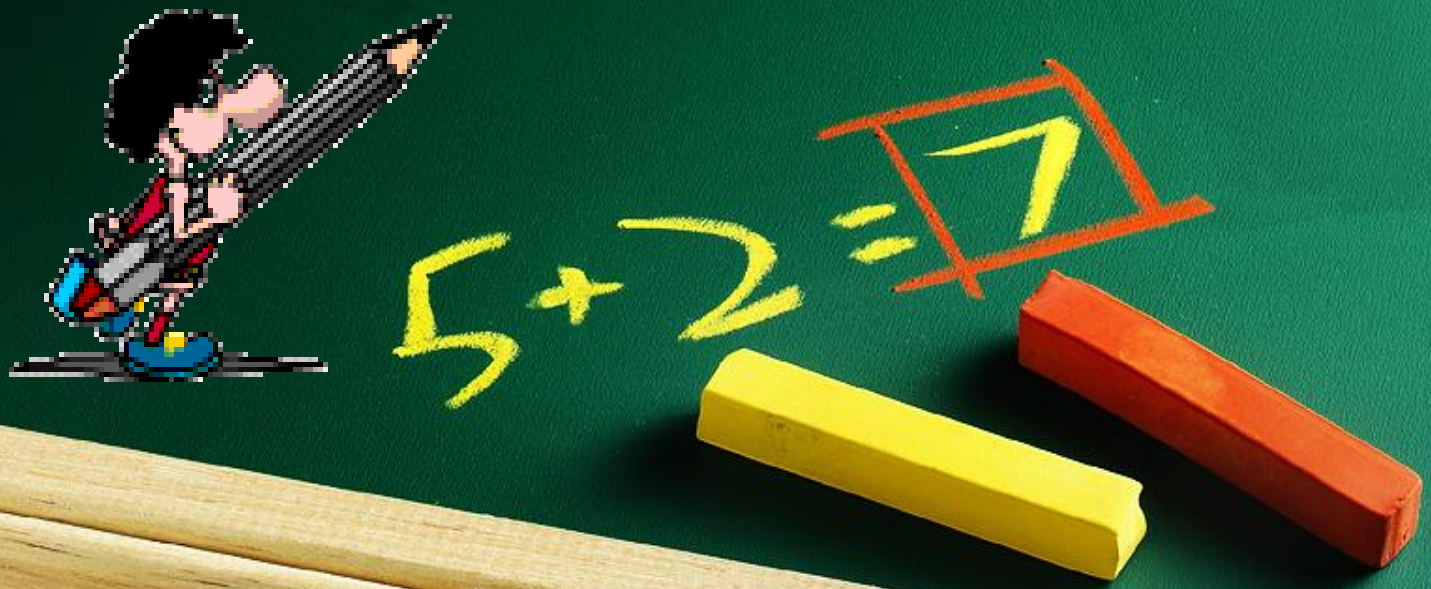
MATHEMATICS

Information for Primary One Parents



Primary Mathematics (Laying a strong foundation)

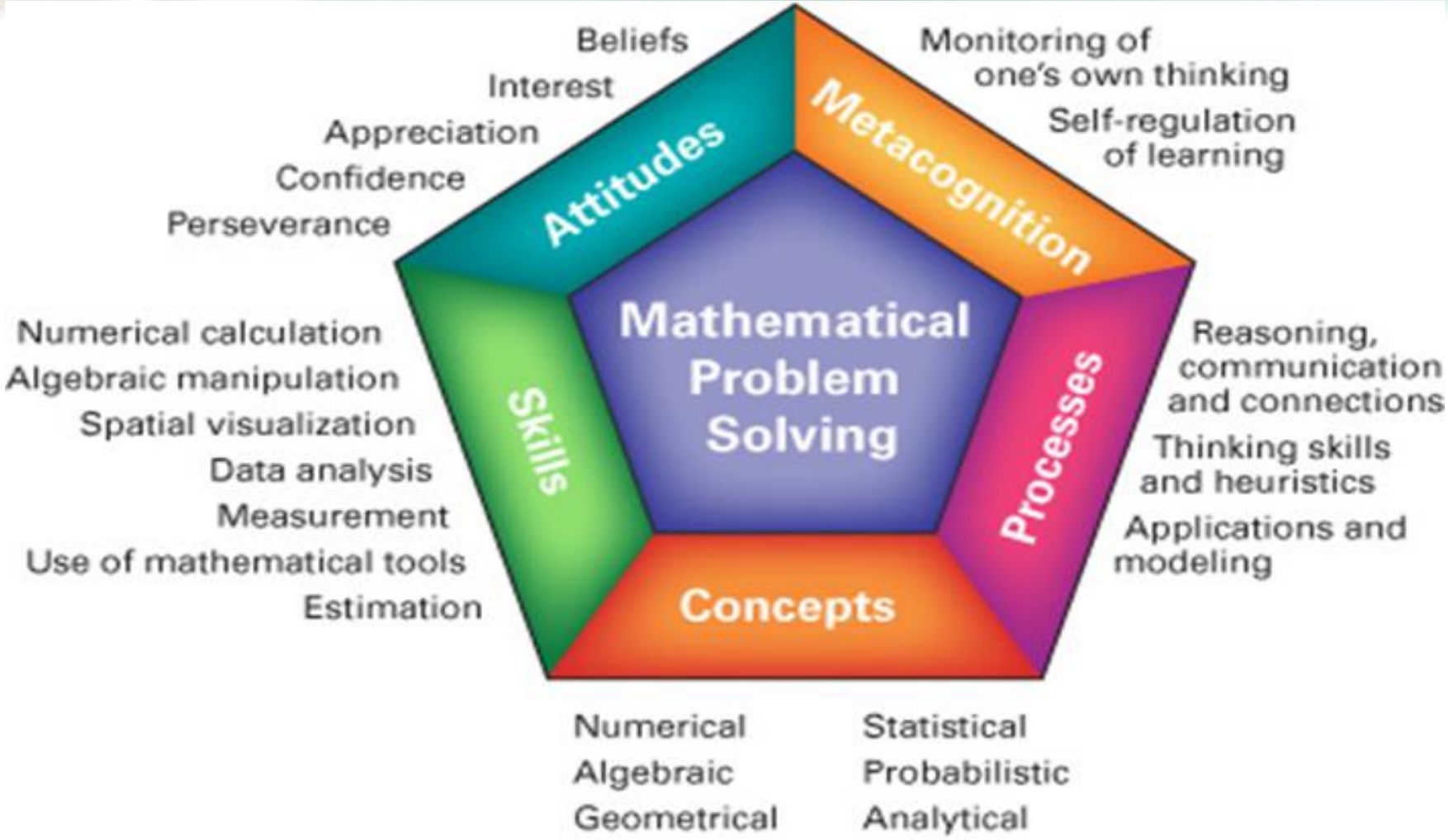
The Primary Mathematics syllabus aims to enable all students to:

- 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		

P1 Syllabus

Number & Algebra (Strand)

- ✓Numbers up to 100
- ✓Addition & subtraction
- ✓Multiplication & division
- ✓Money

Measurement & Geometry (Strand)

- ✓Length
- ✓Time
- ✓2D shapes

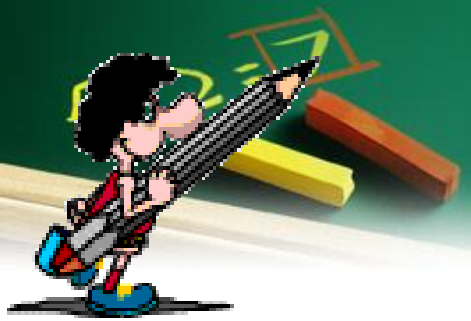
P1 Syllabus

Statistics (Strand)

- ✓Picture graphs

Mathematical Processes

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

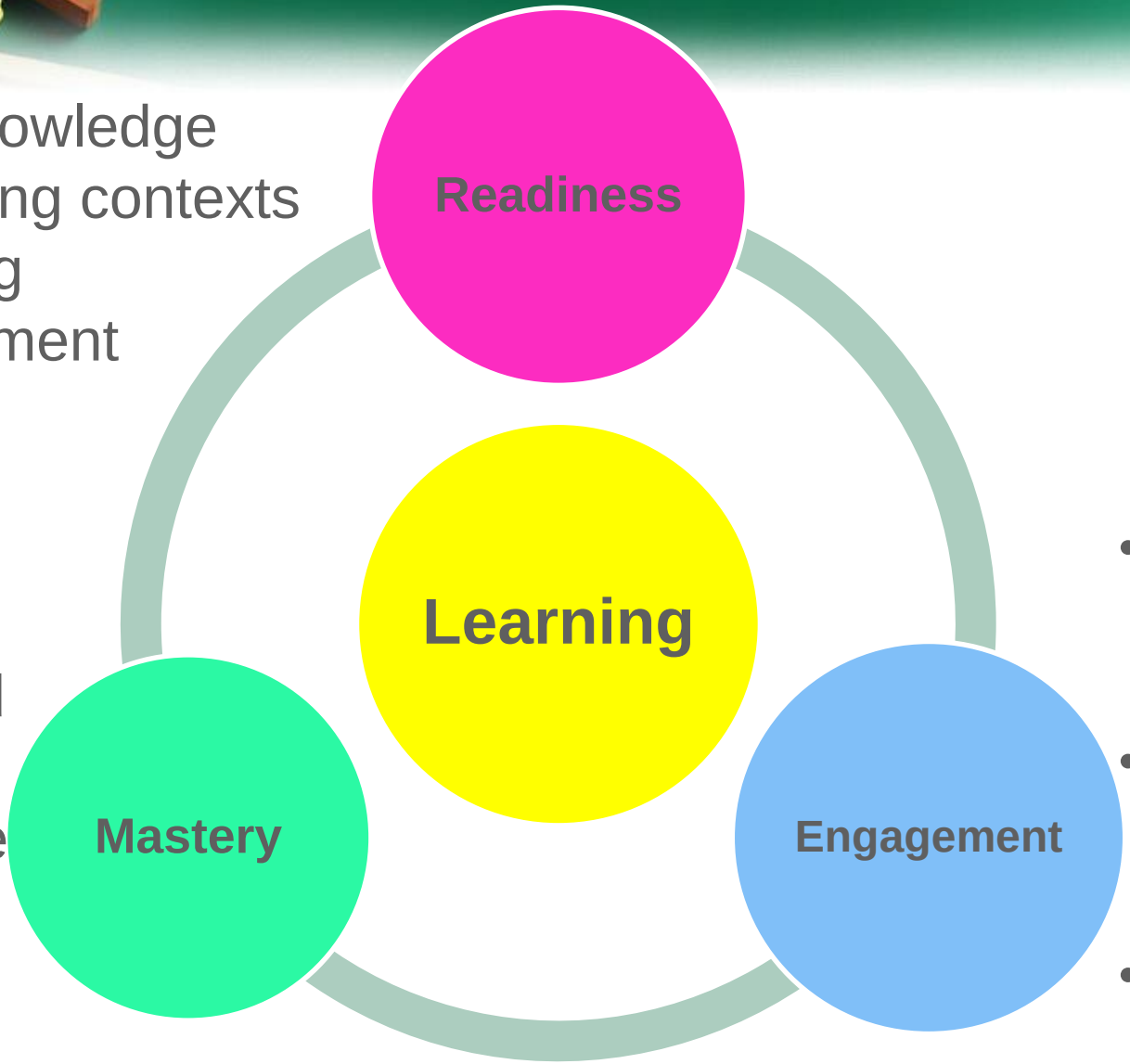


Learning Outcomes – P1

Subject	Primary 1
Mathematics	1. Understand numbers up to hundred. 2. Understand addition and subtraction. 3. Add and subtract numbers 4. Understand multiplication and division. 5. Identify, name, describe and sort shapes. 6. Tell time to the hour/half hour. 7. Measure and compare lengths using everyday objects. 8. Read and interpret picture graphs.

Phases of Learning

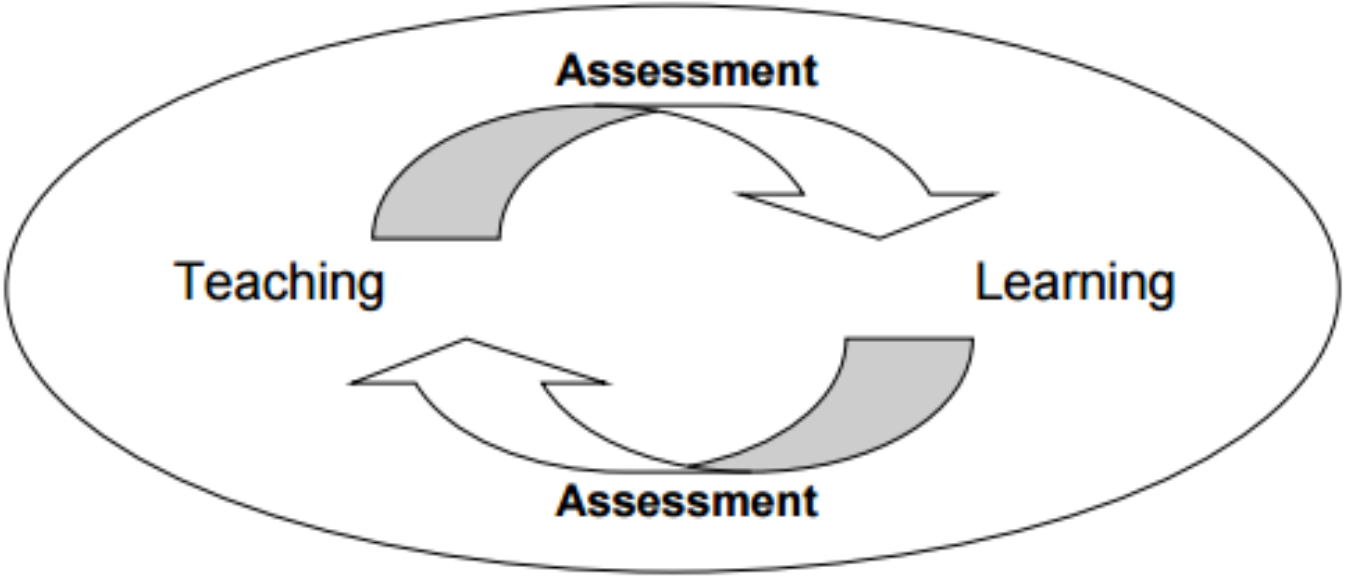
- Prior knowledge
- Motivating contexts
- Learning environment



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

- Motivated Practice
- Reflective Review
- Extended Learning

Assessment



P1 Programmes

Primary Mathematics Instructional Programme

To help **students build strong foundation** in primary Math through a structured teaching sequence and supporting manipulatives and materials based on the concrete-pictorial-abstract (CPA) approach.

P1 Programmes

Hands-On Activities

- Enhance conceptual understanding through use of the Concrete-Pictorial-Abstract approach
- Communicate their reasoning and connections through various mathematical tasks and activities.

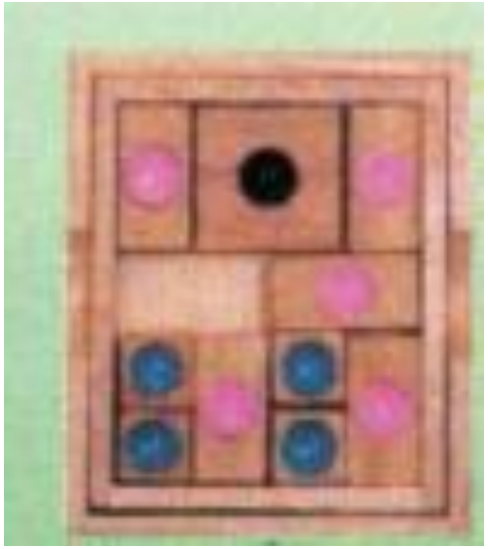
Integrated Trails

- To experience real-life Mathematics around them

P1 Programmes

BrainGames

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



P1 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

P1 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

P1 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.

P1 Programmes

Math Alive

- To provide platforms for students to explore and/ or relate the mathematical concepts that they have learnt at a relational or extended abstract level using real-life scenarios.
- To provide platforms for students to link and integrate the mathematical concepts that they have learnt and contribute to a deeper and more coherent understanding of the concepts.

P1 Programmes

Math Alive

- To provide platforms for students to tap on their prior knowledge to build new knowledge.

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

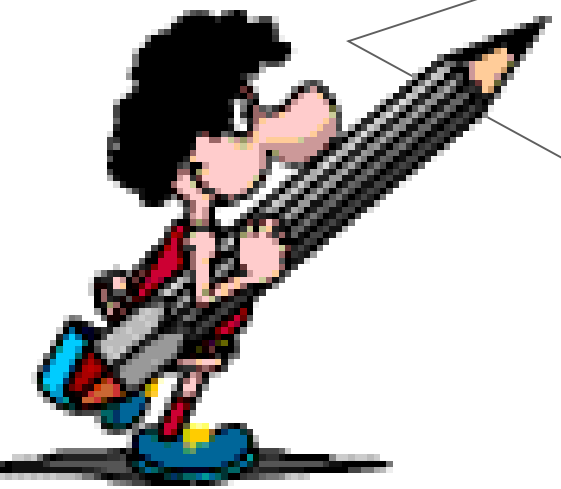
Heuristics (P1-P5)

7. Work backwards
8. Restate the problem in another way
9. Simplify the problem
10. Make suppositions

CPA Approach

Our approach when teaching Math concepts to young children is from ‘Concrete’ to ‘Pictorial’ to ‘Abstract’.

C-P-A Approach



Model Drawing

- To allow students to “see” the word problem in a mathematical way and help them to solve the problem sums

Model Drawing

Concrete Objects

↓

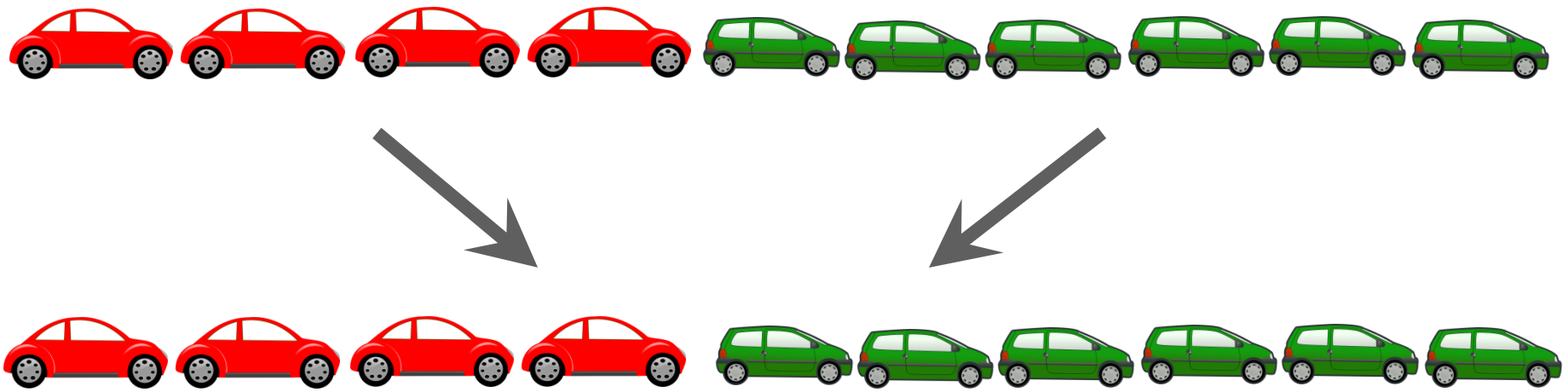
Drawing of Rectangular Bars

↓

Solve Abstract Word Problem

STAGE 1: USING CONCRETE MATERIALS

Sam has 4 red toy cars. He buys 6 more green toy cars. How many toy cars does he have now?



4 + 6 = 10

STAGE 2: PICTORIAL REPRESENTATION

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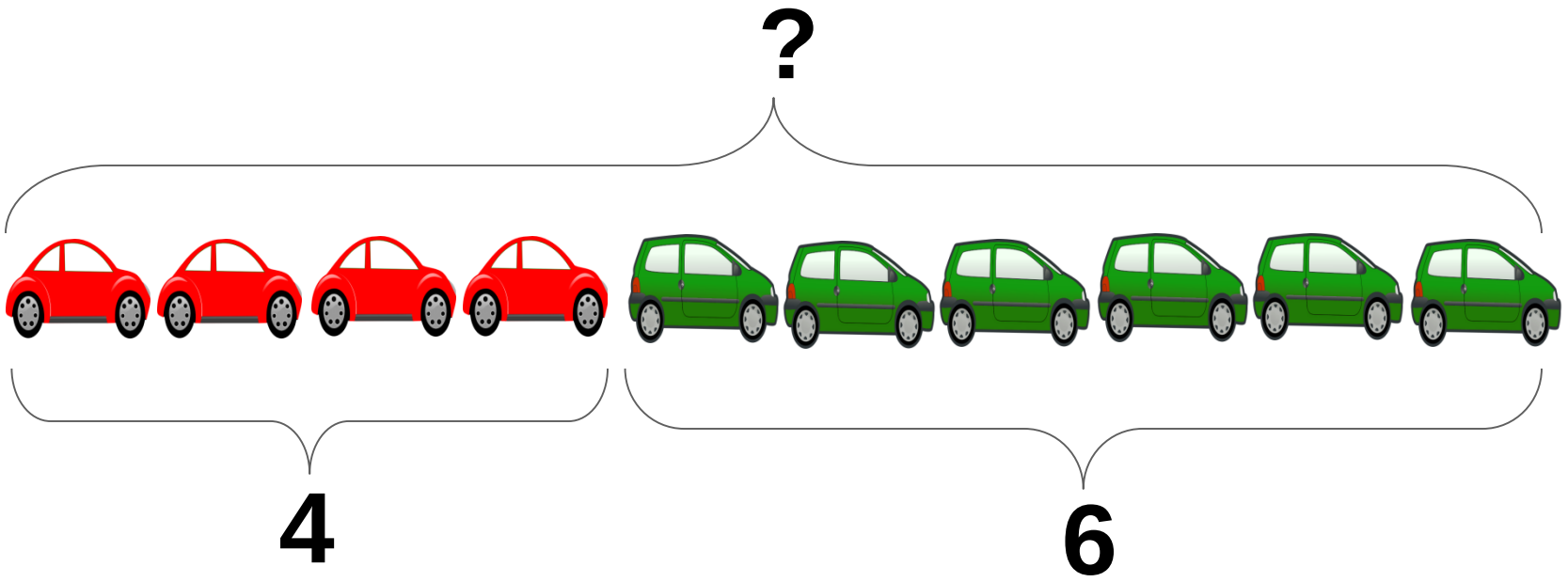

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STAGE 3: INSERT BOXES WITH PICTURES

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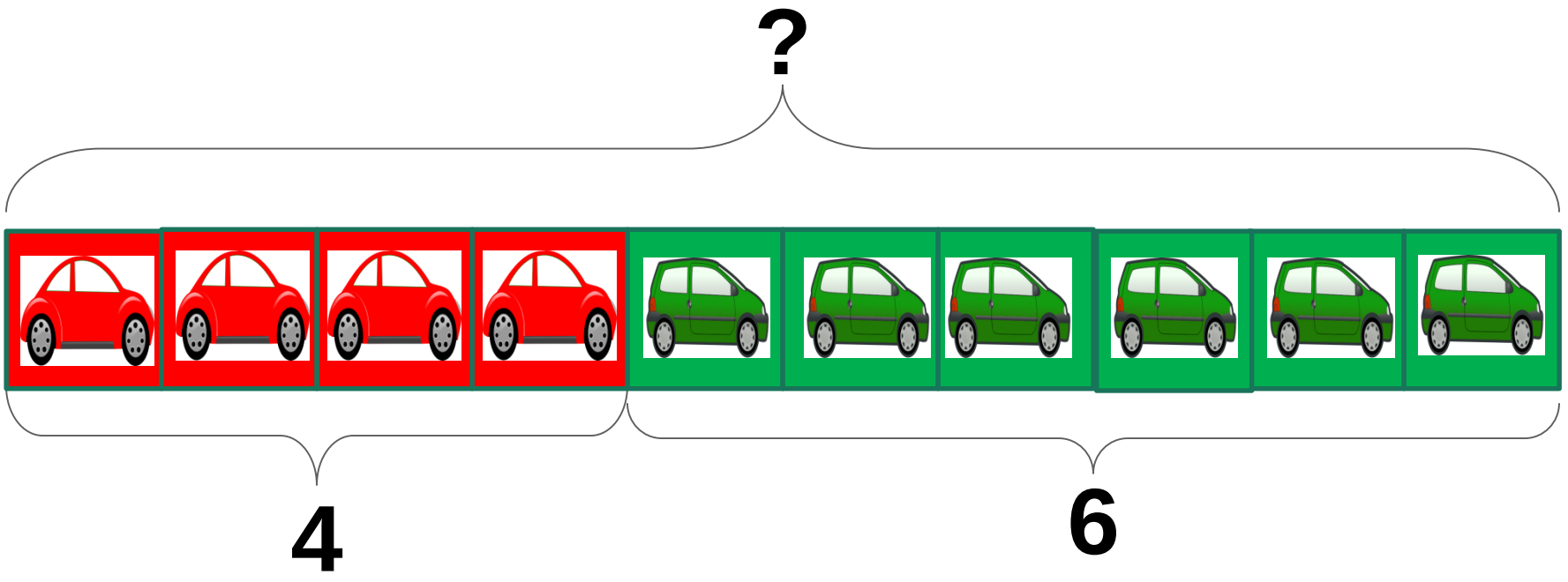

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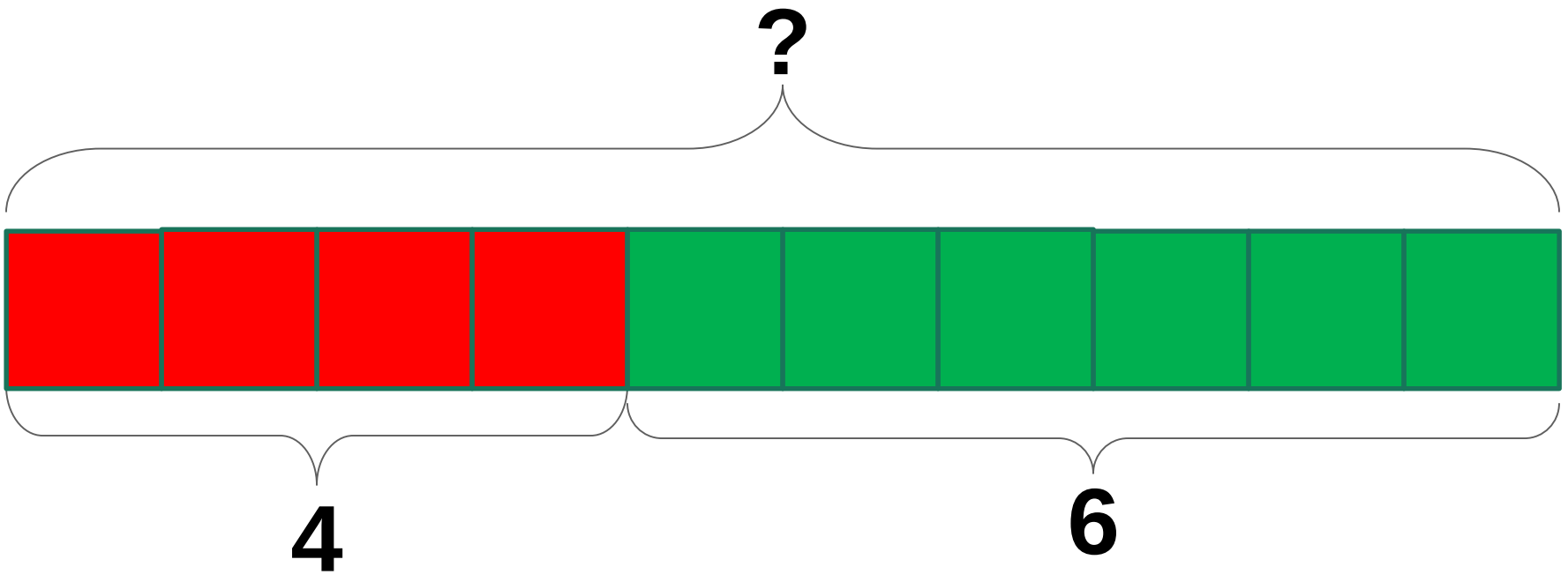

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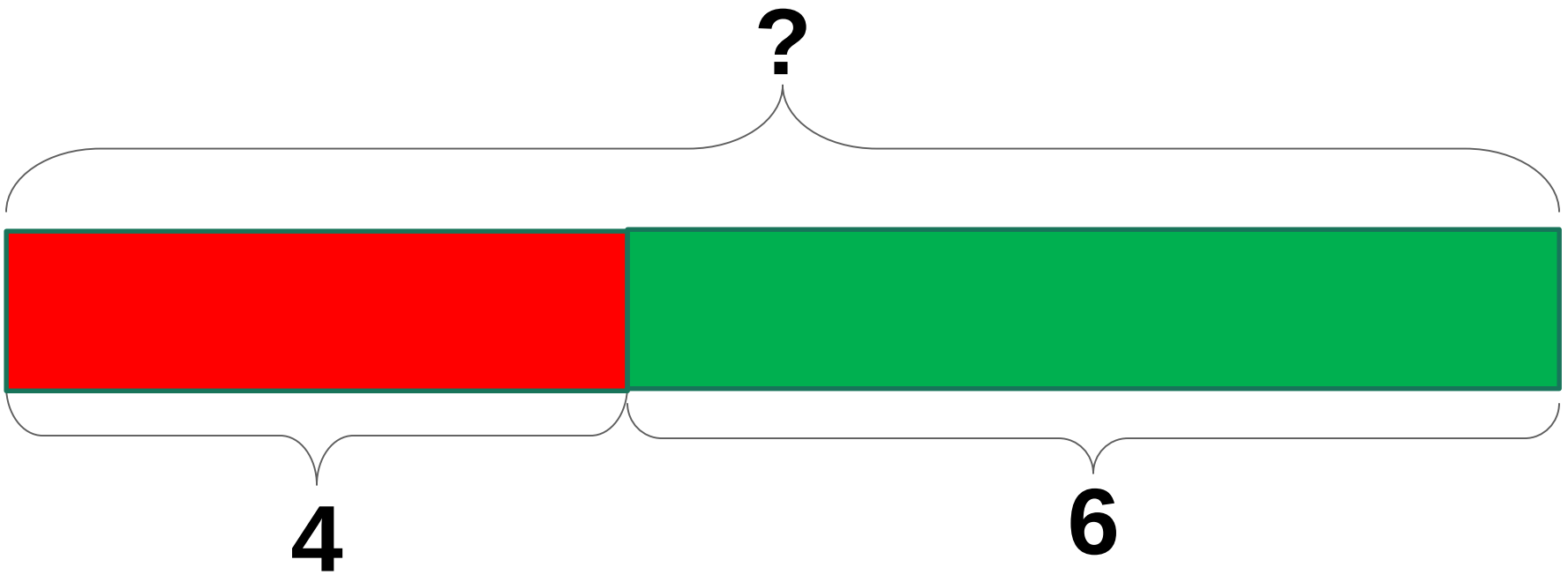

4 + 6 = 10

HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS

- Carry out these activities in an informal and fun way
- Having mastered counting, (1 to 20), help your child with the number bonds

of 5 : eg. 1 + 4 , 2 + 3

of 10 : eg. 1 + 9 , 2 + 8

of 20 : eg. 1 + 19, 5 + 15

HOW YOU CAN HELP YOUR CHILD IN MATHEMATICS

- Count with your child, using familiar concrete objects at home, such as toys, spoons, books etc.
- Start with a small number of objects first and then progress to more objects.
- The importance of Math language

Contact Details

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THANK YOU