential



Thank You