MATHEMATICS Information for Primary Two Parents

Primary Mathematics (Laying a strong foundation)

The Primary Mathematics syllabus aims to enable all students to:

- •Acquire mathematical concepts and skills for everyday use and for continuous learning in Mathematics.
- •Develop thinking, reasoning, communication, application and metacognitive skills through a mathematical approach to problem solving; and
- •Build confidence and foster interest in Mathematics



A Creative, Innovative and Effective Mathematics Problem Solver

Mathematics Framework



5+

From the Singapore Ministry of Education



The syllabus is organised along 3 content strands with a listing of mathematical processes that cut across the 3 strands.

3 Content Strands + 1 Process Strand					
Number and Algebra	Measurement and Geometry	Statistics			
Mathematical Processes					





Number & Algebra (Strand) ✓ Numbers up to 1000 Addition & subtraction Multiplication & division ✓ Fraction of a whole ✓ Addition and subtraction – Fraction ✓ Money





Measurement & Geometry (Strand) ✓Length, Mass & Volume ✓Time ✓2D shapes ✓3D shapes





Statistics (Strand) ✓ Picture graphs with scales Mathematical Processes

Reasoning, communication & connections

✓ Applications✓ Thinking skills & heuristics



Learning Outcomes

- 1. Understanding numbers up to thousand
- 2. Solve mathematical problems involving addition and subtraction
- 3. Multiple and divide numbers within multiplication tables
- 4. Identify, name, describe and sort shapes and objects
- 5. Tell time to 5 minutes
- 6. Compare and order objects by length, mass, or volume
- 7. Read and interpret picture graphs with scales
- 8. Understand fractions



Heuristics (PL-P5)

- 1. Draw a model/diagram
- 2. Make a systematic list/tabulation
- 3. Look for patterns
- 4. Guess and check
- 5. Act it out
- 6. Use before-after concept



Heuristics (PL-P5)

- 7. Work backwards
- 8. Restate the problem in another way
- 9. Simplify the problem
- 10. Make suppositions



Phases of Learning

- Prior knowledge
- Motivating contexts

Mastery

 Learning environment

- Motivated Practice
- Reflective Review
- Extended Learning

Learning

- - Engagement
- Activitybased
- learning • Teacherdirected
 - inquiry

Direct instruction



CPA Approach

Our approach when teaching Math concepts to young children is from 'Concrete' to 'Pictorial' to 'Abstract'.



C-P-A Approach

Checkpoints

Daily assignments	Experiential Learning activities	
Math Alive	Class, group and individual tasks	
Diagnostic Package	Open Ended Tasks	

5+2=





Holistic Assessment

Term 1	Term 2	Term 3	Term 4	
1 Unit Review	1 Unit Review	1 Unit Review	1 Unit Review	
Non-Weighted				







Experiential Learning

- Enhance conceptual understanding through use of the Concrete-Pictorial-Abstract approach
- Communicate their reasoning and connections through various mathematical tasks and activities.

Integrated Trails

• To experience real-life Mathematics around them

BrainGames

 To develop the abilities to reason and apply problem solving skills through games







Learning Support for Math

- Provide help for students with weak basic numeracy skills
- Students receive more individual attention from teacher
- Students learn through hands-on experiences

5+2=2

P2 Programmes

Money Sense!

- Able to count amount of money in dollars up to \$100
- Understand the value of money
- Build confidence and foster interest in Mathematics
- Reward system
- Make sound decision

Reasoning Cartoon

 Develop thinking, reasoning, communication, application and metacognitive skills with the help of our cartoon characters, Chendol, Kachang, Cheng Teng and Cha Cha. HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS



5+2=

HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS



- Start with a smaller number (revisit what they have learnt in Primary 1)
- Start with concrete materials
- Scaffold their learning of new knowledge
- Provide regular practices





- Use simple language
- Help your child to comprehend word problems
- Use mathematical language (Renaming/ Regrouping)
- Use of visuals







I can learn anything I want to. When I'm frustrated, I persevere. I want to challenge myself. When I fail, I learn. Tell me I try hard. If you succeed, I'm inspired. My effort and attitude determine everything.





• Persistence



HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS



Need to space out reviews to make the brain reconstruct that memory, strengthening like a muscle





HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS

Making mistakes is part of learning!

Neuroscientists have found that mistakes are helpful for brain growth and connectivity and if we are not struggling, we are not learning.



Contact Details

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THANK YOU