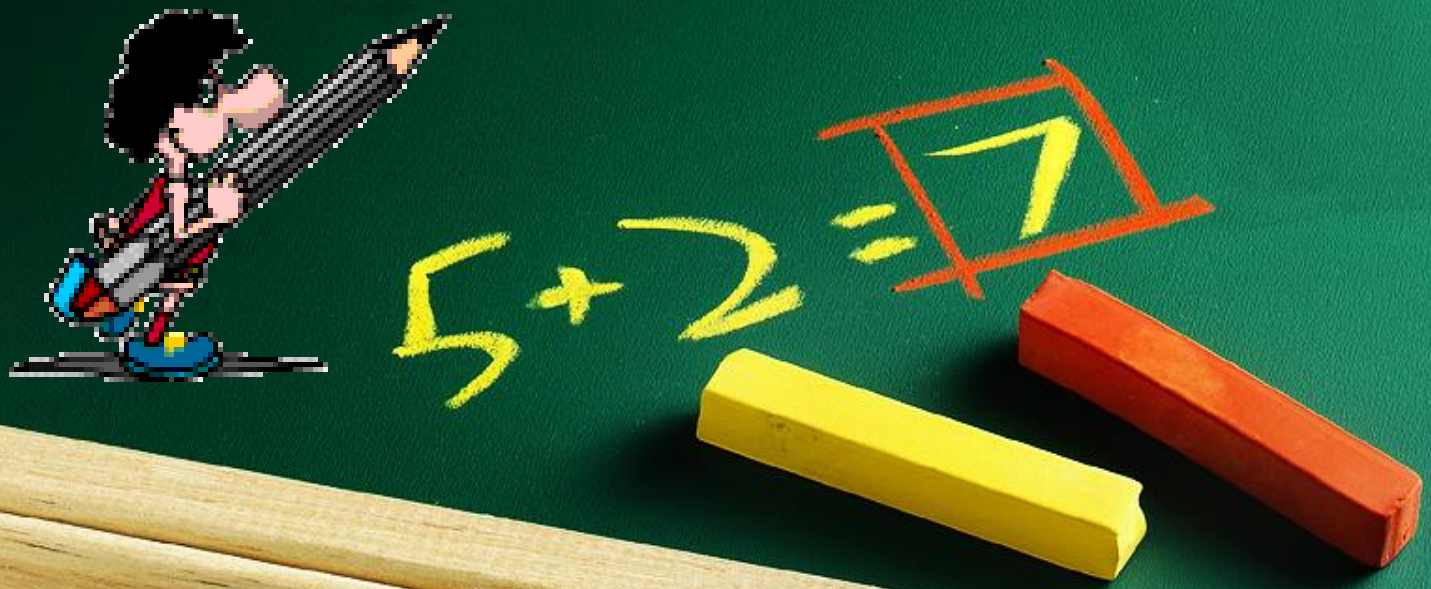
# MATHEMATICS

## Information for Primary Three Parents




# Primary Mathematics (Laying a strong foundation)

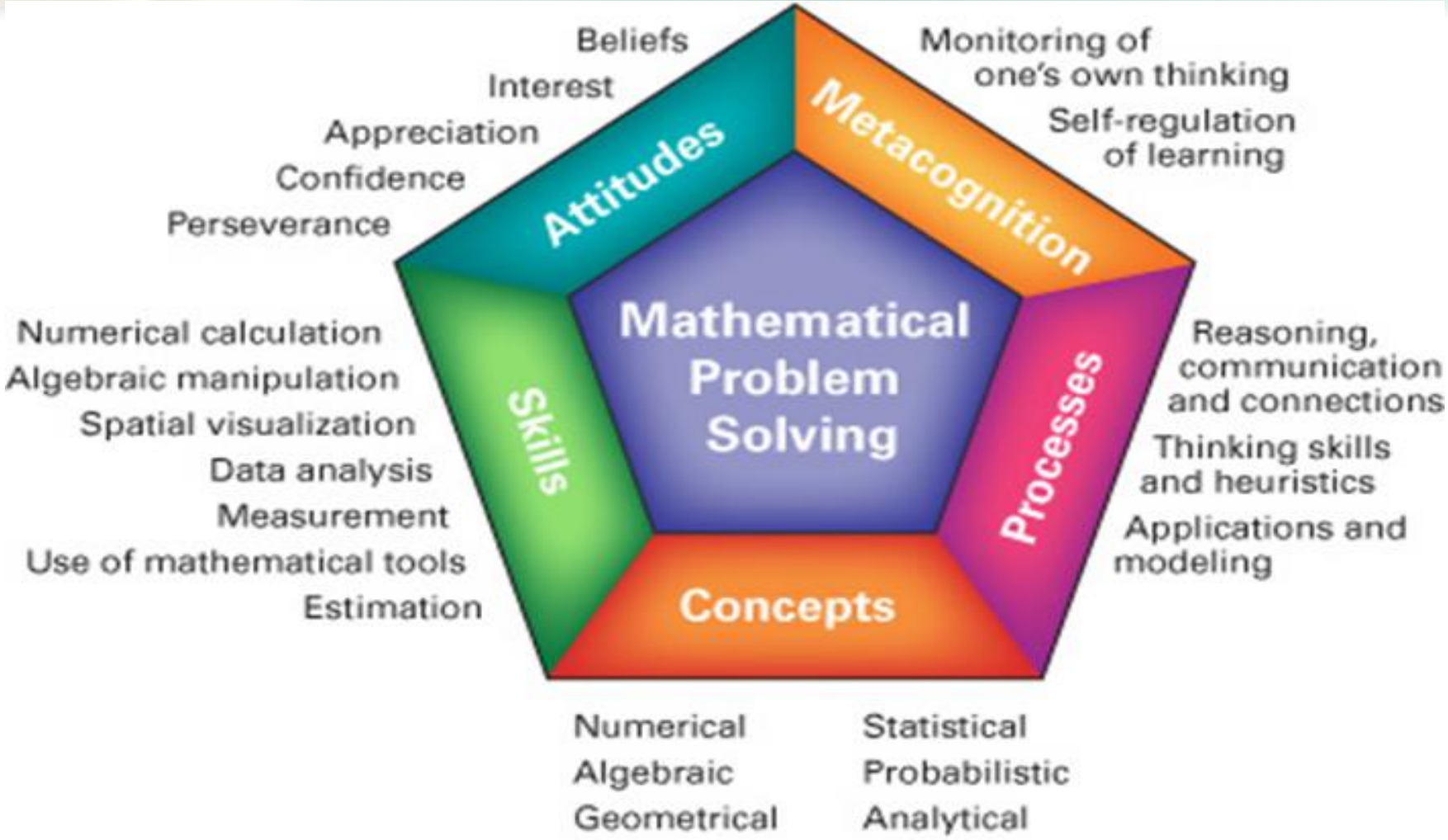
The Primary Mathematics syllabus aims to enable all students to:

- 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


# Our Vision

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

# Mathematics Framework




*From the Singapore Ministry of Education*


# Syllabus Organisation

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 | | |


# P3 Syllabus

## Number & Algebra (Strand)

- ✓Numbers up to 10 000
- ✓Addition of subtraction up to 10 000
- ✓Multiplication Tables of 6, 7, 8 and 9
- ✓Equivalent Fractions
- ✓Addition and Subtraction of Fractions

# P3 Syllabus

## Number & Algebra (Strand)

- ✓Money


# P3 Syllabus

## Measurement & Geometry (Strand)

- ✓Time
- ✓Length, Mass and Volume
- ✓Area and Perimeter
- ✓Angles
- ✓Perpendicular and Parallel lines

## Statistics (Strand)

- ✓Bar Graphs


# P3 Syllabus

## Mathematical Processes

- ✓Reasoning, communication & connections
- ✓Applications
- ✓Thinking skills & heuristics


# Heuristics (P1-P5)

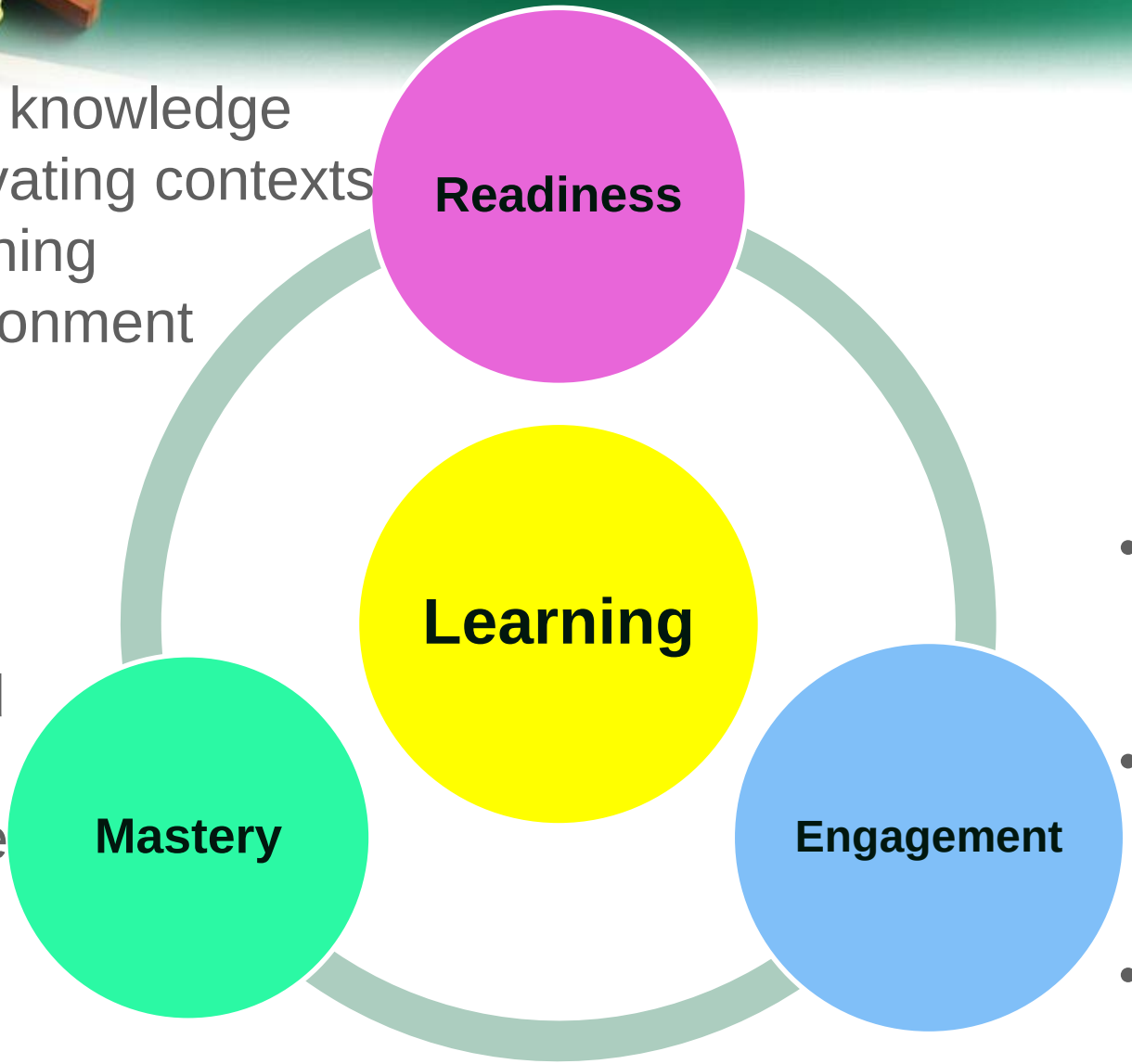
1. Draw a model/diagram
2. Make a systematic list/tabulation
3. Look for patterns
4. Guess and check
5. Act it out
6. Use before-after concept


# Heuristics (P1-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
- Learning environment



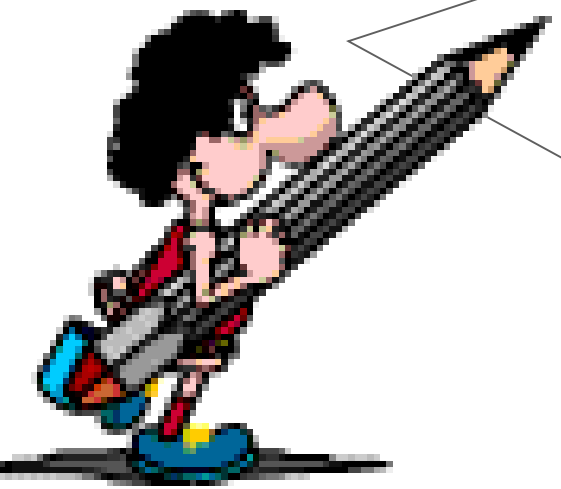

- Motivated Practice
- Reflective Review
- Extended Learning

- Activity-based learning
- Teacher-directed 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



# MATH KEY Programmes

**Math Alive**

**Reasoning Cartoon**

**STEAM Week**

Talent Development

Math Olympiad

# Checkpoints

Platforms to check learning at Primary 3

- Daily Assignments
- Diagnostic Package
- Experiential Learning Activities
- Math Alive
- Reasoning Cartoon
- Open-ended Tasks
- Unit Reviews

# Weighting

| Term 1 | Term 2 | Term 3 | Term 4 |
|---|---|---|---|
| 10% | 15% | 10% | 65% |
| 1 WA | 1 WA | 1 WA | SA2 |

**Weighted Assessment – WA**

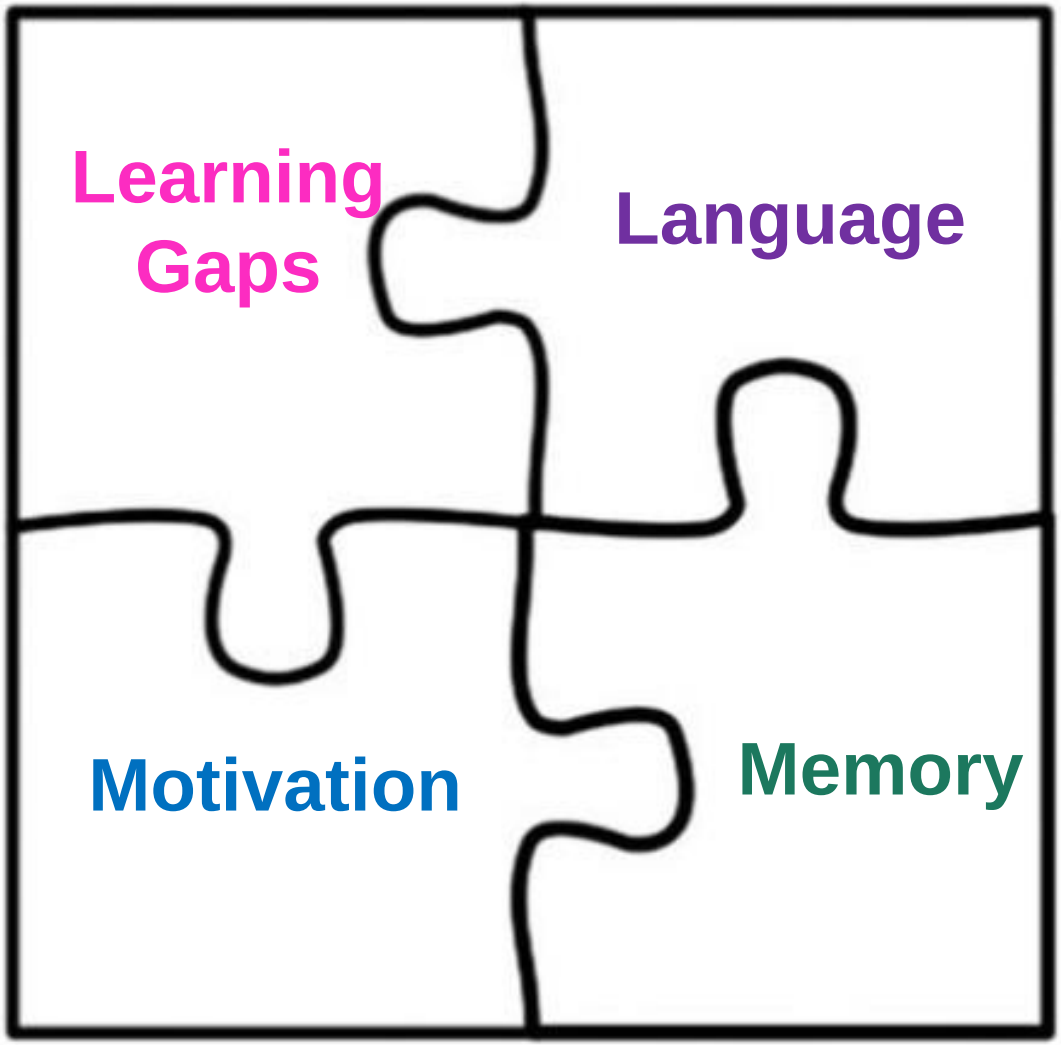
**Semestral Assessment 2 – SA2**


# Exam Format – SA2

| Section A | Section B | Section C |
|---|---|---|
| 15 MCQ | 15 SAQ | 5 LAQ |
| 30 Marks | 30 Marks | 20 Marks |
| Total Marks: 80<br>Duration: 1 hour 45 minutes | | |

MCQ – Multiple Choice Question
SAQ – Short-answer Question
LAQ – Long-answer Question

# HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS



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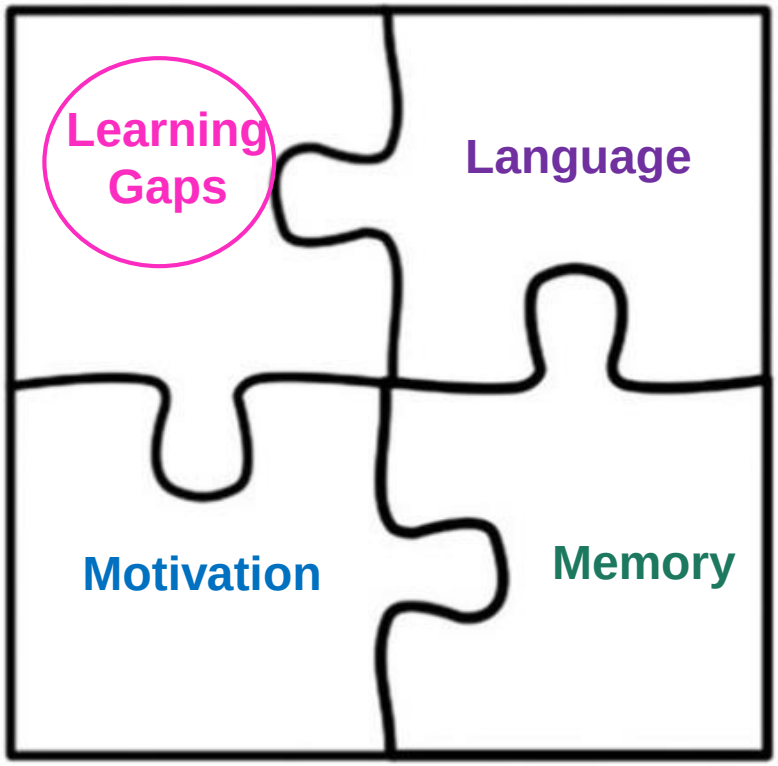


- Start with a smaller number (revisit what they have learnt in Primary 2)
- Start with concrete materials
- Scaffold their learning of new knowledge
- Provide regular practices

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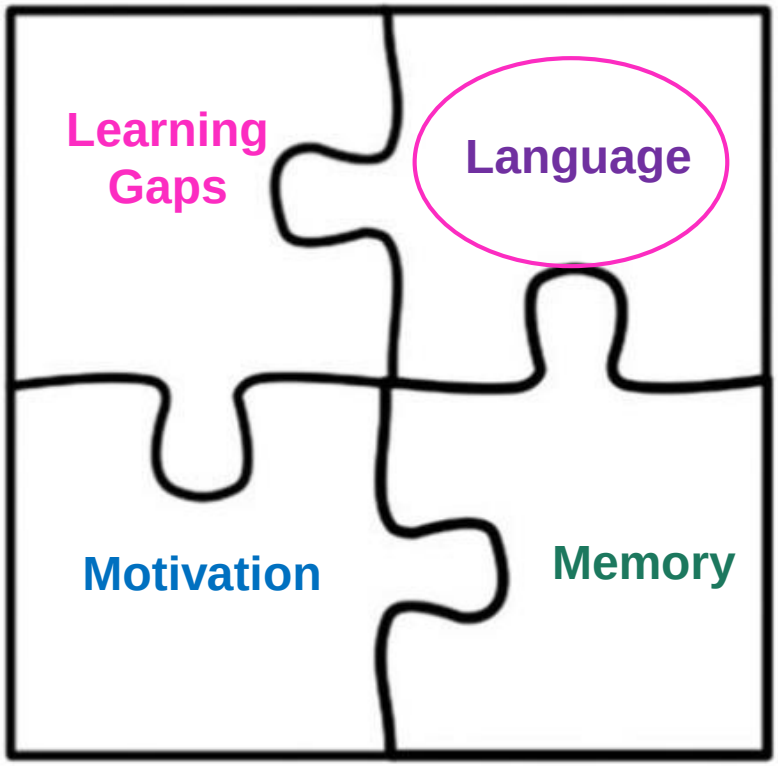
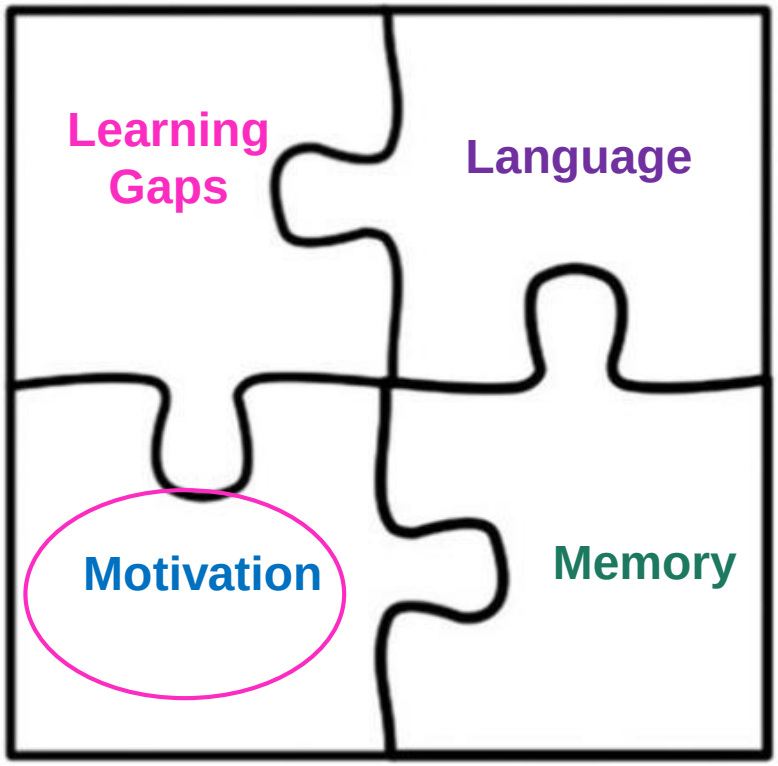



- Use simple language
- Help your child to comprehend word problems through chunking/ model drawing/ role playing/working backwards/ concrete materials/ etc
- Use mathematical language (Renaming/ Regrouping)
- Use of visuals

# HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS





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.

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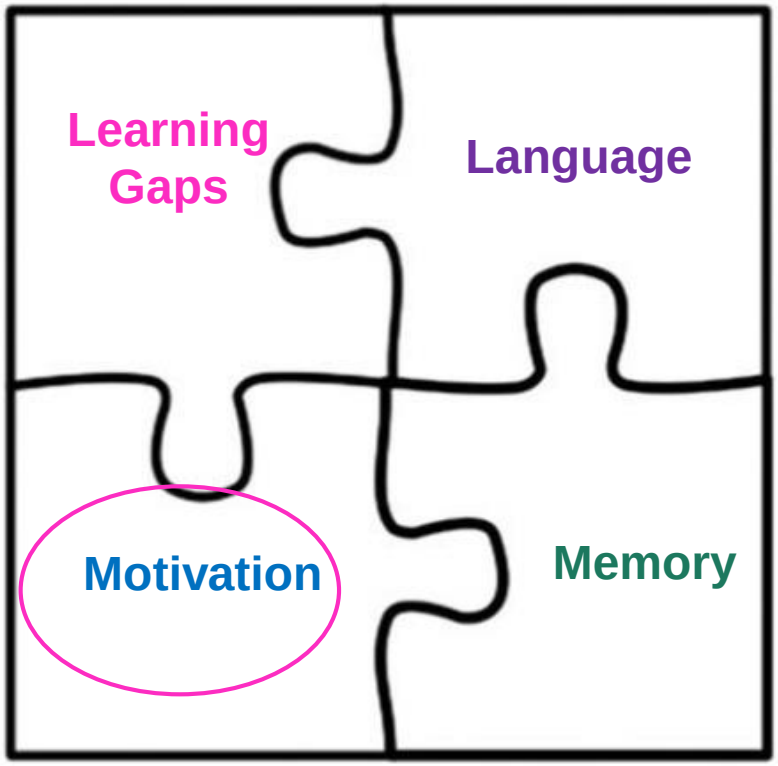


**Don't Praise**

Intelligence/
Abilities

**Do Praise**

The Process
&
Effort

Praise for:

- Strategy
- Effort
- Process
- Persistence

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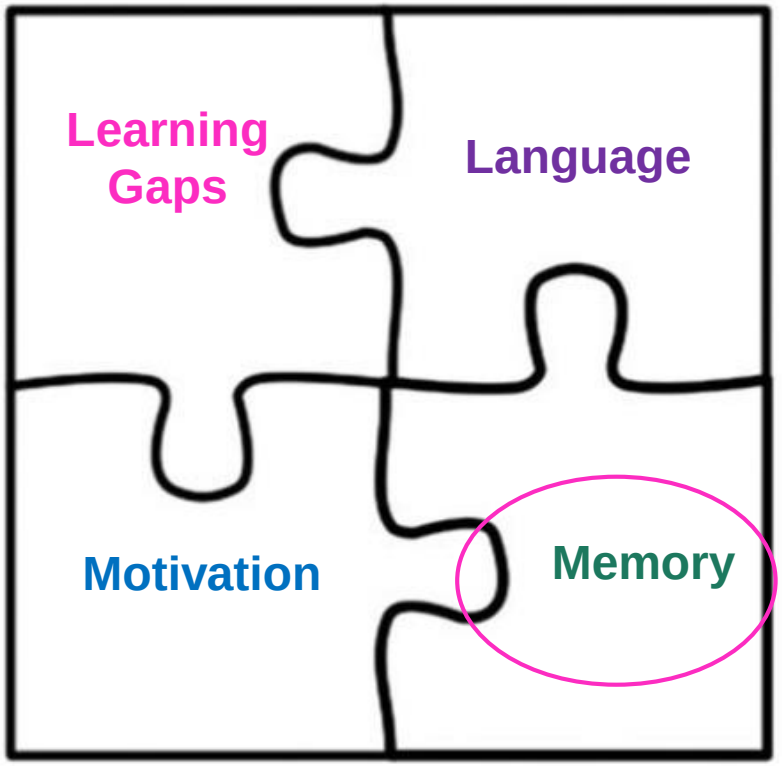


Need to space out reviews to make the brain reconstruct that memory, strengthening like a muscle

# HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS

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

# 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

HOD Mathematics

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# THANK YOU