# Mathematics

## Primary 5

**Singapore Mathematical Framework**
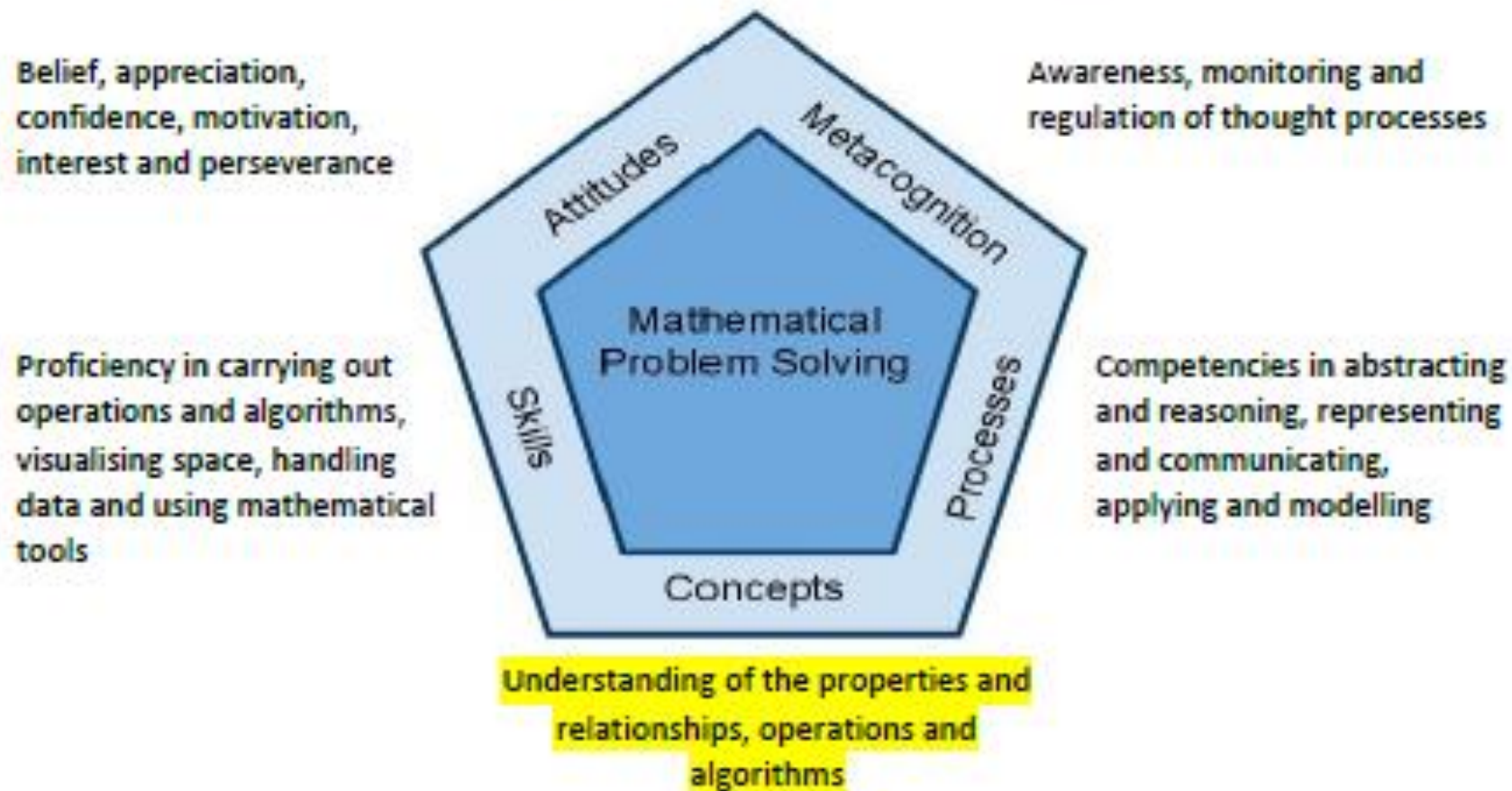
**Key Department Approaches & Programmes**

**Strategies to support our students**

# SINGAPORE MATHEMATICAL FRAMEWORK



Mathematics Curriculum Framework

Belief, appreciation, confidence, motivation, interest and perseverance

Awareness, monitoring and regulation of thought processes

Attitudes

Metacognition

Mathematical Problem Solving

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

Skills

Processes

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

Concepts

Understanding of the properties and relationships, operations and algorithms

# Topics at P5

| |
|---|
| Whole Numbers (10 Million) |
| Four Operations of Whole Numbers |
| Fractions |
| Area of Triangles |
| Volume |
| Ratio |
| Decimals |
| Rate |
| Percentage |
| Average |
| Angles |
| Properties of Triangles |
| Parallelogram, Rhombus and Trapezium |

# Topics at P6

| |
|---|
| Algebra |
| Fractions |
| Ratio |
| Percentage |
| Angles in Geometrical Figures |
| Circles |
| Speed |
| Volume |
| Pie Charts |
| Solid Figures and Nets |
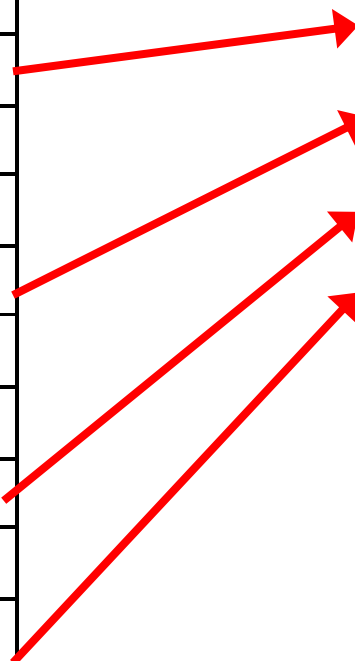
# Topics at P5 FMA

| Whole Numbers (10 Million) |
| --- |
| Four Operations of Whole Numbers |
| Factors and Multiples |
| Fractions |
| Geometry |
| Time |
| Decimals |
| Perimeter, Area and Volume |
| Rate |
| Tables and Graphs |

## P6 FMA Topics

| Fractions |
| --- |
| Decimals |
| Percentage |
| Area and Perimeter |
| Average |
| Triangles, Rectangles and Squares |
| Pie Charts |
| Volume |

**J U N Y U A N  P R I M A R Y  S C H O O L**

Future-Ready Learners  .  Leaders of Character

**N u r t u r i n g   e v e r y   c h i l d   i n   a   v i b r a n t   a n d   c a r i n g   e n v i r o n m e n t   w h e r e   t a l e n t s   b l o s s o m**

# Key Department Approaches & Programmes

- **Sustained Support for Maths (SSM)**

- **Factual Fluency**

- **Note Taking**

- **STAR Heuristics Package (STAR Hpack)**

- **Enrichment <span style="color:red">(For selected students only)</span>**

  - **Mathematics Olympiad Training (Semester 1)**

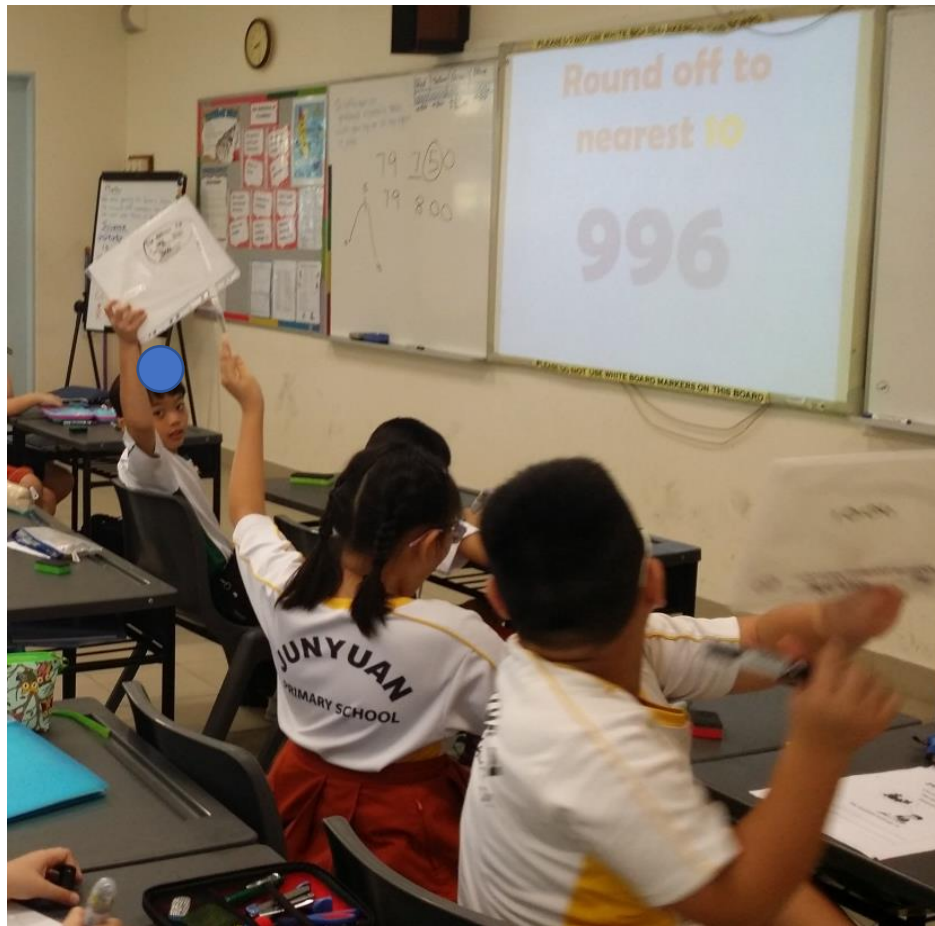  - **Maths Excellence 2000 (E2K) Programme**

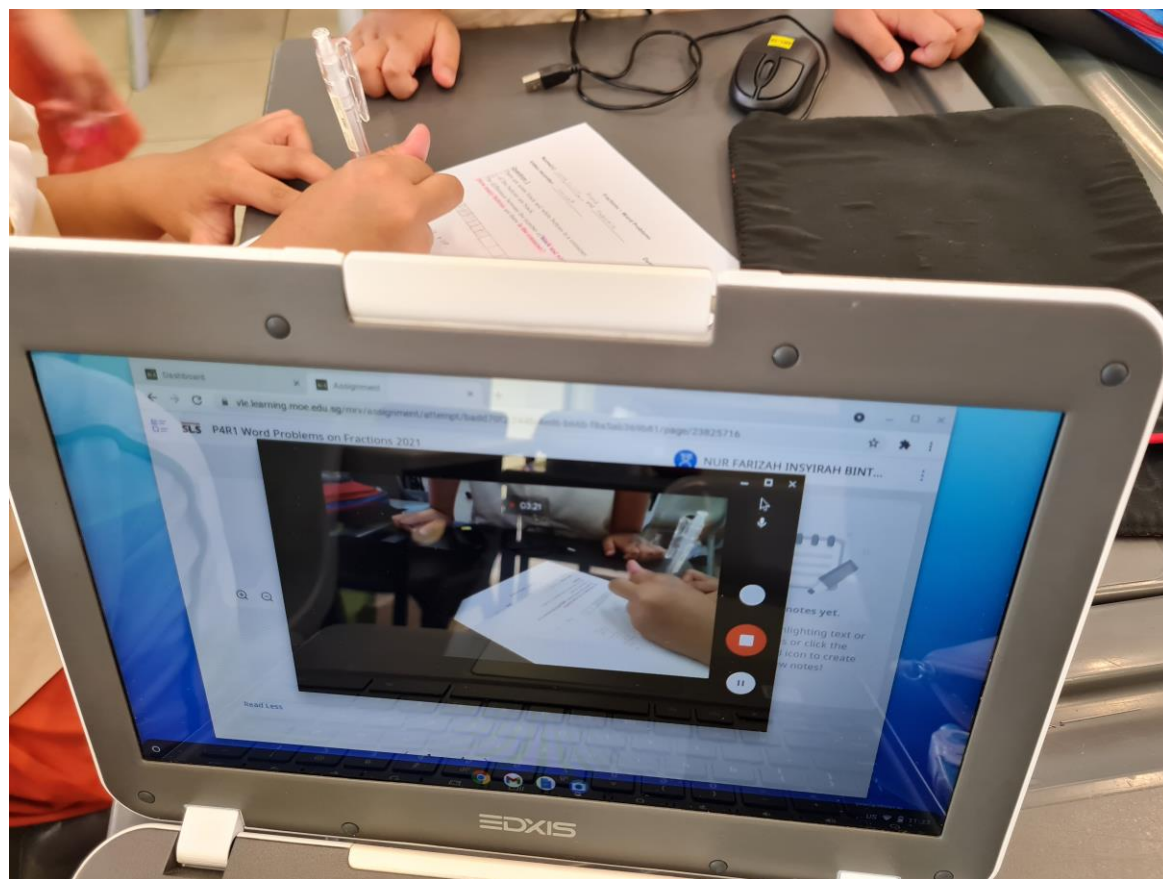# Sustained Support for Maths (SSM)
# Activity - based lessons

# Sustained Support for Maths (SSM)
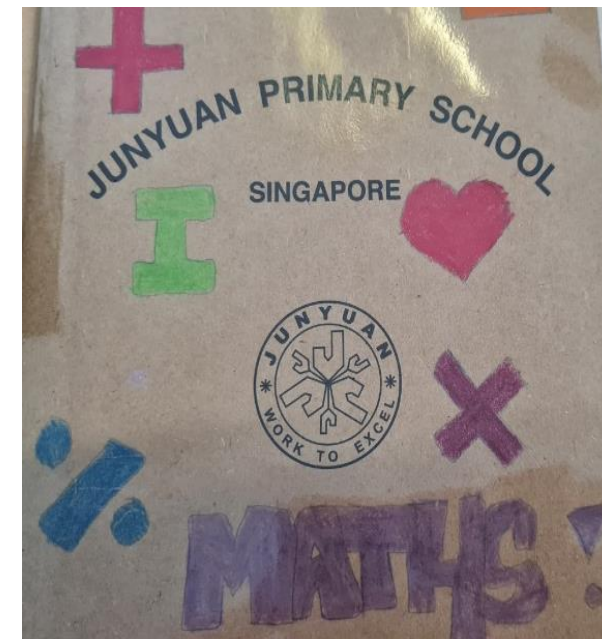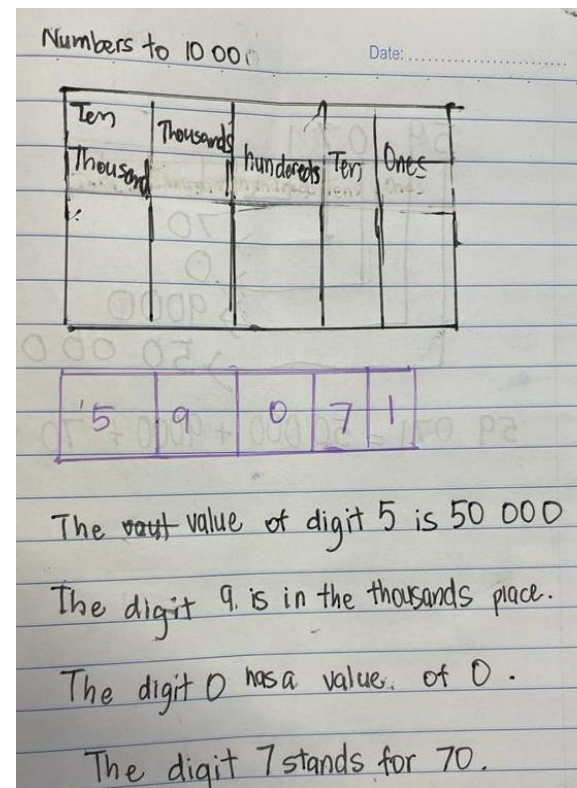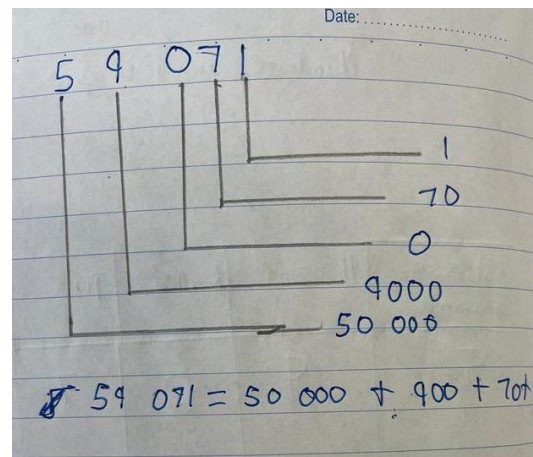# Factual Fluency
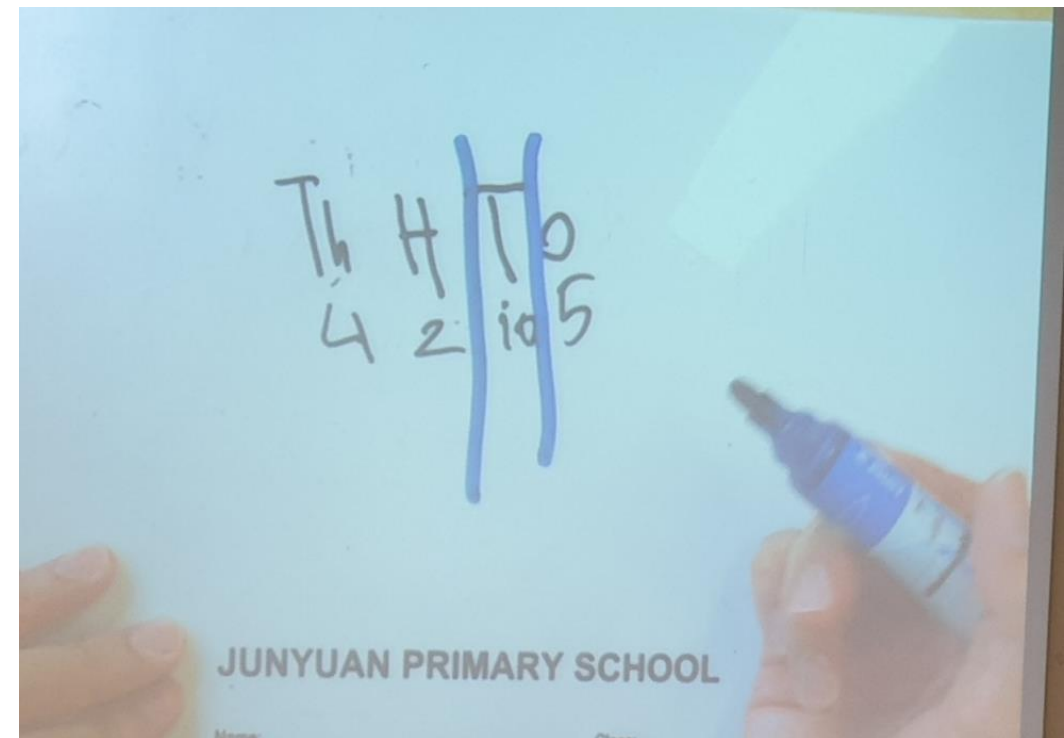


*Pictures were taken pre-Covid*

# Sustained Support for Maths (SSM)
# ICT - based lessons

# Note Taking
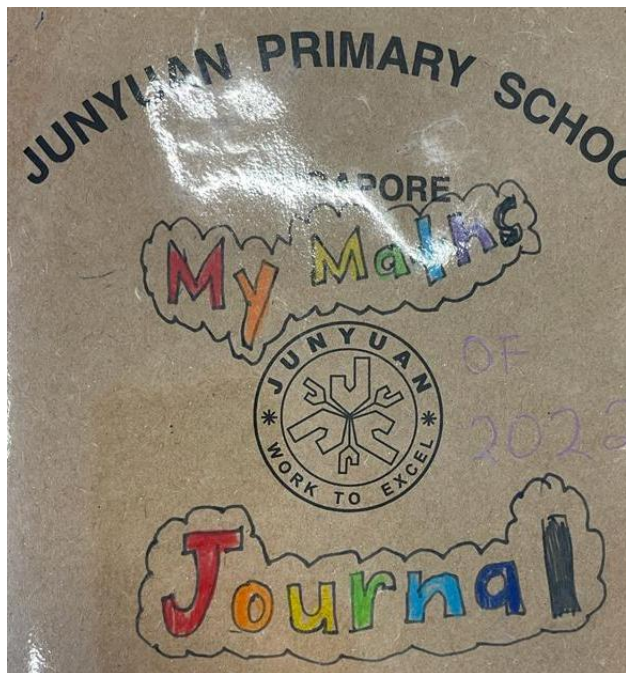
JUNYUAN PRIMARY SCHOOL
MATHEMATICS

# STAR Heuristics Package (STAR Hpack)

**STAR**

SEE ~ THINK ~ ACT ~ RELOOK

P5

S T A R

# STAR

## Approach in Problem Solving

**S**ee what is given

**T**hink of a plan

**A**ct on my plan

**R**elook and check

# Examples of Heuristics

- **Model Drawing e.g. Stacking method, Fractions of a remainder**

- **Guess and Check**

- **Working backwards**

- **Restate the problem**

# Assessment

**J U N Y U A N   P R I M A R Y   S C H O O L**

Future-Ready Learners    .    Leaders of Character

**N u r t u r i n g   e v e r y   c h i l d   i n   a   v i b r a n t   a n d   c a r i n g   e n v i r o n m e n t   w h e r e   t a l e n t s   b l o s s o m**

# Format of EYE

| Paper | Booklet | Item Type | No. of qns | Marks per qns | Weighting | Duration |
|-------|---------|-----------|------------|---------------|-----------|----------|
| 1 | A | MCQ | 10 | 1 | 10% | 1 h |
| | | | 5 | 2 | 10% | |
| | B | SAQ | 5 | 1 | 5% | |
| | | | 10 | 2 | 20% | |
| 2 | | SAQ | 5 | 2 | 10% | 1 h 30 min |
| | | LAQ | 12 | 3 to 5 | 45% | |
| Total | | | 47 | | 100% | 2 h 30 min |

# Format of EYE (Foundation)

| Paper | Booklet | Item Type | No. of qns | Marks per qns | Marks | Duration |
|-------|---------|-----------|------------|---------------|-------|----------|
| 1 | A | MCQ | 10 | 1 | 10 | 1 h |
| | | | 10 | 2 | 20 | |
| | B | SAQ | 10 | 2 | 20 | |
| 2 | | SAQ | 10 | 2 | 20 | 1 h |
| | | LAQ | 6 | 3 to 4 | 20 | |
| Total | | | 46 | | 90 | 2 h |

# Supporting our Students

- Relate Maths to daily life.

- Encourage active engagement in school's online platforms e.g. Koobits (more details will be given by Math teachers later on), SLS

- Encourage your child to ask questions and not to afraid to try.

- Refer to textbooks / Mathematics Handbook (Orange file) / own notes taken during lessons

# Online Maths Alive!
# Workshop for parents
# (P5 and P6)
# (via Zoom)

## 31 March 2023
## 2.30 p.m.

Thank You!