# Primary 5 Mathematics Curriculum Briefing



#### Outline

- Mathematics Curriculum Framework
- Mission
- Approach to Teaching & Learning
- Assessment



#### **MOE Mathematics Curriculum Framework**

Belief, appreciation, confidence, motivation, interest and perseverance

Proficiency in carrying out operations and algorithms, visualising space, handling data and using mathematical tools

Awareness, monitoring and Metacognition regulation of thought processes Attitudes Mathematical Processes Problem Solving Skills Concepts

Understanding of the properties and relationships, operations and algorithms

Competencies in abstracting and reasoning, representing and communicating, applying and modelling



#### **Mission**



To enable our students to master mathematical concepts and skills for everyday life and to equip them with process skills to solve mathematical problems.



#### **Content Sequence for P5**

Semester 1	Semester 2			
Numbers to 10 million	Rate			
Four Operations of Whole numbers	Percentage			
Fraction and Division	Angles			
Four Operations of Fractions	Properties of Triangles			
Area of Triangle	Properties of Parallelogram, Rhombus & Trapezium			
Volume				
Decimals				



#### **Approach to Teaching & Learning**

CONCRETE

**PICTORIAL** 

**ABSTRACT** 



#### P5 – Volume

#### **Concrete**

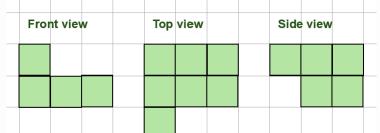




Front view



#### **Abstract**



#### **Mat View**

2	1	1
2	1	1
1		







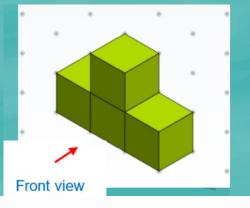


#### The power of

#### **VISUALISATION**

Without building the solid, describe in words the following solid figures.

(a) 1 2 1 Front view





#### **Activity Based Lesson**

#### **Geometry Supplementary Practice**

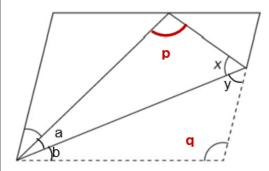
Name:\_\_\_\_\_ Date:\_\_\_\_\_

Class: P5 \_\_\_\_\_

#### Discover

Fold your parallelogram as shown below

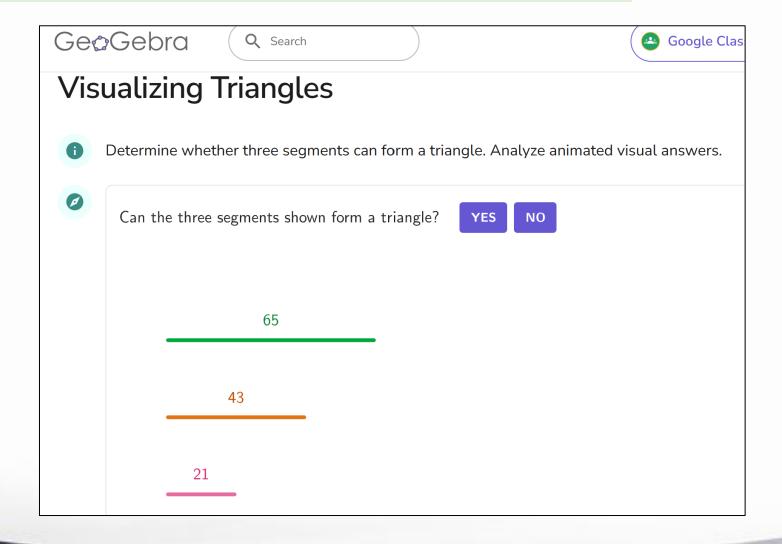
A piece of paper in the shape of a parallelogram is folded as shown. Find  $\angle x$ .



Measure ∠x and ∠y. What do you notice about the two angles?

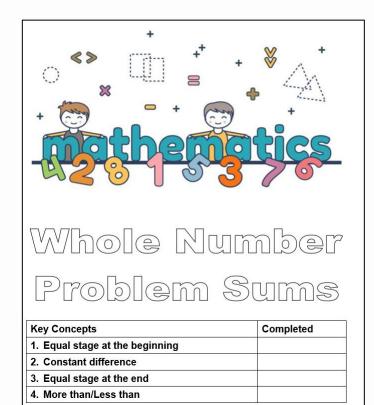


#### **ICT Enriched Lesson**



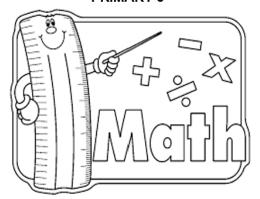


#### **Heuristics Skills**





RAFFLES GIRLS' PRIMARY SCHOOL MATHEMATICS PRIMARY 5



## Fraction Problem Sums (With Model)

S/N	Key Concepts
Notes	Interpreting Fractions in Word Problems
1.	Remainder Concept
2.	One Item Constant
3.	Comparing 'left' with the 'Whole'



1	Useful Notes:	
	B 11 : 14 ( 1: 1	
	<ul> <li>Base and height of a triangle</li> </ul>	
	Area of triangle and its related rectangle	
	Formula for finding area of a triangle	
2	Area of Composite Figures: Split and Add Strategy	$\exists$
3	Area of Composite Figures : Take-away Strategy	
	, , , ,	-
4	Overlapping Areas	
	3	Area of Composite Figures: Split and Add Strategy     Area of Composite Figures: Take-away Strategy



#### Polya's 4 Steps to Problem Solving

**UNDERSTAND** 

**PLAN** 

**SOLVE** 

**CHECK** 

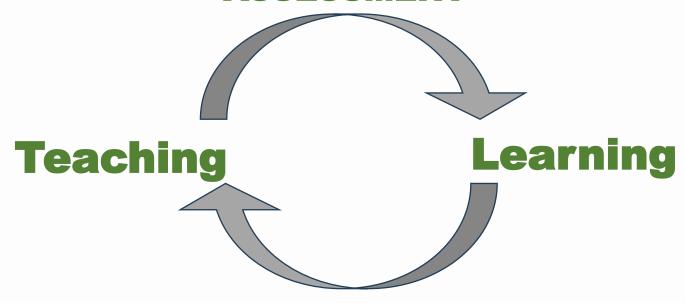
- Read the question carefully
- Take note of key words / information
- What are you asked to solve?

- Think about similar problem you have solved before.
- Any clues to guide you on the strategy to be applied here?
   e.g make a list, draw a model etc
- Follow your plan step by step.
- Write the equations and check each step as you go
- Does your answer make sense?
- Does your answer fit the conditions given in the question?
- Do you need to include any units in your answer?



#### **Formative**

#### **ASSESSMENT**



**ASSESSMENT** 

**Summative** 



#### **Formative Assessment**

- Daily work
- ➤ Topical Review
- > Teacher's observation and feedback



#### **Summative Assessment**

Weighted Assessment 1	Weighted Assessment 2	End-Year- Examination	Total
15%	15%	70%	100%



Weighted Assessment 1	Weighted Assessment 2		
Term 2 Week 5	Term 3 Week 5		
30 marks	30 marks		
<ul><li>Topics:</li><li>Whole Numbers</li><li>Fractions</li></ul>	<ul><li>Topics:</li><li>Area of Triangle</li><li>Volume</li><li>Decimals</li></ul>		



#### **P5 Mathematics End-Year Examination Format**

Paper	Booklet	Item Type	Number of questions	Number of marks per question	Total marks	Weighting	Duration	
1 No Calculator	Α	MCQ	10	1	10	50%	1 h 10 min	
		IVICQ	8	2	16			
	В	SAQ	12	2	24			
2 Calculator	culator	SAQ	5	2	10			
		LAQ/	10	3, 4, 5	3 4 5 40	40	50%	1 h 20 min
		Structured	10	0, 4, 0				
	Total		45	-	100		2 h 30 min	



#### **Use of Calculator at P5**

- Achieve a better balance between the emphasis on computational skills and problemsolving skills in learning and assessment
- Widen the repertoire of teaching and learning approaches to include investigations in authentic situations
- Guidelines on the use of calculator and approved calculator can be found on <u>SEAB</u> website





#### Good habits for your child to adopt

- > Read the question carefully
- > Take note of key words and information given.
- > Present their solution clearly
- > Annotate or write short statements for the working
- Check that they have computed the answer correctly at each step before moving on to the next step
- > Include relevant units in their answer
- Read the question again to ensure that they have answered the question



#### **Empowering Math Learning at Home**

0

- Show the relevance of Math in real-life
- Play Math Games
- Provide a supportive environment
- Encourage a Growth Mindset









### Thank you!



