PRIMARY 6 FOUNDATION MATHEMATICS

FOUNDATION MATH TOPICS

SEMESTER 1	SEMESTER 2
Fractions	Volume (continued)
Decimals	Triangles, Squares and Rectangles
Percentage	
Average	Area of Triangles
Pie Charts Volume	

PROBLEM SOLVING SKILLS

Note:
The slides show some examples of problem solving skills in Primary 6. They are not exhaustive.

1. Draw a model or diagram

Example question from PSLE 2020

Mrs Jeya bought some stickers. On Monday, she gave $\frac{1}{4}$ of the stickers to students in Group A and had 72 stickers remaining.

a) On Tuesday, she gave $\frac{5}{12}$ of the remaining stickers to students in Group B. How many stickers did she give to Group B?

b) How many stickers did Mrs Jeya buy?

PROBLEM SOLVING SKILLS

Note:

The slides show some examples of problem solving skills in Primary 6. They are not exhaustive.

2. Look for a Pattern

Example question from PSLE 2018

White squares and grey squares were used to form figures that follow a pattern. The first three figures are shown below.

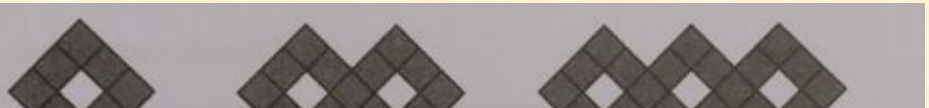

Figure 1 Figure 2 Figure 3

Figure	Number of white squares	Number of grey squares	Total number of squares
1	1	$1 \times 7 + 1 = 8$	9
2	2	$2 \times 7 + 1 = 15$	17
3	3	$3 \times 7 + 1 = 22$	25

What was the total number of squares used to form Figure 9?

EXAMPLES OF PROBLEM SOLVING STRATEGIES

- Draw a model or diagram
- Make a systematic list
- Before / after concept
- Look for a pattern
- Work backwards

Etc.

Assessments (Primary 6)

	Weightage	Paper 1 Booklet A	Paper 1 Booklet B	Paper 2	Total
Term 1: TERM REVIEW 1	nil	30 marks	20 marks	40 marks	90 marks
Term 2: TERM REVIEW 2	nil	30 marks	20 marks	40 marks	90 marks
Term 3: PRELIM	100%	30 marks	20 marks	40 marks	90 marks
Term 4: PSLE					

Format of Exam Paper

Paper	Booklet	Item Type	No. of qns	No. of marks per qn	Weighting	Duration
1 Cal. **NOT** allowed	**A**	Multiple-choice	10	1	10%	1 h
			10	2	20%	
	B	Short -answer	10	2	20%	
2 Cal. allowed		Short-answer	10	2	20%	1 h
		Structured / Long-answer	6	3 or 4	20%	
Total			46		90%	2 h

Both papers are scheduled on the same day with a break between the two papers.

Paper 1 Booklets A & B:

Use of calculator is NOT ALLOWED

Booklet A: 20 Multiple-Choice Questions (MCQ)

- Indicate answer on question paper to facilitate checking.
- Shade oval in OAS after completing each question.

Booklet B: 10 Short Answer Questions

- To show workings clearly and write the correct answers in the spaces provided
- Do not erase the workings as method marks may be awarded for the **correct workings** shown, even if the answer is wrong.

Paper 2

Use of calculator is ALLOWED

10 Open-Ended Questions (2 marks each) &
6 Problem Sums (3 or 4 marks each)

Problem Sums

- To show each step taken and workings clearly, so that **method marks** and answer marks can be awarded accordingly.
- Pupils are encouraged to **show all steps** as method marks may be awarded, even if the answer is wrong.

LIST OF APPROVED CALCULATORS FOR USE IN MATH EXAMINATIONS

S/N	Calculator Brand	Calculator Model	Approved Period[1]
1	CASIO	FX 82MS	2003 – 2026
2		FX 85MS	2003 – 2026
3		FX 95MS	2003 – 2026
4		FX 96SG Plus	2013 – 2025
5		FX 97SG X	2018 – 2026
6		FX 350MS	2003 – 2026
7	CANON	F-960SG	2017 – 2026
8	SHARP	EL W531S II	2018 – 2026
9		EL W531S II Silver Edition	2021 – 2025
10		EL 533X	2013 – 2024

For updates or approval for other models, refer to https://www.seab.gov.sg/docs/default-source/documents/guidelines-on-the-use-of-calculators_for-2024-exam-(website).pdf

PRESENTATION OF SOLUTIONS

- **Consistency** in units of measure

  3 **kg** x 4 = 12 **kg** ☺

  ~~3 x 4 = 12 **kg**~~ ☹

- **Use equal signs** correctly

  $\frac{1}{2}$ of total amount = $45 ☺

  ~~$\frac{1}{2}$ = $45~~ ☹

PRESENTATION OF SOLUTIONS

- Show the method of solution (working steps) clearly

- Standard units of measurement should accompany the final answers. Missing units in final answers will results in mark deduction.

Example:

Ans: 10 cm

Ans: 264 m

Ans: $517

Ans: 34 kg

PRESENTATION OF SOLUTIONS

Mrs Tay deposits $8000 in a bank for one year. The interest rate is 2% per year. What is the total amount of money she will have in the bank at the end of one year?

100% of money = $8000

1% of money = $8000 ÷ 100

= $80

2% of money = $80 × 2

= $160

$8000 + $160 = $8160

Ans: $8160

Wrong Mathematical Presentation

100% = $8000

1% = $80

2% = $160

Partnership with the school…

- Assignments or practice papers from school
  - Ensure conducive working environment.
  - Insist that your child sticks to the given time frame – nothing more and nothing less.
  - Good time management practice.

As a pillar of strength and support for your child…

- Praise, encourage and motivate
- Strategise – focus on areas of weaknesses
- Time Management
- **Ensure that mistakes made are corrected**
- **Constant practice** – do a few Math questions a day to ensure daily practice
- More math…in other forms
  - Math Games → Coolmath.com
  - Math Literature → Math magazines
  - Daily life
  - Logic puzzles
- **Manage stress** – watch for change in behaviour

THANK YOU