

# Primary 4 Mathematics





# Content

- Aims of The Maths Curriculum
- Approaches To Teaching & Learning
- Assessment
- 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 P4 :

- Model-Drawing
- Guess & Check
- Internal Transfer
- External Transfer
- Age Problems





# 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: \_\_\_\_\_

 Maths Journal

Kenny had 2408 g of flour. He had twice as much flour as Jessie.  
Jessie had 4 times as much flour as Lionel.  
How much more flour did Jessie have than Lionel?

Mark's solution:  
 $2408 \div 2 = 1204$   
 $1204 \times 3 = 3612$   
Jessie had 3612 g more flour than Lionel.

There is something wrong with Mark's solution.

(a) Explain the mistake in Mark's solution.

*Answers vary. Example: The step of dividing 1204 by 4 (to find the amount of flour Lionel had) is missing from Mark's solution.*

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(b) Show how you would solve the problem.







# Approaches To Teaching & Learning (Performance Tasks)

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





# Approaches To Teaching & Learning (Performance Tasks - Example)

**Chapter 8: Fractions** Performance Task

**Learning objective:**

- Represent and illustrate mixed numbers and improper fractions.

**Task 1: Understanding Mixed Numbers and Improper Fractions**

1. Fill in the box with the correct mixed number. Express your answer in its simplest form.

2. Draw diagrams to show the mixed number  $2\frac{3}{4}$ . Explain the diagram.

Diagram 1

Explanation

---

---





# 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 Student 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
<ul style="list-style-type: none"><li>• Questioning &amp; Feedback</li><li>• Journal Writings</li><li>• Evidence from pupils' work</li><li>• Group/Class Presentations</li><li>• Performance Tasks</li><li>• Peer / Self Evaluation</li><li>• Weighted Assessments</li></ul>	<ul style="list-style-type: none"><li>• Weighted Assessments</li><li>• End-of-Year Exam (EYE)</li></ul>





# 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





# Teaching & Learning Resources

- My Pals Are Here (Course Books & Activity Books)
- Problem-Solving & Heuristic Skills Booklets
- 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





CHIJ Our Lady of the Nativity  
*Simple in Virtue, Steadfast in Duty*

