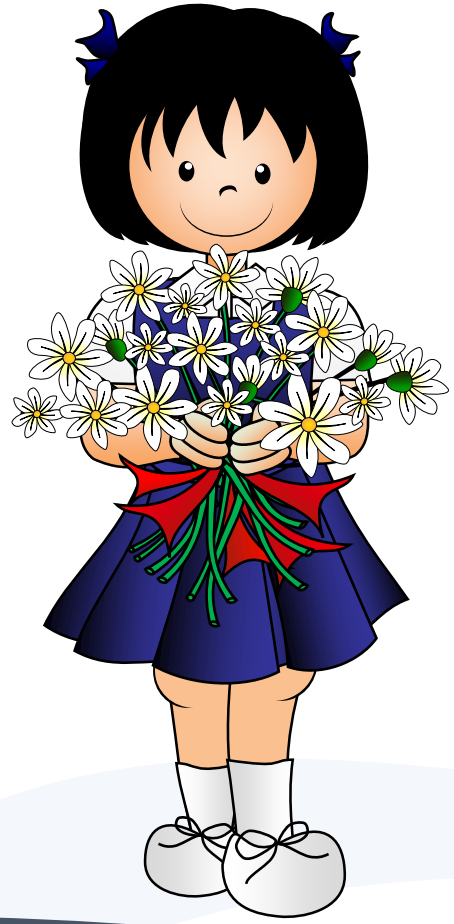


Primary 5
Mathematics

Content

- Aims of The Maths Curriculum
- Approaches To Teaching & Learning
- Assessment
- Use of The Calculator
- Teaching & Learning Resources
- How Parents Can Help

Aims Of The Maths Curriculum

- 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
- Build confidence and foster interest in mathematics

Approaches To Teaching & Learning

- Teaching of Problem-solving & Heuristic Skills
- Journal Writing
- Performance Tasks
- Support Lessons
- Use of ICT (for feedback & e-pedagogy)
- Use of Formative Assessment

Approaches To Teaching & Learning (Teaching of Problem-solving & Heuristics Skills)

- Problem Solving - The process in which a person who is faced with a mathematical problem applies mathematical concepts, skills and process to solve the problem
- Heuristics - Methods that guide pupils to solve mathematical problems systemically by learning from past experiences and investigating practical ways.

Approaches To Teaching & Learning (Teaching of Problem-solving & Heuristic Skills)

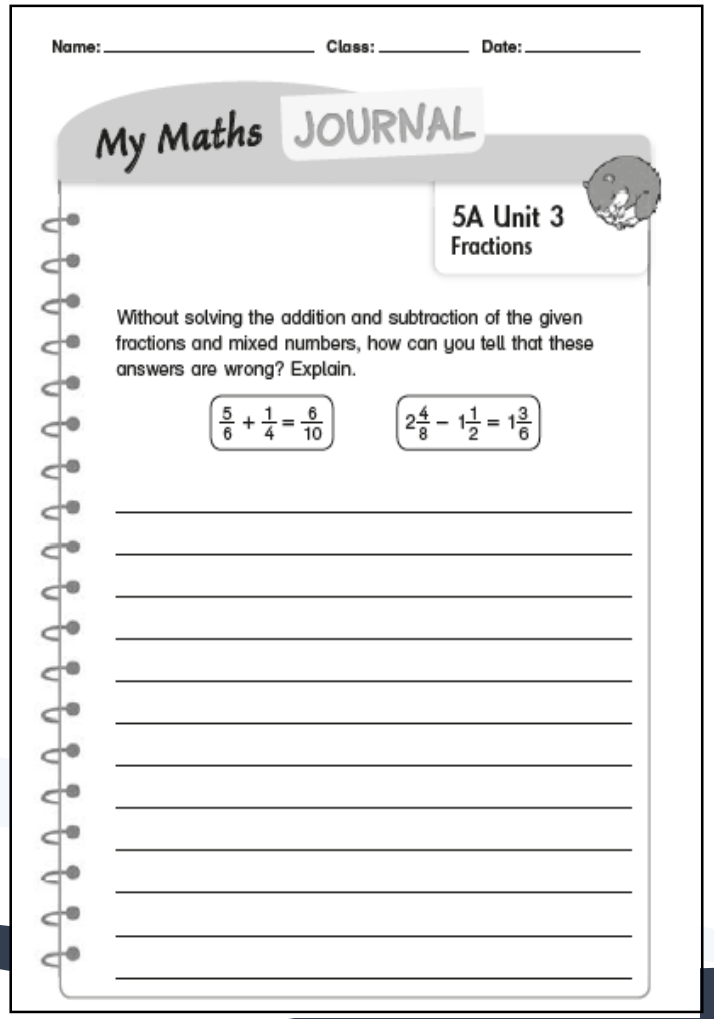
Problem-solving & Heuristic skills taught at P5 :

- Assumption (Supposition)
- Replacement Concept
- Buy & Get Free / Discount Concept
- Equal Fractions Concept
- Fraction if A Remainder
- Repeated Identity
- Before & After Concept
- Access & Shortage

Approaches To Teaching & Learning (Journal Writing)

- A communication tool between the pupil and the teacher.
- Reveals pupils' learning of knowledge and skills
- Serves as a tool for teachers to find out pupils' learning gap so that follow-up actions can be taken.

Approaches To Teaching & Learning (Journal Writing - Example)



Name: _____ Class: _____ Date: _____

My Maths JOURNAL

5A Unit 3
Fractions

Without solving the addition and subtraction of the given fractions and mixed numbers, how can you tell that these answers are wrong? Explain.

$\frac{5}{6} + \frac{1}{4} = \frac{6}{10}$

$2\frac{4}{8} - 1\frac{1}{2} = 1\frac{3}{6}$

Approaches To Teaching & Learning (Performance Tasks)

- Learning activities students perform to demonstrate their knowledge, understanding and proficiency

Approaches To Teaching & Learning (Performance Tasks - Example)

Topic 4: Area of a Triangle

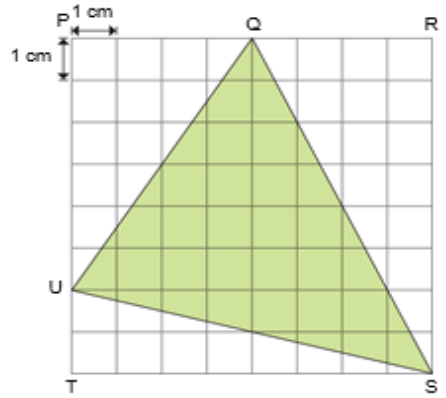
Performance Task

Learning objective:

- Find the area of triangle.

Task 2: Finding the Area of a Triangle

1. Find the area of Triangle QSU.



Approaches To Teaching & Learning (Support Lessons)

- Support Lessons are conducted for selected pupils to help bridge their learning gaps

Approaches To Teaching & Learning (Use of ICT)

- ICT is used to enhance the teaching & learning of Mathematics
- Microsoft Excel & Singapore Students Learning Space(SLS)

Assessment
(Purpose of Assessment)

- To gather evidence about pupils' knowledge of Mathematics
- To ascertain whether learning has taken place
- To provide parents with information on their children's achievement

Assessment
(Modes of Assessment)

Formative Assessment (On-going)	Summative Assessment
• Questioning & Feedback • Journal Writings • Evidence from pupils' work • Group/Class Presentations • Performance Tasks • Peer / Self Evaluation • Weighted Assessments	• Weighted Assessments • End-of-Year Examinations (EYE)

Assessment (Assessment Plan)

Term 1	Term 2	Term 3	Term 4
Weighted Assessment (WA)	**Weighted Assessment (WA)**	**Weighted Assessment (WA)**	**End-of-Year Exam (EYE)**
Review Paper	Review Paper	Review Paper	EYE Paper

Assessment (EYE)
Format of Paper(Standard Mathematics)

Paper	Booklet	Item Type	No. of Qn	No. of marks per Qn	Weighting	Duration
1 (45 %) No calculators allowed	A	MCQ	10	1	10 %	1 h
			5	2	10 %	
	B	Short-Ans	5	1	5 %	
			10	2	20 %	
2 (55 %) Calculators Allowed		Short-Ans	5	2	10 %	1 h 30 min
		Structured / Long-Ans	12	3,4,5	45 %	

Assessment (EYE)
Format of Paper(Foundation Mathematics)

Paper	Booklet	Item Type	No. of Qn	No. of marks per Qn	Weighting	Duration
1 (50 %) No calculators allowed	A	MCQ	10	1	10 %	1 h
			10	2	20 %	
	B	Short-Ans	10	2	20 %	
2 (40 %) Calculators Allowed		Short-Ans	10	2	20 %	1 h
		Structured / Long-Ans	6	3,4	20 %	

Use of The Calculator

- To achieve a better balance between the emphasis on computational skills and problem solving skills in teaching and learning and in assessment
- To widen the repertoire of teaching and learning approaches to include investigations and problems in authentic situations
- To help pupils, particularly those with difficulty learning mathematics, develop greater confidence in doing mathematics

Use of The Calculator

The introduction of calculators……

- will not take away the importance of mental and manual computations. These skills are still emphasized as pupils need to have good number sense and estimation skills to check the reasonableness of answers.
- does not mean that a tougher paper will be set.

Teaching & Learning Resources

- Targeting Mathematics (Course Books & Activity Books)
- Problem-Solving & Heuristic Skills Booklet
- Challenging Problem-Solving Worksheets (Selected classes)
- Practice Papers
- Supplementary Worksheets

How Parents Can Help

- Help to reinforce concepts learnt in lower levels
- Encourage your child to develop good work habits
  - Neatness & good handwriting
  - Complete written task
  - Solve problems with accuracy
  - Persevere through challenging & unfamiliar sums
- Ensure your child has regular & sufficient practices
- Discourage over-dependence on the use of calculators


THANK YOU!