

The background is a green chalkboard. In the lower-left foreground, two pink chalk sticks are lying on the surface. Faint white chalk drawings, including a circle and some lines, are visible on the board. The text is centered in the upper half of the image.

**2017**  
**P6 Parents' Briefing**

*~ Mathematics ~*

# Content to be Assessed:

- Numbers (includes Whole Numbers; Fractions; Decimals)
- Measurement
- Data Analysis
- Geometry
- Ratio; Percentage
- Speed
- Algebra



# Cognitive Levels at which pupils are assessed:

## 1. Knowledge

- Recall specific mathematical facts, concepts, rules and formulae
- Perform straight-forward computations



## 2. Comprehension


- Interpret data
- Use mathematical concepts, rules, and formulae
- Solve routine or familiar problems

## 3. Application & Analysis

- Analyse data
- Apply mathematical concepts, rules and formulae in a complex situation
- Solve unfamiliar problems

# PSLE Mathematics Examination Format

Paper	Booklet	Item Type	No. of qns	No. of marks per qn	Weighting	Duration
1 Cal. not allowed	A	Multiple-choice	10	1	10%	50 min
			5	2	10%	
	B	Short - answer	10	1	10%	
			5	2	10%	
2 Cal. allowed		Short - answer	5	2	10%	1 h 40 min
		Structured / Long-answer	13	3, 4, 5	50%	
Total			48		100%	2 h 30 min



# Math Exam...

## Key Points to Note

### Paper 1:

- straightforward questions that assess the basic concepts and skills.
- Calculators **NOT** allowed
  - ✓ basic computational skills required
  - ✓ estimation & mental calculation
- Focus is on **speed & accuracy**


# What your child can do & How you can help ...

- Master basic computational skills well
- Ensure good mental calculation skills  
→ Practise mental calculation in daily life
- Work with **speed & accuracy**
- Teach possible shortcuts

Example:

$$\begin{array}{l} 7 \times 8 \times 5 \\ = (7 \times 8) \times 5 \\ = 56 \times 5 \end{array} \quad \text{vs} \quad \begin{array}{l} 7 \times 8 \times 5 \\ = 7 \times (8 \times 5) \\ = 7 \times 40 \end{array}$$

- Use the most efficient method



# Math Exam...

## Key Points to Note

### Paper 2:

- questions that require students to apply concepts or skills learnt in both familiar and unfamiliar scenarios
- Calculators allowed
  - ✓ Focus on problem solving
  - ✓ More authentic scenarios & data can be used



# What your child can do & How you can help ...

- Read the questions carefully, sentence by sentence.
- Highlight and tease out the information given from each sentence, then put the information together to obtain a better picture.
- Use the most efficient method.
- Show the method of solution (i.e. workings or number equations) used clearly and neatly.



# Tips to tackling Word Problems:

- Have a positive attitude
- Be open to alternative methods of solving the Math problems
- Adopt a problem-solving process:
  - Polya's
    - 1) Understand
    - 2) Plan ~ *strategies to solve problem sums*
    - 3) Solve
    - 4) Check ~ *calculation error*
      - ~ *use of important information*
      - ~ *the answer should make sense*
      - ~ *units is stated ( if required )*
- *Persevere*

# Problem Solving Heuristics

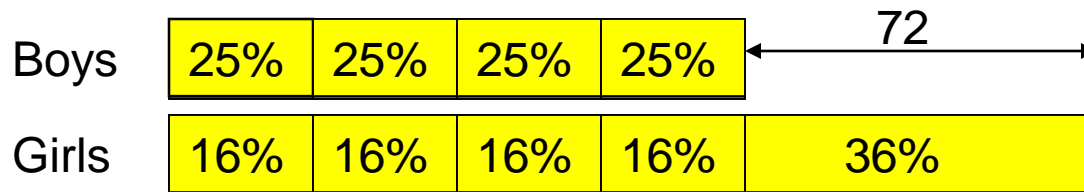
Commonly used:

- Draw a model or diagram
- Make a systematic list/ tabulation
- Use before / after concept
- Look for a pattern
- Guess and Check
- Supposition
- Work Backwards
- Algebraic method
  - no penalty for its use
  - must solve the equation or else limited marks will be awarded



# 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

# Presentation of Solutions

- Include units of measure

$$\frac{3}{5} \times 100\% = 60\%$$

$$3 \text{ kg} \times 4 = 12 \text{ kg}$$

- Use equal signs correctly

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

- Show the method of solution (i.e. workings or number equations) clearly.
- **Write answers in the answers line provided.**
- **Standard units of measurements must be included in the final answer.**



# Partnership with the school...

- Ensure that your child completes his homework daily.
- Encourage you child to attempt all questions in daily assignments even if he has absolutely no idea how to do it.
- Be cool. Avoid jumping to his rescue when he cannot solve a problem. Guide him through by getting him to verbalise and analyse his thoughts on how he can approach the question.
- Review mistakes made. Cover solution and re-attempt the question.



# Partnership with the school...

- Practice Papers from school...
  - Ensure conducive working environment.
  - Insist that your child stick 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
- Strategize – focus on areas of weaknesses
- Time Management
- **Ensure that mistakes made are corrected**
- **Exposure to Non-routine problems**
- More math...in other forms
  - Math Games → [Coolmath.com](http://Coolmath.com)
  - Math Literature → Math magazines
  - Daily life
- **Manage stress** – watch for change in behaviour





*Best wishes*

*for the PSLE!!!*