Mathematics in HPPS

Learn Math,

Live Math,

Love Math.

Sharing with Parents

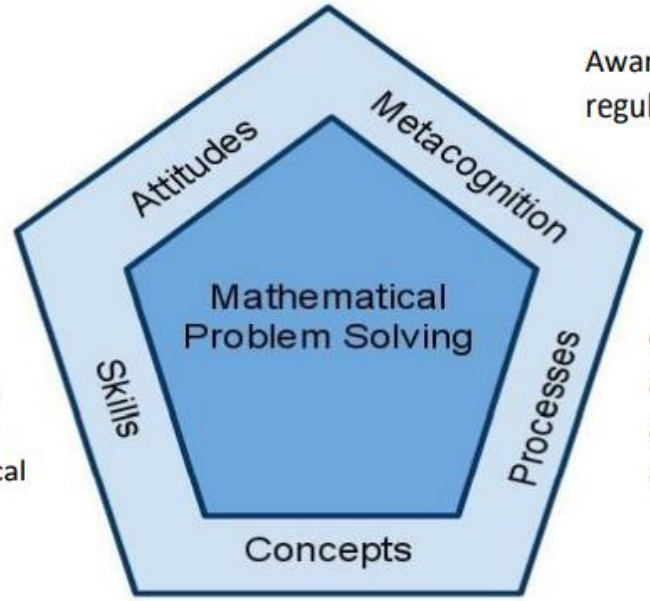
November 2024

Mathematics Framework

Mathematics Curriculum Framework

Belief, appreciation, confidence, motivation, interest and perseverance

Awareness, monitoring and regulation of thought processes



Proficiency in carrying out operations and algorithms, visualising space, handling data and using mathematical tools

Competencies in abstracting and reasoning, representing and communicating, applying and modelling

Understanding of the properties and relationships, operations and algorithms

Aims of the Primary Math Syllabus

To enable students to:

- 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; and
- build confidence and foster interest in mathematics.

Math in Primary 1

3 content strands:

i. Number & Algebra

ii. Measurement & Geometry

iii. Statistics

Number & Algebra

Topics:

- Numbers 0 to 10
- Addition within 10
- Subtraction within 10
- Ordinal Numbers
- Numbers to 20
- Addition and Subtraction
- Numbers to 100
- Addition and Subtraction Within 100
- Multiplication
- Division

Measurement & Geometry

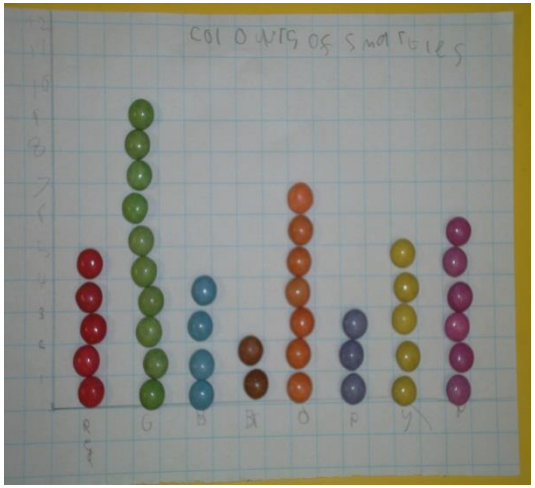
Topics:

- Shapes
- Length
- Time
- Money

Statistics

Topics:

- Picture Graphs



My Favorite Sport	
Baseball	
Football	
Basketball	
Soccer	

C-P-A Approach in Math Learning

- **C**oncrete
  - Use of manipulatives
  - Hands-on activities

- **P**ictorial
  - Use of pictorial representations and/or drawing of diagrams and models
- **A**bstract
  - Numerical representations, symbolic representations, algorithms and mental calculations

Math Programmes for Primary 1

- **Learning Support in Math (LSM)**
  - Early intervention support for students who need help in acquiring basic numeracy skills.

- **Fun in Math**
  - Enrichment activities for students with aptitude in Math to expose them to various skills (such as classification, visual-spatial skills, logical reasoning, pattern recognition etc) through games and activities.

Formative Assessments

- An integral part of teaching and learning
- On-going process where teachers gather information about students' learning to inform and support teaching

Formative Assessments

- Provides information on how well students are progressing toward the desired learning goal(s).
- Non-weighted
- Focus on growth and mastery, **NOT** on grades and performance

Modes of Formative Assessments

- Oral Question & Answer
- Diagnostic Tasks
- Pen-and-Paper Tasks
- Performance Tasks
- Journal Writing

Feedback to Parents

- Check-point feedback given after every 2-3 units taught
- Based on 4-Level Qualitative Descriptors
  - Beginning
  - Developing
  - Competent
  - Accomplished

Sample of Feedback to Parents

Henry Park Primary School
Mathematics
Primary 1
Semester 1 – Review 1 (1A Practice Book Page 49 to 54)
Chapter 1: Numbers to 10
Chapter 2: Addition
Chapter 3: Subtraction

Student's Self-evaluation			
I checked my work.			
I wrote the numbers clearly.			
I worked out all the answers without asking for help.			

Feedback on child's learning:

Teacher's Feedback					
No.	Learning Objectives	Beginning	Developing	Competent	Accomplished
1	To count, read and write numbers 0 to 10				

Home support for your child

- Set a daily homework routine.
- Regularly review the basic concepts & skills your child has learnt in class.
- Focus on your child's efforts instead of his/her mistakes.
- Always motivate and encourage him/her to build confidence.

Home support for your child

- Play Math games.

  Some examples:
  - Number Snap!
  - Addition/Subtraction Bingo
  - Skip Counting

- Read Math-related stories.

  Some examples:
  - The Very Hungry Caterpillar (Eric Carle)
  - Amanda Bean's Amazing Dream (Cindy Neuschwander)
  - How Big Is A Foot? (Rolf Myller)

Home support for your child

Provide and create opportunities to explore Mathematics through real-life experiences.

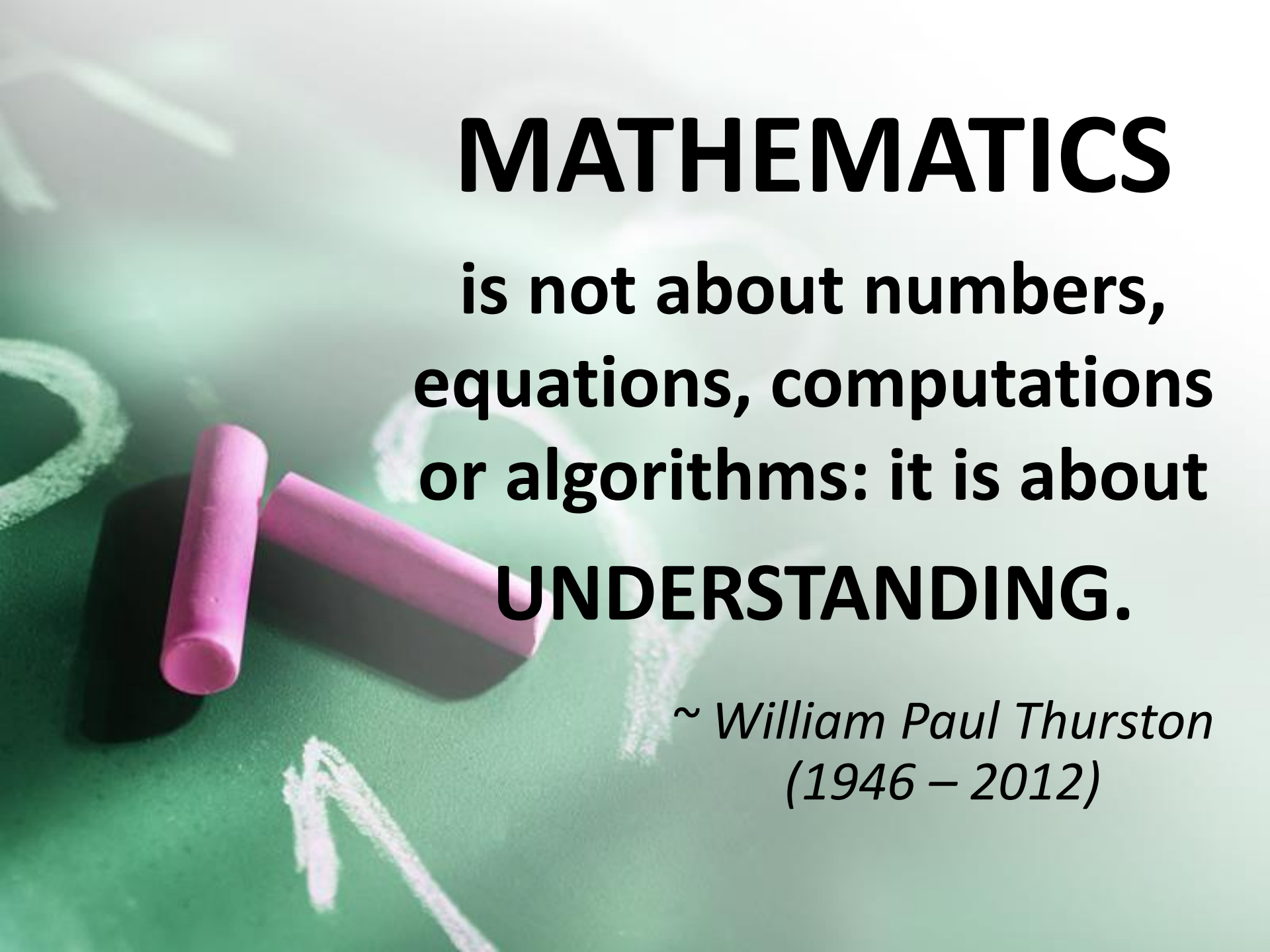
Some examples:

- Estimating number of items in a container.
- Estimating time taken to travel from home to school.
- Tell and read time from both analogue and digital clocks or watches.
- Calculate total cost of items while grocery shopping.
- Reading the mass or volume of items indicated on the labels.
- Licence-plate Math

  Eg SMR 9577 U → 9 + 5 + 7 + 7 = 28

  → 9 + 5 = 7 + 7

  → 9 – 7 = 7 – 5


MATHEMATICS
is not about numbers, equations, computations or algorithms: it is about
UNDERSTANDING.
~ William Paul Thurston
(1946 – 2012)


Have an enjoyable learning journey in the primary school years with your child!