

# MATHEMATICS

## Information for Primary 5 Parents

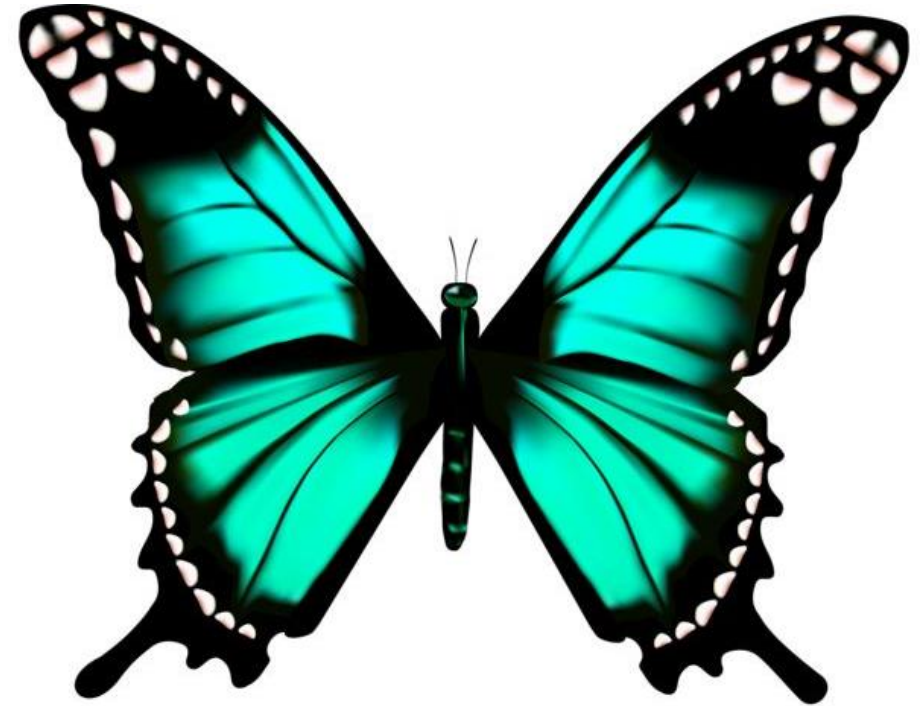




# **Primary Mathematics** **(Laying a strong foundation)**

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



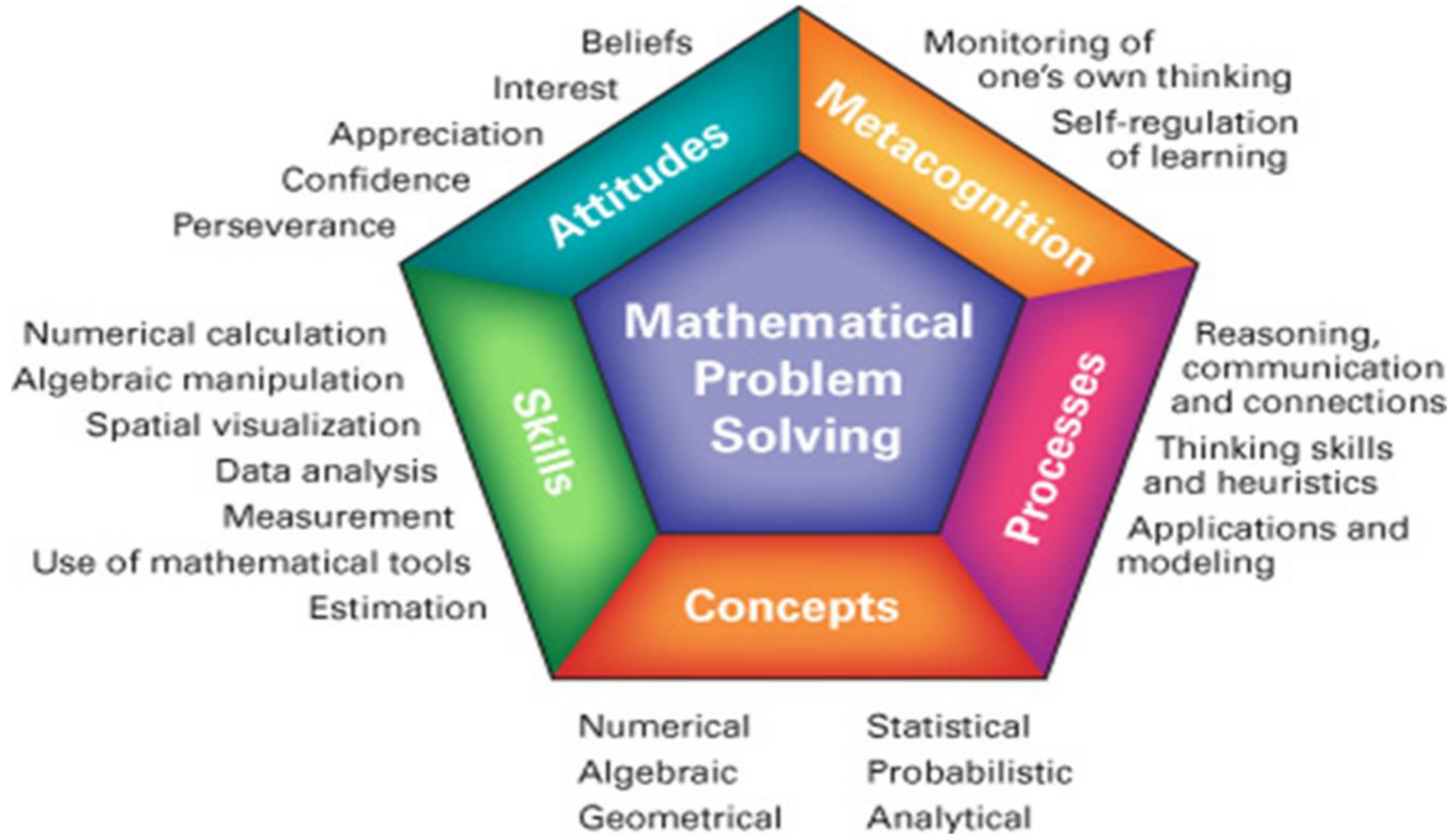
# **Mathematics Department Vision**

**A Creative, Innovative and Effective Mathematics  
Problem Solver**





# Ma Framework



*From the Singapore Ministry of Education*

# Ma Syllabus Organisation (S)

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

3 Content Strands + 1 Process Strand		
Number	Measurement and Geometry	Statistics
<ul style="list-style-type: none"><li>Numbers Up to 10 Million</li><li>Four Operations – Whole Numbers</li><li>Fraction and Division</li><li>Four Operations – Fraction</li><li>Four Operations - Decimals</li><li>Percentage</li><li>Ratio</li><li>Rate</li></ul>	<ul style="list-style-type: none"><li>Area of Triangle</li><li>Volume of Cube and Cuboid</li><li>Angles</li><li>Triangles</li><li>Parallelogram, Rhombus and Trapezium</li></ul>	<ul style="list-style-type: none"><li>Average of a set of data</li></ul>
Mathematical Processes		
Reasoning, Communication, Connection, Application, Thinking Skills and Heuristics		

# Ma Syllabus Organisation (F)

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

3 Content Strands + 1 Process Strand		
Number	Measurement and Geometry	Statistics
<ul style="list-style-type: none"><li>Numbers Up to 10 Million</li><li>Four Operations – Whole Numbers</li><li>Factors and Multiples</li><li>Concepts of Fractions</li><li>Equivalent Fractions</li><li>Mixed Numbers and Improper Fractions</li><li>Four Operations – Fractions</li><li>Decimals Up to 3 Decimal Places</li><li>Four Operations – Decimals</li><li>Rate</li></ul>	<ul style="list-style-type: none"><li>Time</li><li>Area and Perimeter</li><li>Volume of Cube and Cuboid</li><li>Perpendicular and Parallel Lines</li><li>Angles</li><li>Rectangle and Square</li></ul>	<ul style="list-style-type: none"><li>Tables, Bar Graphs and Line Graphs</li></ul>
Mathematical Processes		
Reasoning, Communication, Connection, Application, Thinking Skills and Heuristics		

# Heuristics (P1 to P5)

Draw a diagram/ model

Make a systematic list/ tabulation

Look for patterns

Guess and Check

Act it Out

Use Before-and-After Concept

Work Backwards

Restate the problem in another way

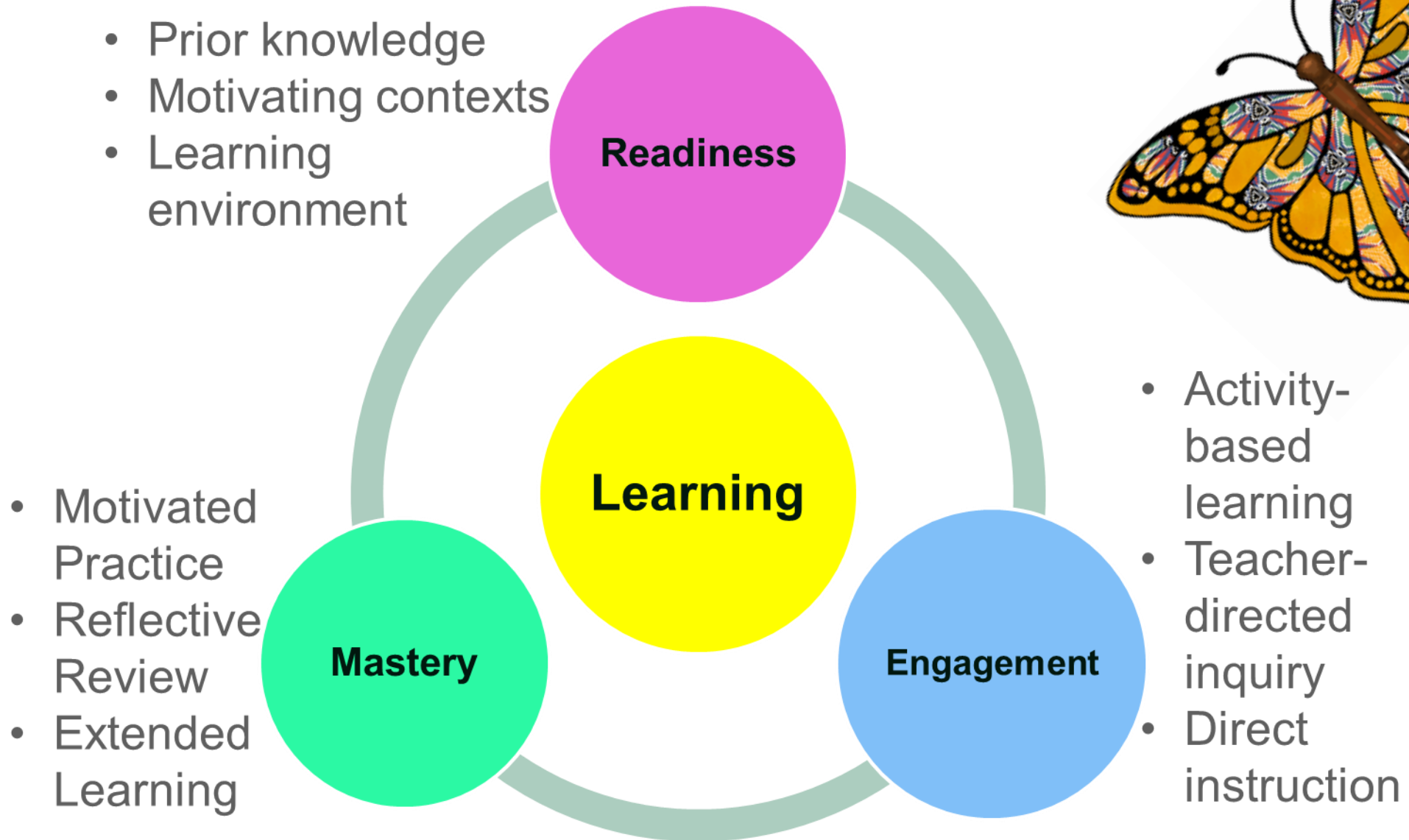
Simplify the problem

Make suppositions





# Phases of Learning



# Checkpoints

Daily  
assignments

Experiential  
Learning  
activities

Spatial  
Visualisation  
Package

Math Alive

Class, group  
and individual  
tasks

Reasoning  
Cartoon  
Package

Diagnostic  
Package

Open Ended  
Tasks



# Reasoning Cartoon

- Develop thinking, reasoning, communication, application and metacognitive skills with the help of our cartoon characters, Chendol, Kachang, Cheng Teng and Cha Cha.



**Kachang**



**Cha Cha**

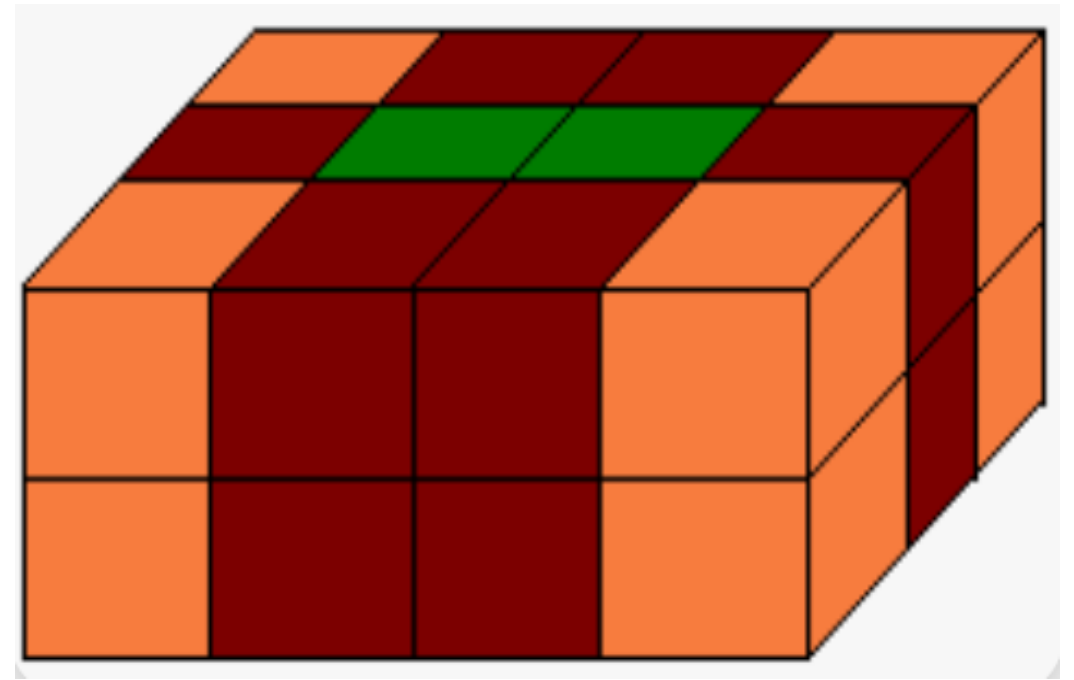
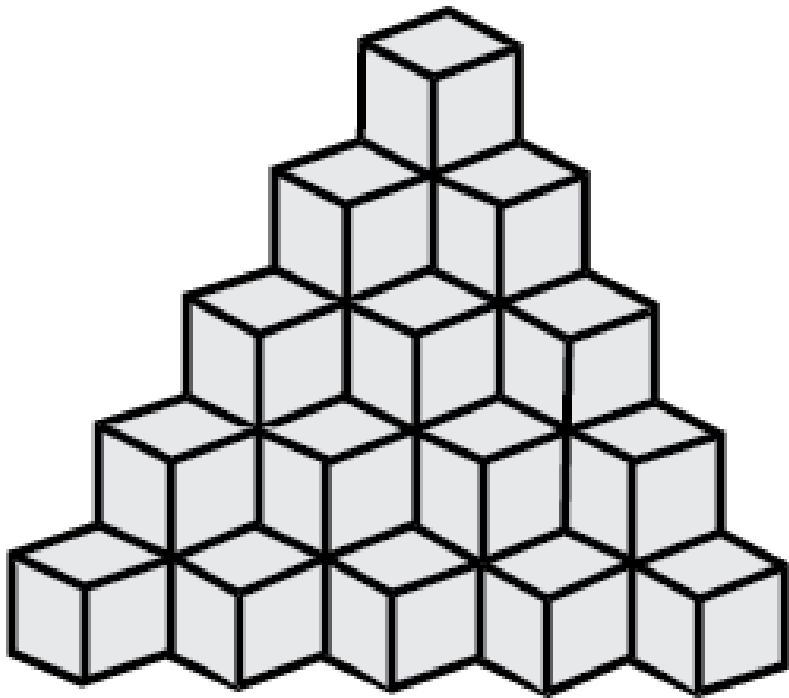


**Cheng Teng**



**Chendol**

# Spatial Visualization Package



# **Format – P5(S) & P5(F)**

## **Weighted Assessment**



**Duration: 45/ 55 minutes**

No calculator allowed

- Short-Answer Questions
- Long-Answer Questions



# Format – P5(S) SA2



Paper 1 (Booklet A)	Paper 1 (Booklet B)	Paper 2
Duration: 1 Hour		Duration: 1 Hour and 30 Minutes
No calculator allowed		Calculator allowed
15 Multiple Choice Questions	15 Short-Answer Questions	<ul style="list-style-type: none"><li>• 5 Short-Answer Questions</li><li>• 12 Long-Answer Questions</li></ul>
20 Marks	25 Marks	55 Marks

# Format – P5(F) SA2



Paper 1 (Booklet A)	Paper 1 (Booklet B)	Paper 2
Duration: 1 Hour		Duration: 1 Hour
No calculator allowed		Calculator allowed
20 Multiple Choice Questions	10 Short-Answer Questions	<ul style="list-style-type: none"><li>10 Short-Answer Questions</li><li>6 Long-Answer Questions</li></ul>
30 Marks	20 Marks	40 Marks

# Department Programmes

**MDPW**

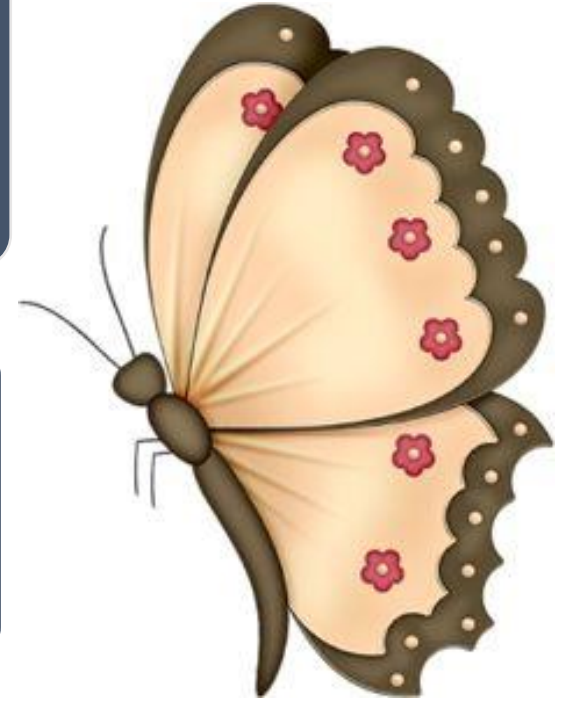
**Math Alive**

**STEAM Week**

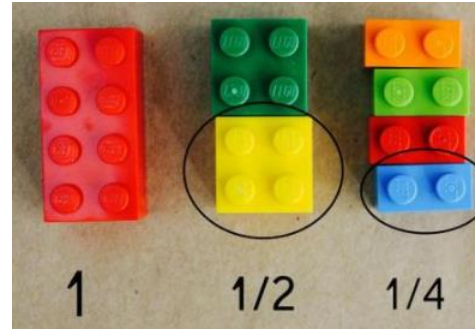
Talent  
Development

E2K

Math  
Olympiad



# you help your Mathematics



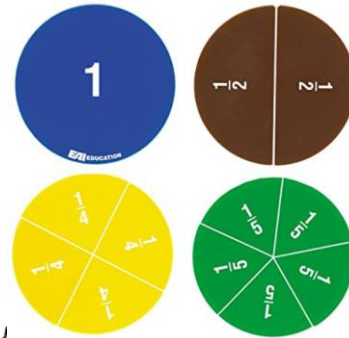
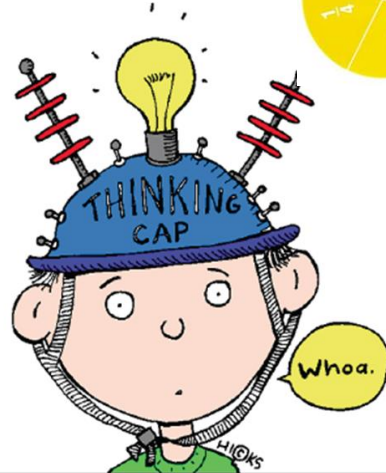
## Concrete Approach (Fractions Disc/ Lego)

# Ma Games

## Model Drawing (Heuristics)

# Making Thinking Visible

what  
do you  
**think** is  
going on?



# CONTACT DETAILS

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