

# Mathematics in Primary 5

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Information for Parents  
2018



# **Aims of Mathematics Education in Singapore**

- Acquire and apply mathematical concepts and skills.
- Develop cognitive and metacognitive skills through a mathematical approach to problem solving.
- Develop positive attitudes towards mathematics.

# **Content Strands in Mathematics Syllabus**

- Numbers & Algebra
- Measurement & Geometry
- Statistics

# Topics under Numbers & Algebra

- Whole Numbers
- Operations of Whole Numbers
- Fractions
- Ratio
- Decimals
- Four Operations of Decimals
- Percentage

# Topics under Measurement & Geometry

- Area of Triangles
- Volume
- Rate
- Angles
- Triangles
- Quadrilaterals

# Topics under Statistics

- Average

## SEMESTER 1

5A Unit 1 – Whole Numbers

5A Unit 2 – Operations of Whole Numbers

5A Unit 3 – Fractions

5A Unit 4 – Area of Triangles

5A Unit 5 – Ratio

5A Unit 6 - Volume

## SEMESTER 2

5B Unit 1 - Decimals

5B Unit 2 – 4 Operations of Decimals

5B Unit 3 - Percentage

5B Unit 4 - Rate

5B Unit 5 - Average

5B Unit 6 - Angles

5B Unit 7 - Triangles

5B Unit 8 - Quadrilaterals

# Assessments

- The process of gathering information about students' learning by teachers.
- Used for various purposes such as
  - To improve teaching and learning.
  - To measure achievement.



# Cognitive Levels of Assessment Objectives

## **AO1:**

Recall Math facts, concepts, rules and formulae; perform straightforward computations and algebraic procedures.

## **AO2:**

Interpret information; understand and apply math concepts and skills in a variety of contexts.

## **AO3:**

Reason mathematically; analyse information and make inferences; select appropriate strategies to solve problems.

# PSLE Mathematics Examination Format

Paper	Booklet	Item Type	No. of questions	No. of marks per question	Total marks	Duration
1	A	MCQ	10 (Q1 – 10)	1	10	1 h
			5 (Q11 – 15)	2	10	
	B	SAQ	5 (Q16 – 20)	1	5	
			10 (Q21 – 30)	2	20	
2		Structured/ LAQ	5 (Q1 – 5)	2	10	1 h 30 min
			12 (Q6 – 17)	3, 4 or 5	45	
<b>Total</b>			47	-	100	2 h 30 min

# Key Points to Note

**Paper 1: CALCULATORS NOT ALLOWED**

**Booklet A: 15 Multiple Choice Questions**

- Select answer from the 4 given options and shade selected option in the OAS.

# Key Points to Note

## Booklet B: 15 Short Answer Questions

- To show workings clearly and write the correct answers in the spaces provided.
- For 2-mark questions, marks are awarded as shown:

Method	Answer	Mark Awarded
Correct & Shown	Correct	2 marks
Not shown	Correct	2 marks
Correct and Shown	Incorrect	1 method mark may be awarded
Incorrect	Correct	0 marks

- Answers must be given according to the standard units of measurement provided on the answer blanks.

# **Paper 2: CALCULATORS ALLOWED**

## **5 Short Answer Questions**

- To show workings clearly and write the correct answers in the spaces provided.
- Marks will be awarded similarly to Paper 1 Booklet B.

## **12 Problem Sums**

- To show each step taken (number equations) and solutions clearly so that method marks can be awarded accordingly.
- Method marks will be awarded for each correct significant step of the solutions even if the final answer is wrong.
- Where applicable, standard units of measurement must be indicated with final answers.

# Calculators

- Only calculators approved by SEAB will be allowed for use in the examinations.
- Approved list of calculators:  
<https://www.seab.gov.sg/content/calculator/GuidelinesCalculators.pdf>
- To maintain continuity from primary to secondary education, these calculators can be used at the secondary level.

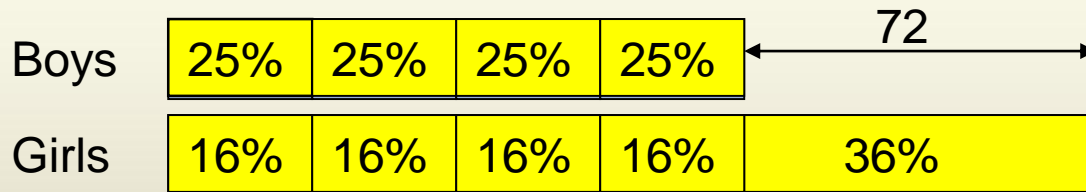
# Problem Solving Heuristics

Commonly used:

- Draw a model or diagram
- Make a systematic list/ Tabulation
- Before / after concept
- Look for a pattern
- Guess & Check
- Work backwards
- Supposition

# Presentation of Solutions

25% of the boys in a hall is equal to 16% of the girls. There are 72 more girls than boys. How many children are there in the hall?



$$36\% \text{ of girls} = 72$$

$$64\% \text{ of girls} = (72 \div 36) \times 64$$

$$= 128$$

$$128 \times 2 + 72 = 328$$

Ans: 328

**Wrong Mathematical Statement/Presentation**

$$36\% = 72$$

$$64\% = 128$$



# Presentation of Solutions

## Things to Note:

- Include units of measurement  
 $\frac{3}{5} \times 100\% = 60\%$  (money spent)

$$3 \text{ kg} \times 4 = 12 \text{ kg} \text{ (sugar used)}$$

- Use equal signs correctly

$$\frac{1}{2} \text{ of total amount} = \$45 \text{ (used)}$$

- Clearly indicate the method of solution (working steps / number equations).
- Write final answers on the answer lines provided.

**Thank You**