# Primary 1 Mathematics Curriculum Briefing

## Content

Learning of Mathematics

How can I help my child

# Teaching and learning

Build and strengthen content knowledge and understanding

Focus

Increase motivation & interest in subject

Develop mathematical skills

Teaching Approaches
Concrete-Pictorial-Abstract (CPA)
Gradual Release Responsibility (GRR)
Problem Solving

# Teaching approaches

	Characteristics	Example
Concrete	Use of manipulatives, measuring tools or objects	Count using objects
Pictorial	Use of drawings, diagrams, charts or graphs	Count using diagrams
Abstract	Use of abstract representations such as numbers and letters	Write the number statement $3 + 5 = 8$

# Teaching approaches

## Gradual Release Responsibility (GRR)

I Do

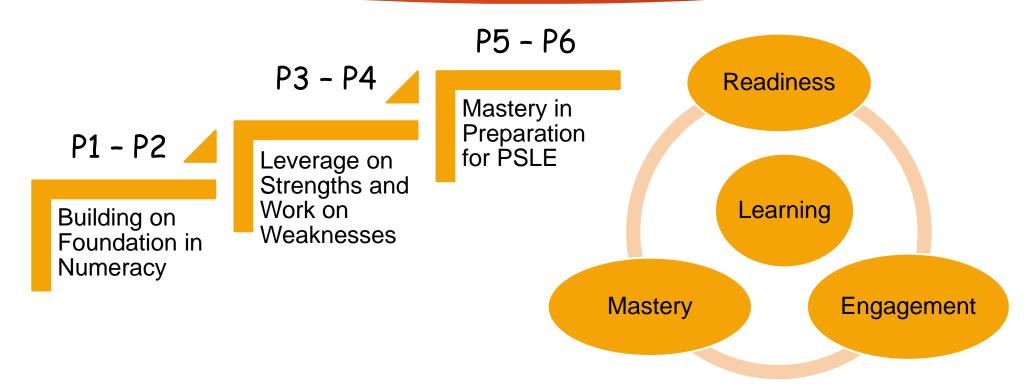
Teacher Demonstrates

Teacher/Students Do Together



Students Try on Their Own

# Teaching and Learning



<u>Curricula Goal</u> Competent Problem-Solvers

## Mathematics Materials

Heuristics Worksheets

Topical Mastery and Learning Reviews

Textbook and Workbook

Topical Mastery and Learning Reviews used as formative assessment

## Curriculum

### Content Strands - Spiral Curriculum

Numbers and Algebra

Whole Numbers

Fractions

Money

Measurement and Geometry

Measurement

Geometry

Statistics

Data
Representation
and
Interpretation

## Curriculum

#### Primary 1 Primary 2 Whole Whole Numbers Numbers Measure-Measurement ment Geometry Geometry Data Data Analysis Analysis Fractions

#### Problem Solving - Heuristic skills

P1	P2
Act It Out	Act It Out
Draw a Diagram	Draw a Diagram
Make a List	Make a List
	Look for Patterns
	Work Backwards

# Learning Outcomes for P1

- Understand numbers up to hundred.
- Understand addition and subtraction.
- Add and subtract numbers
- Identify, name, describe and sort shapes

- Measure and compare lengths of objects.
- Understand multiplication and division
- Tell time to 5 minutes
- Read and interpret picture graphs

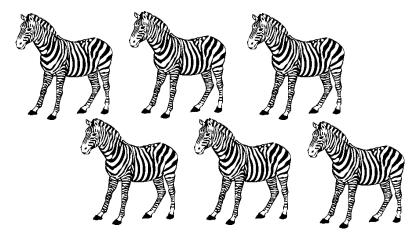
## Assessment

- No weighted assessment
- Focus on formative assessment
  - ·Lesson-based (e.g. questioning, white board)
  - Authentic Learning
    - Learning Experiences (e.g. use play money to simulate real-live experiences)
  - Topical Mastery/ Learning Reviews (Progressive check students' mastery of concepts and skills)

## How can I help my child

## Difficulties faced





Number symbol has no resemblance to the things they are representing.



# Difficulties faced

#### Vocabulary - Terms

- Altogether / Total / Left
- More Than/Less Than/Greater Than
- Longer/Shorter
- Greatest/Smallest
- Most/Least

#### Word Problems

There are 3 apples and 5 oranges.

How many fruits are there altogether?

Jenny has 9 marbles.

Mary has 6 marbles.

How many more marbles does Jenny have than Mary?

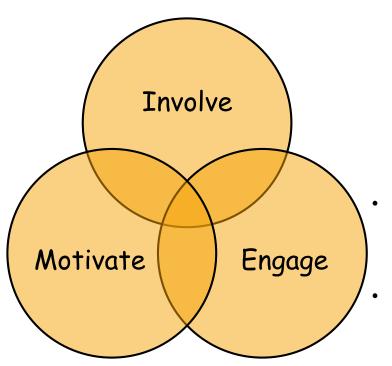
# IME Approach

#### Involve

- Aware of progress and challenges faced
- Ensure homework is done

#### Motivate

- Help child cultivate positive learning attitude, develop passion in the subject
- Show application and draw links of Mathematics in daily real-life situations



#### Engage

- Help child develop Factual Fluency of mathematical facts
- Use correct mathematical language Example:

"Borrow", "Carry" × Regroup ✓

# Thank You