



Primary 6

Bukit Timah Primary School



Mathematics MTPS (Cohort Briefing) 2023



3 February 2023



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Mathematics Teaching & Learning in BTPS

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BTPS Approach

Extend Mathematical
Thinking through Mastery

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Pedagogy

C-P-A
IBL- TR

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Assessment Plan
Paper Format

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Extend Mathematical Thinking with Mastery in Mathematics



Investigative & Authentic Tasks

Complex tasks that require them to investigate, clarify, connect and apply mathematical concepts learnt effectively



Consolidation Reflection

Consolidate and reflect on their learning in Mathematics



Rigor to Mastery

Provide more rigor to prepare our students towards mastery.

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STANDARD MATHEMATICS

Chapters	Topics
2	Fractions
3	Ratio
4	Percentage
5	Angles in Geometrical Figures
6	Circles
9	Pie Charts
8	Volume
1	Algebra
7	Speed
10	Solid Figures and Nets

FOUNDATION MATHEMATICS

Chapters	Topics
1	Fractions
2	Decimals
3	Percentage
5	Average
7	Pie Charts
8	Volume
4	Area and Perimeter
6	Triangles, Rectangles, Squares

Mathematics Teaching & Learning in BTPS



C-P-A

Introduce topics through **hands-on activities** that leverage on **conceptual development**.

Infuse **interactive activities** for students to experience the **joy of learning** Mathematics.

Encounter mathematics in an **authentic** way to **make meaning to learning**.



IBL-TR



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

Thinking routines to **reflect** on their learning and **make connections** to the topics learnt to deepen their conceptual knowledge.

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In preparation of PSLE,

Completion of syllabus

1. by end of July so that there is sufficient time for revision.

Additional Resources

1. systematic approach to tackle problem sums
2. challenging and wider range of questions
3. prepare students for PSLE

Timed Practice Papers

1. Familiarise students with the exam format as well as exam seating.
2. Advise students on better time management.

Maths Enhancement Programme

1. Additional classes during June and Sept holidays.
2. Targeted revision to strengthen weaker concepts.



Mathematics Teaching and Learning in BTPS



Resources for Teaching and Learning

1. Textbooks and Workbooks
2. Topical Reviews
3. Compilation of PSLE questions by topics
4. PSLE booklets and Practice Papers
5. Speed and Accuracy Practices
6. Koobits and other online resources
7. TOM Journals



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Programmes for Mathematics Learning

1. Learning Support (Pull-out) – Supporting mathematics learning.
2. ASC Programme – Supporting mathematics learning.
3. Math Olympiad Programme – Developing higher-order thinking skills.
4. E2K Programme – Developing higher-order thinking skills.
5. Math Learning Day – Joy of Learning and Application of Mathematics thinking.
6. Junior Achievement Programme – Start-up and Entrepreneurship



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Mathematics Assessment in BTPS (Standard)

	Term 1	Term 2	Term 3
Base Mark	45	35	100
Weightage			100%
Schedule*	Week 9	Week 7	Week 8
Topics	P1 to 5 syllabus P6: Chapter 2 to 4	P1 to 5 syllabus Chapter 2 to 6 and 9	P1 to 6 syllabus
Format	Paper 1: MCQ SAQ	Modified Paper 2: SAQ LAQ	MCQ SAQ LAQ
Duration	1 h	50 min	2 h 30 min

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Mathematics Preliminary Exam Format (Std)

Paper	Booklet	Item Type	Number of Questions	Number of marks per question	Number of marks	Duration
1	A	Multiple-choice	10	1	10	1 h
			5	2	10	
	B	Short-answer	5	1	5	
			10	2	20	
2		Short-answer	5	2	10	1 h 30 min
		Structured / Long-answer	12	3, 4, 5	45	
			47	-	100	2h 30 min

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Mathematics Assessment in BTPS (Foundation)

	Term 1	Term 2	Term 3
Base Mark	50	40	90
Weightage			100%
Schedule (subject to change)	Week 9	Week 7	Week 8
Topics	P1 to 5 syllabus P6: Chapter 1 to 2	P1 to 5 syllabus Chapter 1 to 3, 5 & 7	P1 to 6 syllabus
Format	Paper 1: MCQ SAQ	Paper 2: SAQ LAQ	MCQ SAQ LAQ
Duration	1 h	1 h	2 h

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Mathematics Preliminary Exam Format (Foundation)

Paper	Booklet	Item Type	Number of Questions	Number of marks per question	Number of marks	Duration
1	A	Multiple-choice	10	1	10	1 h
			10	2	20	
	B	Short-answer	10	2	20	
2		Short-answer	10	2	20	1 h
		Structured / Long-answer	6	3, 4	20	
			46	-	90	2h

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Mathematics Assessment @ P6



Formative assessment will also take place regularly to ensure students receive timely feedback on their learning.

- Worksheets and practice papers (topical reviews, speed tests and PSLE revision worksheets, Practice Papers)
- TOM Journals
- Class-based activities and ICT enriched activities

Feedback to parents

- Topical worksheets and Self-assessment checklist will be sent home for parent's acknowledgement after the completion of each topic.
- Files will be sent home for revision termly.

Involving Students in Assessment

What am I proud of in this piece of work?
I successfully managed to try to estimate the ~~area~~ area of a circle. Although it was not accurate, I tried. It was difficult drawing a proper rectangle/square but I did not give up. At least I came up with something.

What am I not happy about with this piece of work?
My estimate was very far from the actual thing. I think something had gone wrong along the way but I only realised during class discussion. It was too late to change anything.

My work deserves B grade because something had gone wrong because of which, my estimate was totally off. However, I tried hard so, I don't get a C but a B. A is for perfect and C is for fail. B is in the middle. My efforts balance out my mistakes.

How can I improve in my work?
Maybe, I should have used a combination of A and C instead of only rectangle. I should have tried to make a figure with more sides to improve accuracy.

Weighted Assessment 2: Post-Assessment Reflection

Name: _____			Class: _____			Date: _____	
No.	Test Objective	Topic	Correct	Incorrect because I don't know how to do.	Incorrect because I misread the question.	Incorrect because I made a mistake in computation.	What did I do well for this question? How can I do better in this question?
1	Representing mixed number on a number line.	Fraction					
2	Converting mixed number to decimal.	Fraction					
3	Multiplying 2 proper fractions.	Fraction					
4	Identifying base given height.	Area of triangle					

Post-SA1 Reflection			
Booklet B & Paper 2.			
Q. No.	Topic	What did I do wrongly?	How can I do better in this question?
18	Fractions	I was careless and thought that I can divide by 2.	Be more careful and find a way to check.
19	Ratio	I was careless and wrote 1 instead of 11.	Be more careful and check carefully.
25	Circle	I thought that the figure was $\frac{1}{2}$ of a circle.	Revise on this topic.
26	Speed	I divided it wrongly.	Find a way to divide it if I see that the answer does not make sense.
27	Percentage	I thought that work is done.	Read the question carefully.
28	Fractions	completely wrong answer.	Do this question over and over again until I understand.
33	Fraction	I did it in ratio and mixed up.	Do this question over and over again until I understand.
34	Ratio	I did not find the percentage or ratio.	Do this question over and over again until I understand.
35	Fraction	I did not simplify the final answer.	Do this question over and over again until I understand.
36		I did not do question and check.	Revise the question and check again.
37	Ratio	I did not change 25% in fractions.	Do this question over and over again until I understand.

Developing Metacognition

Partnership with Parents



How can you help your child?

1. Ensure your children revise the work that we have done in class daily.
2. Monitor their homework, eventually work towards them taking ownership of their own learning.
3. Encourage them not to be over-reliance on the use of calculators.
4. Encourage them to work within the stipulated time frame (for better time management during examinations, especially for Paper 1).
5. Deploy targeted revision on weaker topics. It is more effective than doing sets of practice papers.
6. Encourage neat and clear presentation of solutions.
7. Encourage them to check their work.

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you!

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