

Primary 3 Mathematics Sharing

Mrs Wong – Chong Yu Pei (LH Mathematics)
chong_yu_pei@moe.edu.sg



**A PRESENTATION BY
BUKIT TIMAH PRIMARY SCHOOL**

Enjoy Mathematics through Exploring, Reasoning and Communicating Mathematics logically

- More opportunities to explore real-life and novel maths problems
- Deepening the students' conceptual knowledge and applying them in daily lives
- Presenting students with both standard curriculum topics and challenging real-world math problems to encourage higher-order thinking skills

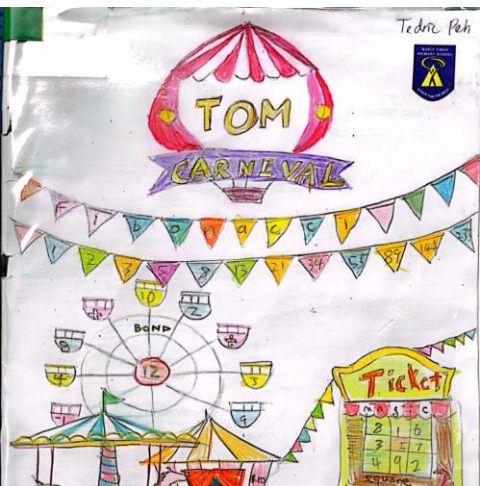


Enjoy Math through Exploration



More opportunities to explore real-life and novel math problems





Key Learning Experiences: IBL-TR

Use of mathematics journaling in **Thinking of Mathematics (TOM)** to encourage creative and critical thinking as well as reasoning and communication skills.



<u>Claim</u> What is the claim or theme being examined?	<u>Support</u> What evidence is there to support the claim or theme?	<u>Question</u> What questions do you still have? What is missing here? What am I not being told?
1) Ken: Sunsets happen between 18:50 (6:50) and 19:20 (7:20 pm) depending on time of year	check when we google for the time when sunset happens	when there is winter will the sunset happen earlier? Have you experienced this?
2) xinyi: Sunsets happen at the same time no matter where you are in the world	Not correct as some places are night while it is morning	
3) we can see the sunrise and sunset every day. They are 12 hours apart. Leila	The earth spins around the sun so some places are where you are what makes you say so? Did you read or experience this?	but there is the changing of the clock in london How does this affect the time for sunrise and sunset?

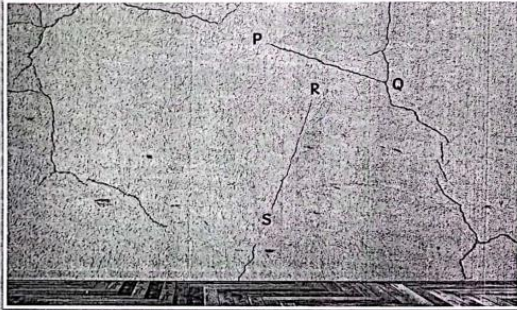


Key Learning Experiences: IBL-TR



Thinking Aloud

Three children saw some crack lines on the wall. They identified two lines and labelled the two lines PQ and RS.



They had a discussion among themselves.

These lines will meet. They are not parallel lines.



Xinyi

These lines do not touch each other. They are not perpendicular to each other.



Ken

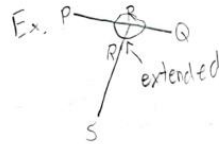
These lines will meet at a right angle if one of the lines is extended. They are perpendicular to each other.



Siti

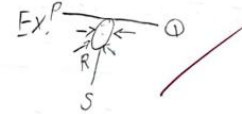
Parallel and Perpendicular Lines. 10/7/23
All of the children are correct in different ways.

The lines will not meet at a point so they are not parallel lines.
Xinyi ✓



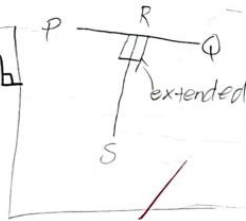
The lines do not touch each other so they are not perpendicular to each other. I think Ken is correct because the lines in the picture do not touch each other.

Xinyi is correct because if you extend line RS it will touch line PQ.



The lines will meet at a point if extended so they are perpendicular to each other. I think Siti is correct because her statement is true.

Perpendicular: \perp
right angle.
Sign: \perp



Parallel: \parallel
2 lines that never meet at a point.
Sign: \parallel



TOM Journal: Authentic Learning Experiences

Name: Olivia Class: 3RL Date: 22 Sep 2023

Copy into ↓ Design a ZOO!

Animal	Area	Colour
Monkeys	25 m ²	Green
Elephants	36 m ²	Red
Giraffe	36 m ²	Blue
DUCK	40 m ²	Yellow
	25 m ²	Green

Facility	Area	Colour
Toilet	16 m ²	Blue
Cafe	15 m ²	Yellow
Playground	33 m ²	Red

P3 Fractions (1)
Name: Joseph Class: 3G Date: 10 July 2023

Johnny has a bar of chocolate. Kate asks if he can share the bar of chocolate with her. Johnny agrees and breaks the chocolate bar into half and gave her one half. Draw and colour the fraction of the chocolate bar that Kate receives.

Chocolate bar

What fraction of the chocolate bar does Kate receive? $\frac{1}{2}$

However, Johnny takes back the one half of the chocolate bar from Kate. He says that he will give her 2 fourths of the chocolate bar instead. So, he further breaks down the 2 pieces of chocolate into 4 pieces. Draw and colour the new fraction of the chocolate bar that Kate receives.

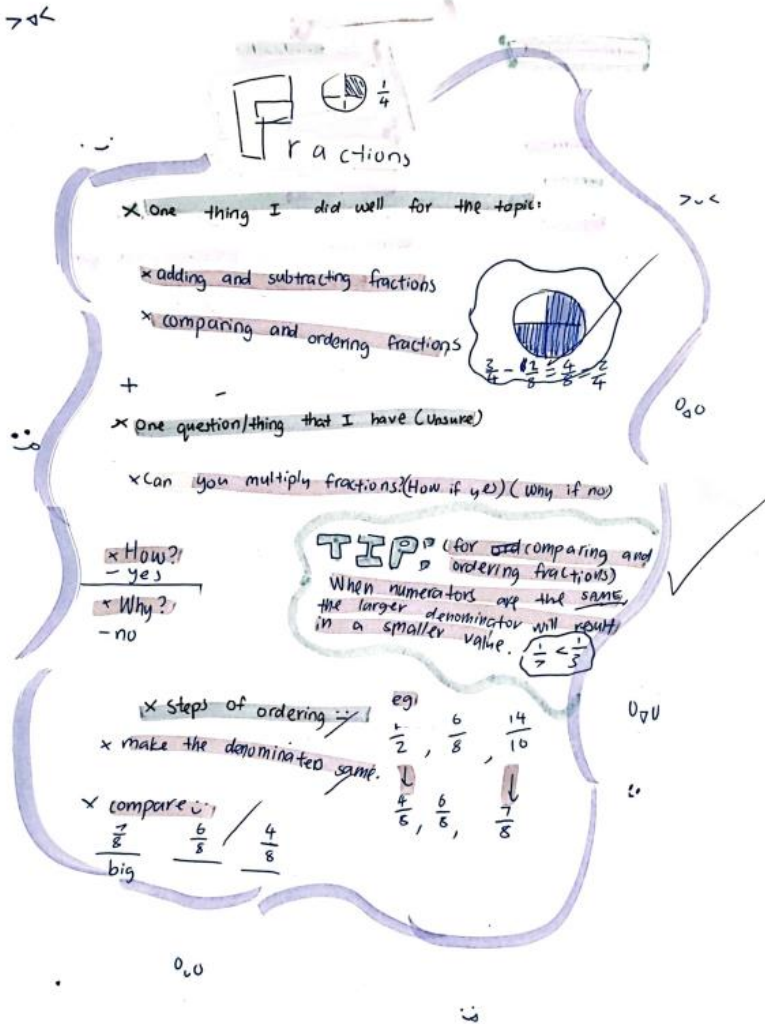
Chocolate bar

What fraction of the chocolate bar does Kate receive now? $\frac{2}{4}$

Did Kate still receive the same amount of chocolate? Yes

What can you say about the 2 fractions above?
They both have the same value





TOM Journal: Reflection

- Understand what “good” work looks like.
- Self-assess using a set of criteria and act on teachers’ feedback.
- Post Activity Reflection



Mathematics Teaching and Learning @ P3

Resources for Mathematics Teaching and Learning

- Textbooks and Practice books
- ICS Booklets: Problem Solving Strategies
- Heuristics Booklet: Make a List, Working backwards, Make a supposition etc.
- Koobits and other online resources
- Mental Sums
- TOM Journals



Mathematics Teaching and Learning @ P3

Programmes for Mathematics Learning

1. LSM – Supporting mathematics learning.
2. STEM Programme – Application of Maths concepts, Computational Thinking and Spatial Visualisation.



Mathematics Topics @ P3

Topics build up from P2	New Topics in P3
Whole Numbers	Bar Graph
$+$, $-$, \times , \div	Angles
Fractions	Perpendicular and Parallel Lines
Time	Area and Perimeter
Money	
Length, Mass, Volume	



Mathematics Assessment @ P3

	Term 1	Term 2	Term 3	Term 4
Base Mark	30	30	30	50
Weightage	10%	15%	15%	60%
Schedule	23 Feb 2024	2 May 2024 to 16 May 2024	7 Aug 2024 to 21 Aug 2024	24 Oct 2024
Format	MCQ, SAQ, LAQ	MCQ, SAQ, LAQ	MCQ, SAQ, LAQ	MCQ, SAQ, LAQ
Duration	50 min	50 min	50 min	1h 30 min



Feedback to Parents

Topical worksheets will be sent home together with self-assessment checklist for parent's acknowledgement after the completion of each topic.

Math files will be sent home for revision termly.

P3 Math Self-Assessment Checklist
Chapter 1 – Numbers to 10 000

Name: _____ Class: 3 (____) Parent's Signature: _____

Choose the level that best describes your level of understanding of the Math concepts.

Levels	Descriptors
1	I am beginning to understand this Math concept but I still need help.
2	I have some understanding of this Math concept and need to make some improvement.
3	I have understood this Math concept very well and can apply it (in everyday life).

	Learning Outcomes	1	2	3
1.	Counting to 10 000 Count by 1s, 10s, 100s and 1000s, to 10 000			
2.	Place Values Know the value of the digits in each place value of a 4-digit number			
3.	Comparing and Ordering Numbers Able to use place value to compare and order numbers			
4.	Number Patterns Able to complete a number pattern			



Partnership with Parents

- Revisit the work that we have done in class with your child.
- Monitor their work, eventually work towards them taking ownership of their own learning.
- Encourage them to
 - Draw models to solve word problems.
 - Work within the stipulated time frame (for better time management during examinations).
 - Play games that strengthen their spatial visualisation skills, such as tangrams, pentominos and etc.
 - Cultivate a habit of checking their work after completion.
- Help them relate Mathematics to real life examples.



Thank You



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