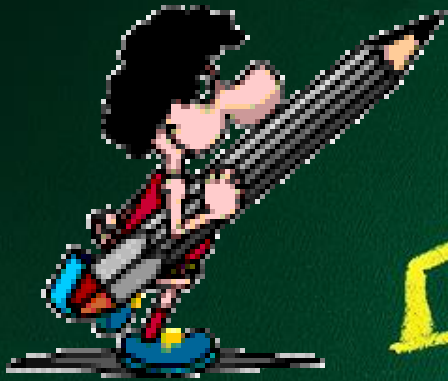


MATHEMATICS

Information for Primary Two Parents



$$5 + 2 = 7$$





Primary Mathematics

(Laying a strong foundation)

The Primary Mathematics syllabus aims to enable all students to:

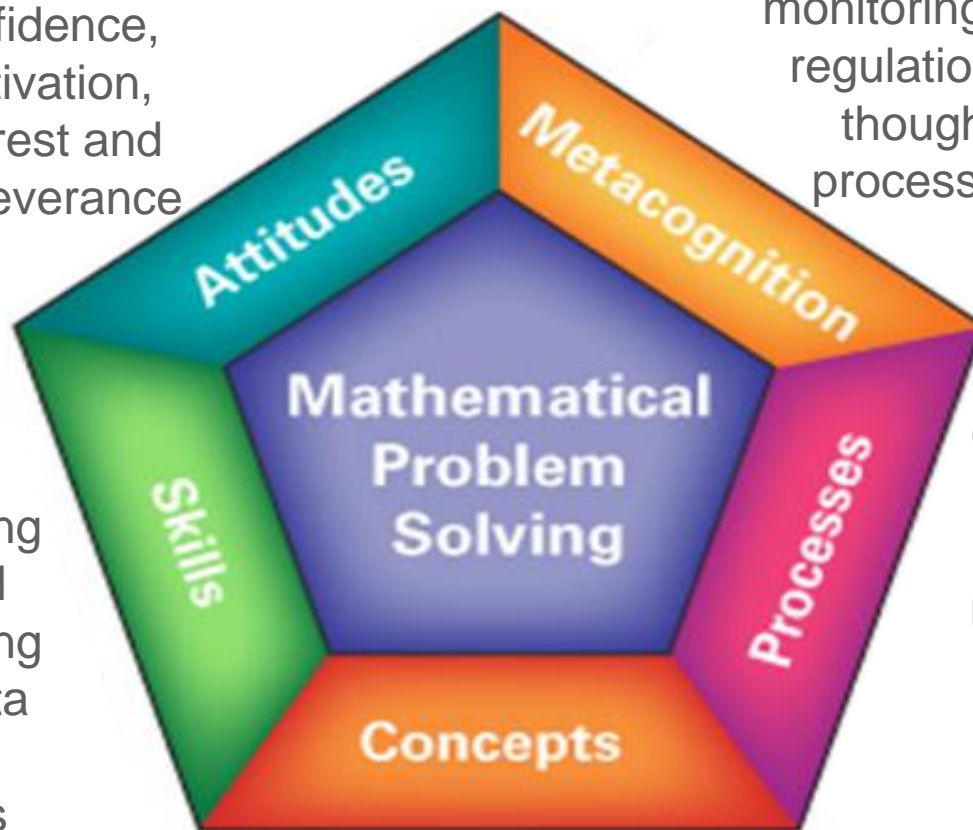
- Acquire mathematical concepts and skills for everyday use and for continuous learning in Mathematics.
- Develop thinking, reasoning, communication, application and metacognitive skills through a mathematical approach to problem solving; and
- Build confidence and foster interest in Mathematics

2021 Mathematics 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

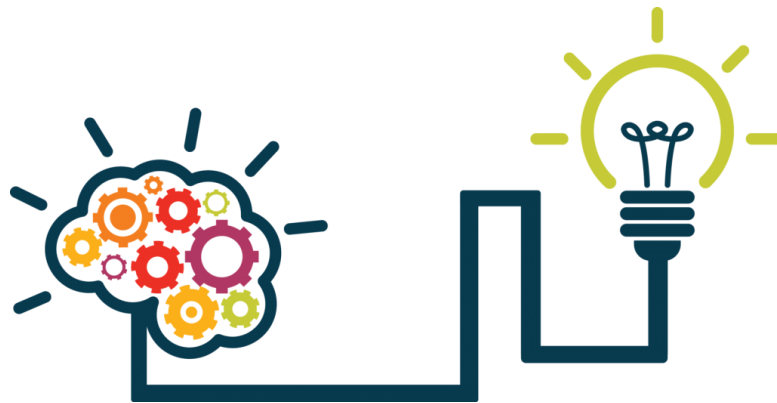
Competencies in
abstracting and
reasoning,
representing and
communicating,
applying and
modelling

Understanding of the properties and
relationships, operations and algorithms



Our Vision

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





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	Measurement and Geometry	Statistics
Mathematical Processes		



P2 Syllabus

Number

- ✓ Numbers up to 1000
- ✓ Addition & subtraction within
Multiplication & division
- ✓ Fraction of a whole
- ✓ Addition and subtraction –
Fraction
- ✓ Money



P2 Syllabus

Measurement & Geometry

- ✓ Length, Mass & Volume
- ✓ Time
- ✓ 2D shapes
- ✓ 3D shapes



P2 Syllabus

Statistics

- ✓ **Picture graphs with scales**

Mathematical Processes

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



Content Sequence – P2

Term 1	Term 2
Numbers to 1000 Additional and Subtraction Length	Multiplication & Division Multiplication Tables of 2, 5 & 10 Mass Time
Term 3	Term 4
Additional & Subtraction (2- Step Word Problems) Multiplication Tables of 3 and 4 Money Fractions	Volume Picture Graphs Shapes



Changes in P2 Content

Topics	Movement
Length	<u>P2 to P1:</u> Standard unit of length (cm)
Time	<u>P3 to P2:</u> <ul style="list-style-type: none">• Telling time to the minute• Measuring time in hours and minutes• Converting time <u>P2 to P1:</u> Telling time to 5 minutes

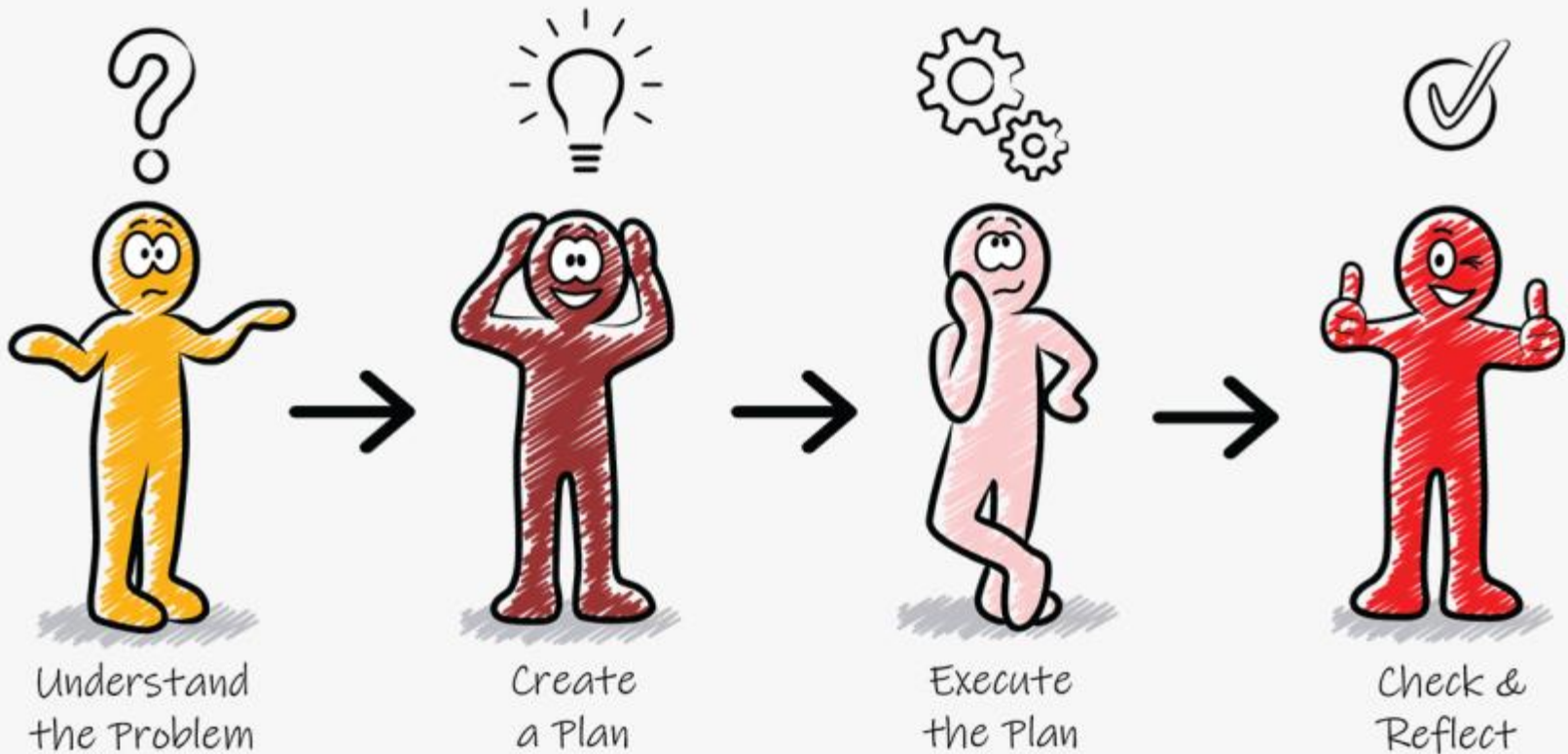


Changes in P2 Content

Topics	Movement
Shapes	<p><u>P1 to P2:</u> Making and completing 2D patterns</p> <p><u>P2 to P1:</u> Half circle and quarter circle</p>

Making and completing 2D patterns are done together with making and completing 3D shapes.

Polya's 4 stages of Problem-Solving





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
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

Readiness

Learning

Mastery

Engagement

- Motivated Practice
- Reflective Review
- Extended Learning

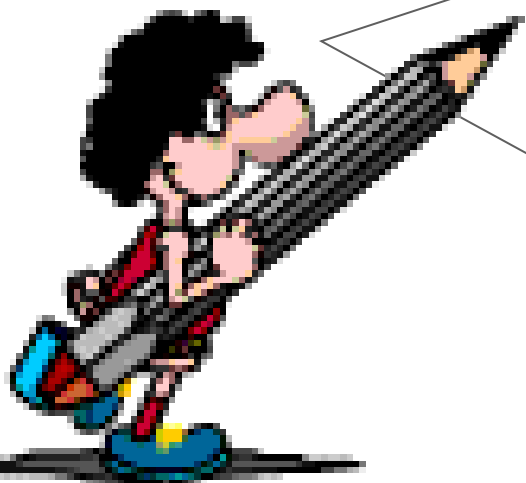
- Activity-based learning
- Teacher-directed inquiry
- Direct instruction



CPA Approach

Our approach when teaching Math concepts to young children is from 'CConcrete' to 'Pictorial' to 'AAbstract'.

C-P-A Approach





Checkpoints

Daily
assignments

Experiential
Learning
activities

Math Alive

Class, group
and individual
tasks

Diagnostic
Package

Open Ended
Tasks





Key Programmes

Math Alive

**Integrated
Trail**

**Learning
Support for
Mathematics**

Money Sense

Brain Games

**Reasoning
Cartoon**

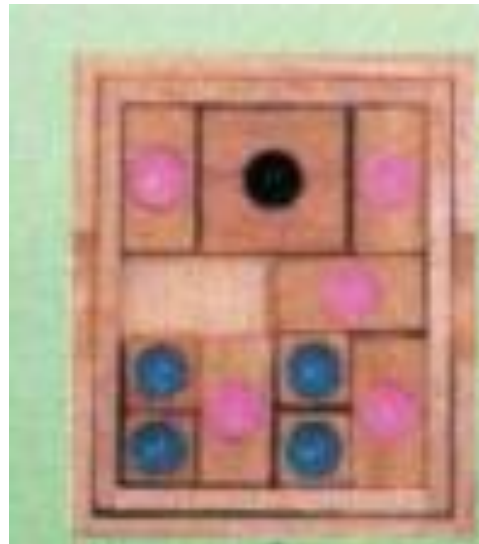
STEAM Week



P2 Programmes

BrainGames

- To develop the abilities to reason and apply problem solving skills through games





P2 Programmes

Learning Support for Math

- Provide help for students with weak basic numeracy skills
- Students receive more individual attention from teacher
- Students learn through hands-on experiences



P2 Programmes

Money Sense!

- Able to count amount of money in dollars up to \$100
- Understand the value of money
- Build confidence and foster interest in Mathematics
- Reward system
- Make sound decision



P2 Programmes

Reasoning Cartoon

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



Chendol



Cheng Teng

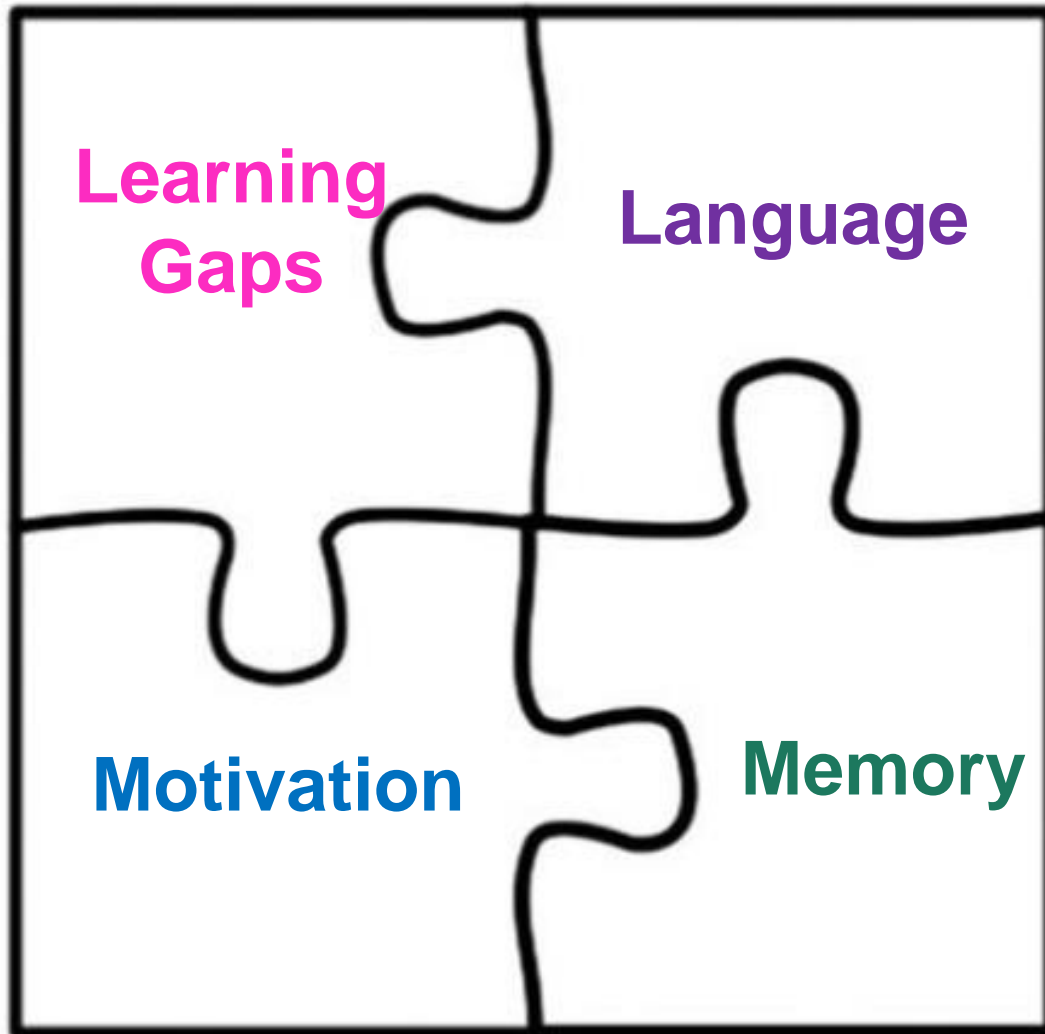


Kachang

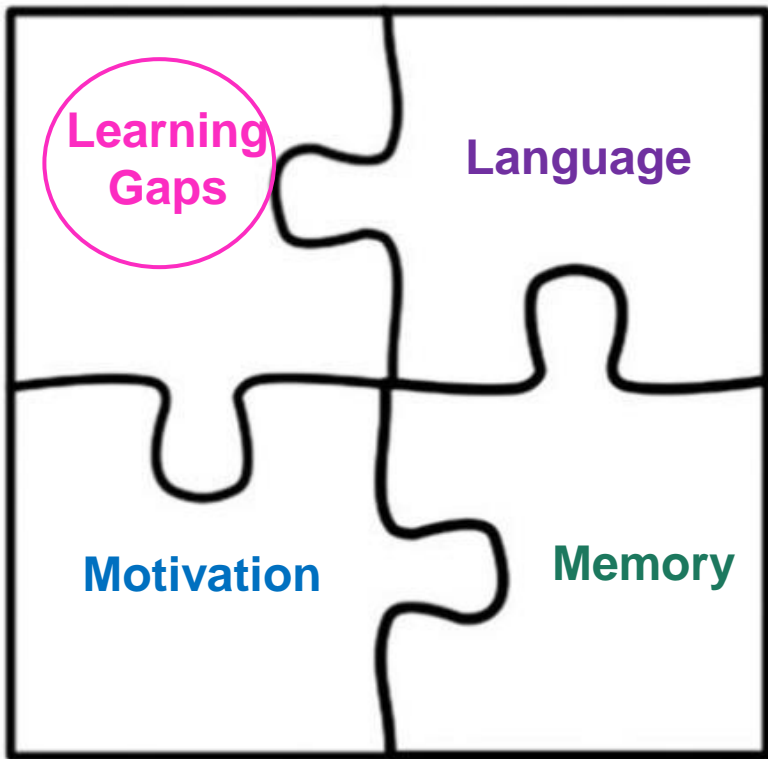


Cha Cha

HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS

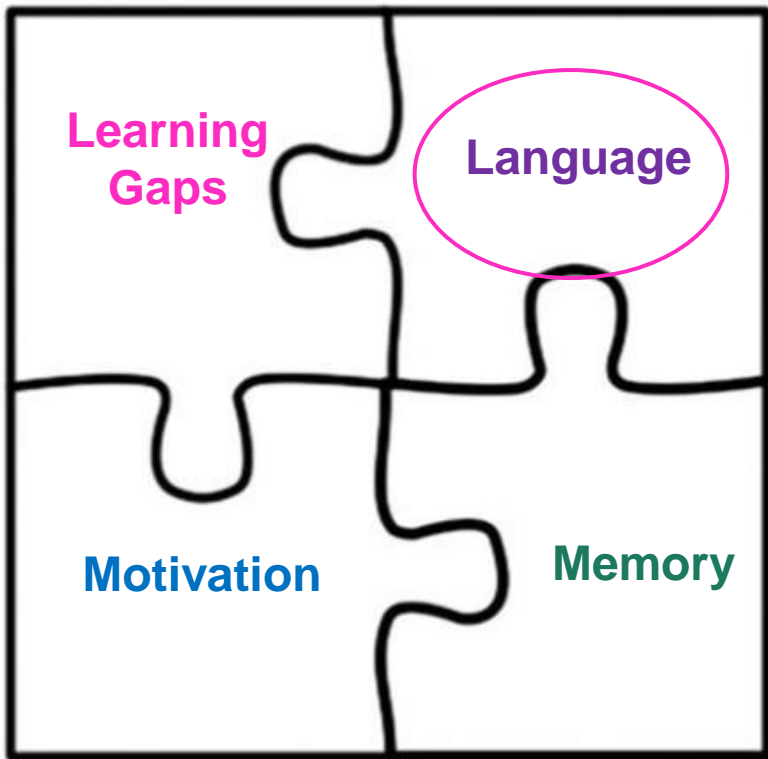


HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS



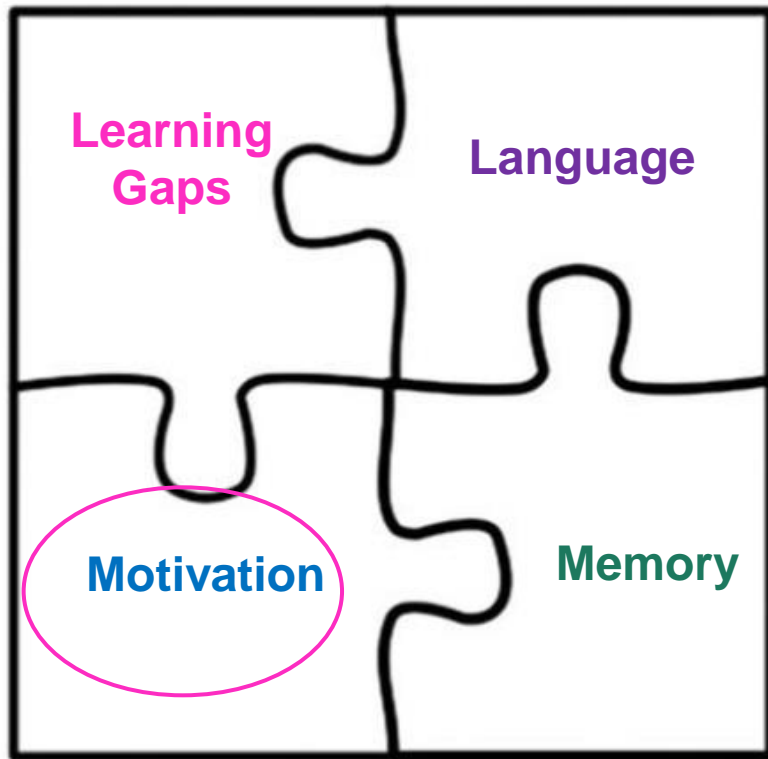
- Start with a smaller number (revisit what they have learnt in Primary 1)
- Start with concrete materials

HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS



- Use simple language
- Help your child to comprehend word problems
- Use mathematical language (Renaming/ Regrouping)
- Use of visuals

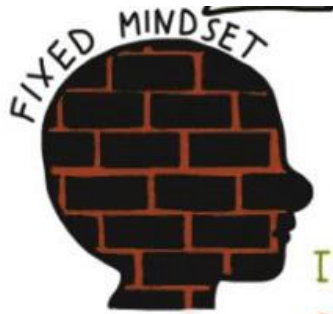
HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS



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.

How can you help your child in Mathematics?

Speak positively about Math



What can I say to myself?

INSTEAD OF:

I'm not good at this.

I'm awesome at this.

I give up.

This is too hard.

I can't make this any better.

I just can't do Math.

I made a mistake.

She's so smart. I will never be that smart.

It's good enough.

Plan "A" didn't work.

TRY THINKING:

1 What am I missing?

2 I'm on the right track.

3 I'll use some of the strategies we've learned.

4 This may take some time and effort.

5 I can always improve so I'll keep trying.

6 I'm going to train my brain in Math.

7 Mistakes help me to learn better.

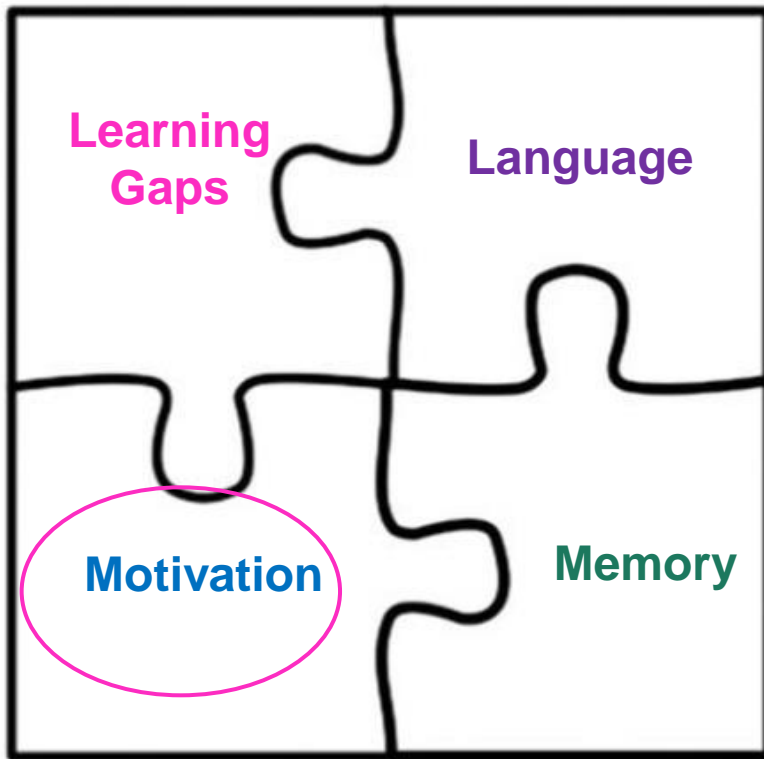
8 I'm going to figure out how she does it.

9 Is it really my best work?

10 Good thing the alphabet has 25 more letters!



HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS



Don't Praise

Intelligence/
Abilities

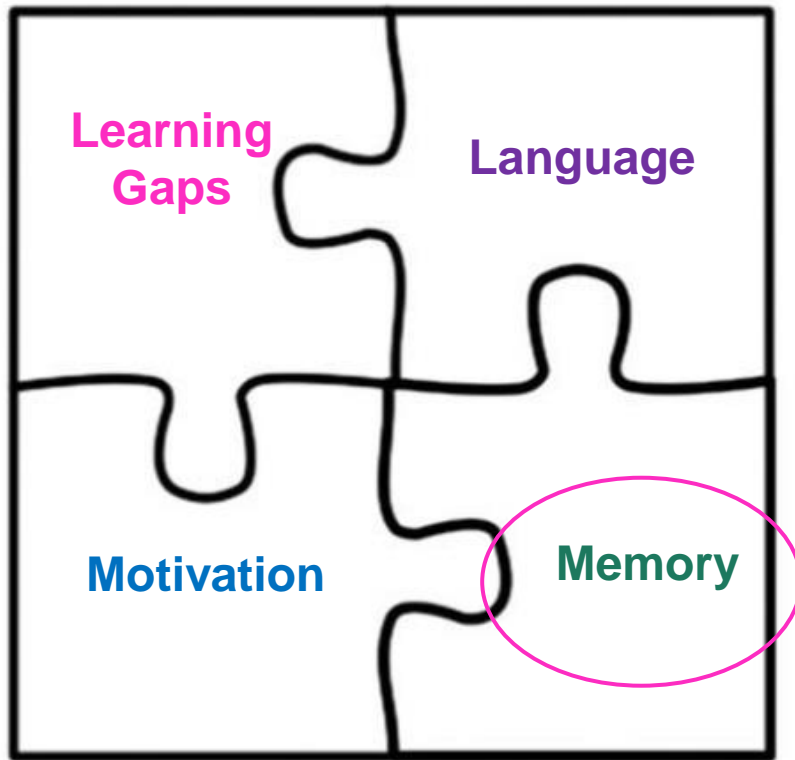
Do Praise

The Process
&
Effort

Praise for:

- Strategy
- Effort
- Process
- Persistence

HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS



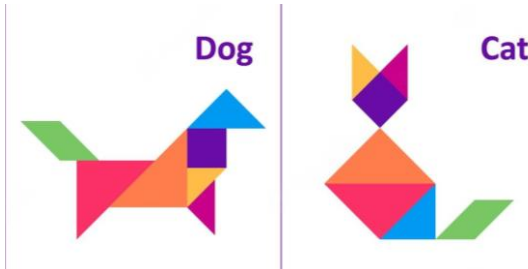
Need to space out reviews to make the brain reconstruct that memory, strengthening like a muscle



How can you help your child in Mathematics?



what
do you
think is
going on?



Math in Real-life

Games

Why did you...?
What can you do next?
Do you see any patterns?
Does the answer make sense? How do you know?



Contact Details

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THANK YOU

