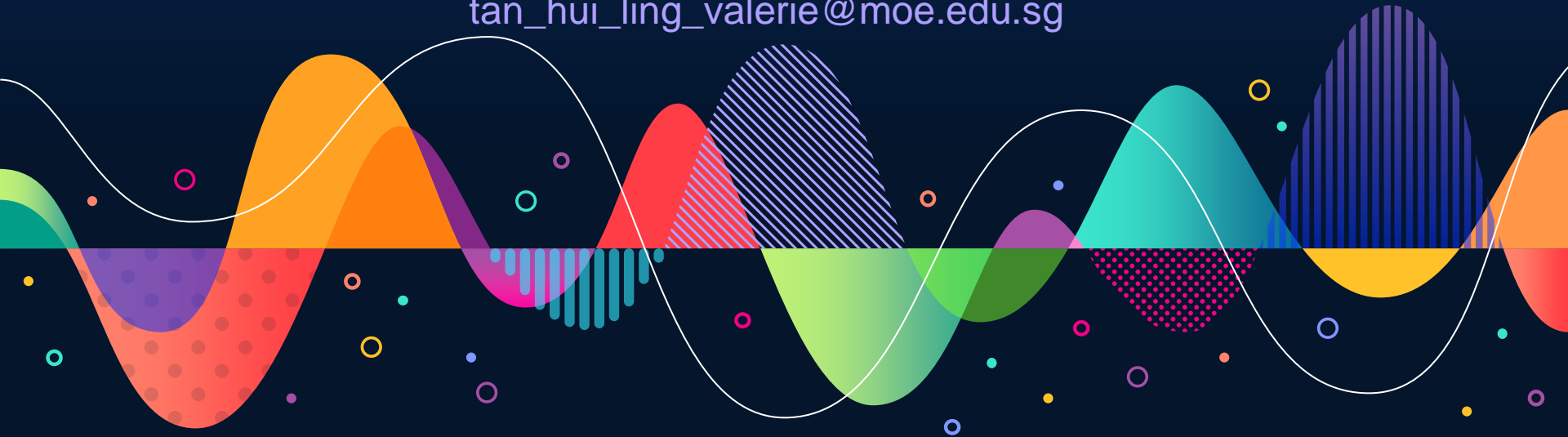


# MATHEMATICS

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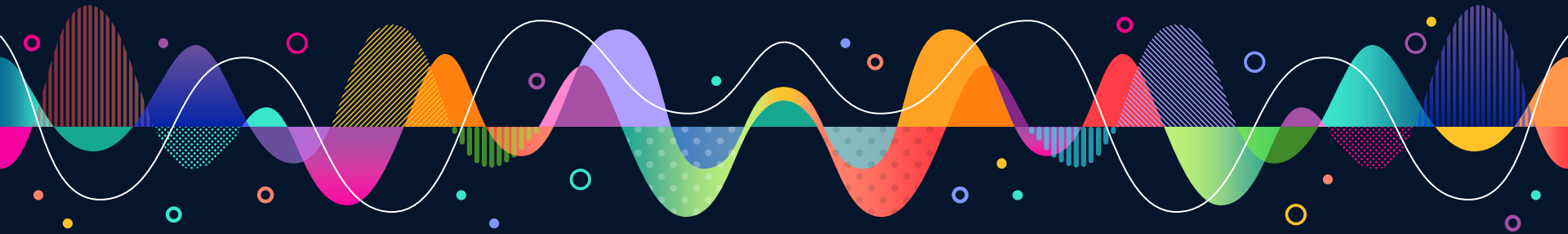
# Topics covered today

Maths Syllabus (2021)

Learning Outcomes

Learning experiences and programmes

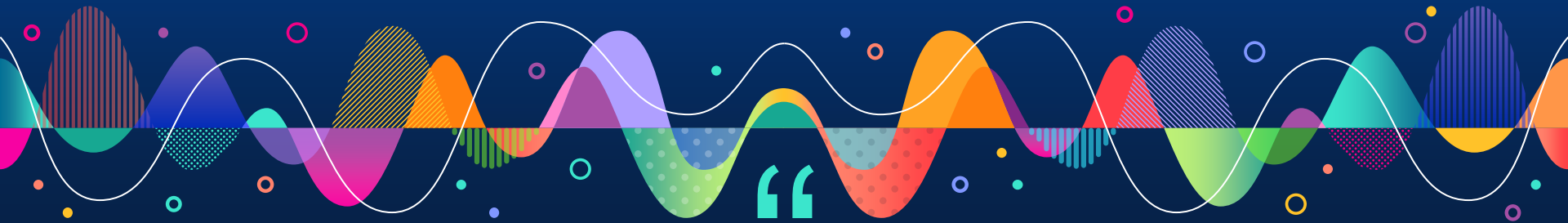
Parental Involvement



# Latest Primary Mathematics Syllabus (2021)

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





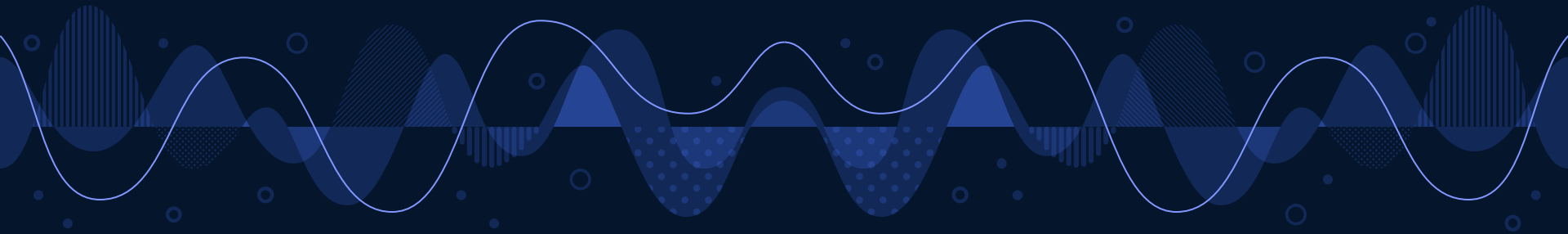
You become successful in Math by seeing that there are just a few **big ideas** that you need to **link together** and think about in depth. And once you've understood the core ideas in Math, everything kind of comes together.

- J Boaler -

# Big Ideas...



- ▶ **Connect** the ideas across topics and strands
- ▶ **Deepen** students' mathematical understanding
- ▶ **Appreciate** Mathematics
- ▶ **Coherent** learning of Mathematics as a **whole**



# Syllabus Organisation & Learning Outcomes

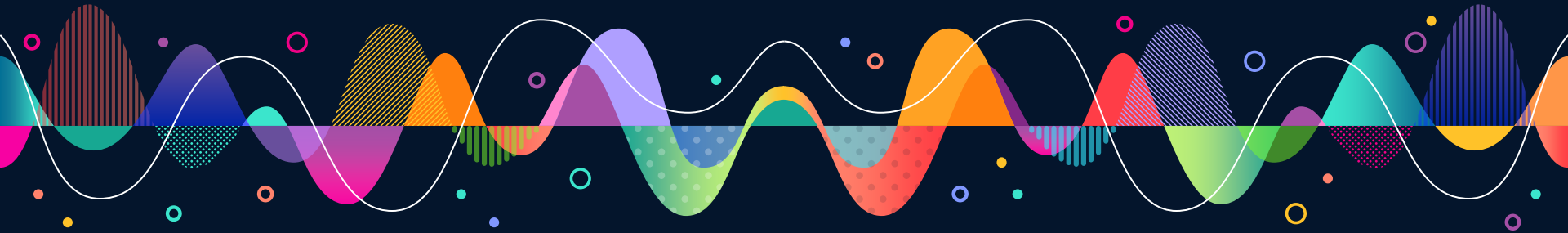


The concepts and skills are organised along **3 content strands**. The development of Mathematical processes, metacognition and attitudes are embedded in the learning experiences that are associated with the content.

Concepts and Skills		
Number and Algebra	Measurement and Geometry	Statistics
<ol style="list-style-type: none"><li>1. Understand numbers up to hundred.</li><li>2. Understand addition and subtraction.</li><li>3. Add and subtract numbers</li><li>4. Understand multiplication and division.</li></ol>	<ol style="list-style-type: none"><li>5. Identify, name, describe and sort shapes.</li><li>6. Tell time to 5 minutes</li><li>7. Measure and compare lengths of objects</li></ol>	<ol style="list-style-type: none"><li>8. Read and interpret picture graphs.</li></ol>
Processes	Learning Experiences Metacognition	Attitudes

# Learning in class

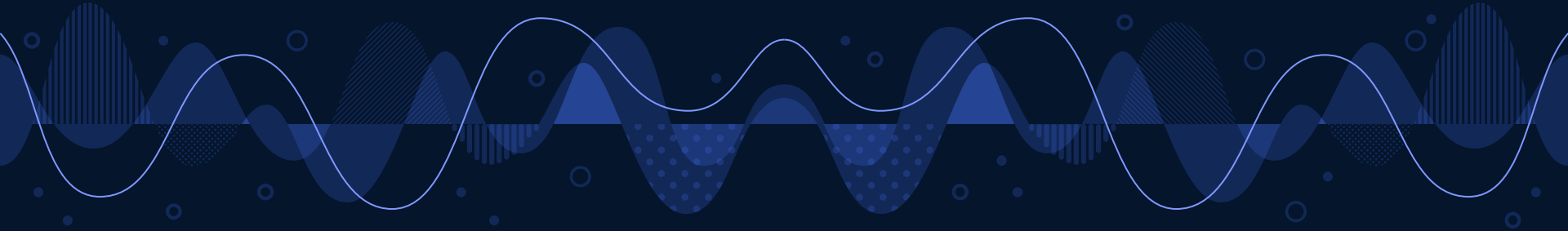
- ▶ Hands-on experiences, class discussions and learning activities
- ▶ Opportunities to demonstrate what they have learnt or acquired
- ▶ Bite-sized assessment of skills and understanding
- ▶ Provide feedback on their learning formatively
- ▶ Allows teachers to adjust and customise their teaching onward to cater to their students' progress
- ▶ Work on areas that require more development



# My child will learn to...



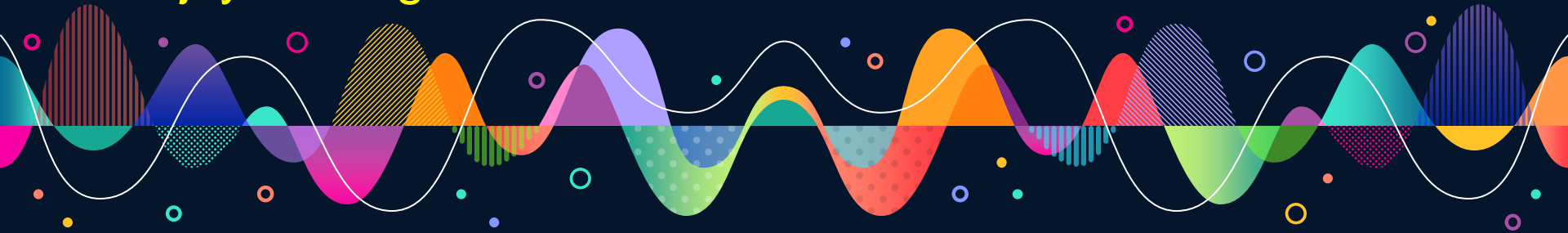
- Work with numbers
- Be a self-directed problem-solver
- Find patterns
- Communicate ideas and reasoning





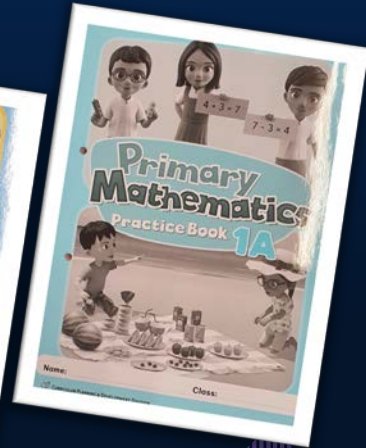
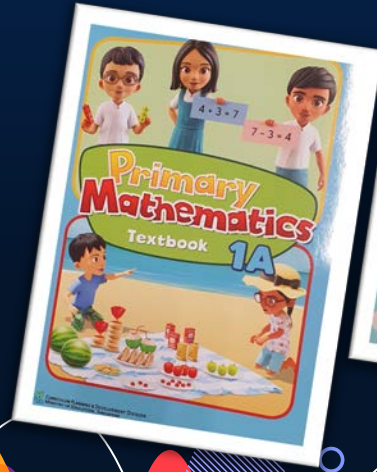
# Expectations

- ▶ Listen and participate actively
- ▶ Be on task
- ▶ Be prepared (Bring the necessary books, Punctual submissions)
- ▶ Ask when in doubt
- ▶ Take pride in his/her work (Neat and accurate)
- ▶ Keep trying and do not give up
- ▶ **Enjoy learning!**



# Books and Materials Used

- ▶ Primary Mathematics Textbook 1A & 1B
- ▶ Primary Mathematics Practice Book 1A & 1B
- ▶ Mathematics File (Pink folder)
- ▶ Maths Exercise Book (Broad-lined)
- ▶ Maths Worksheets

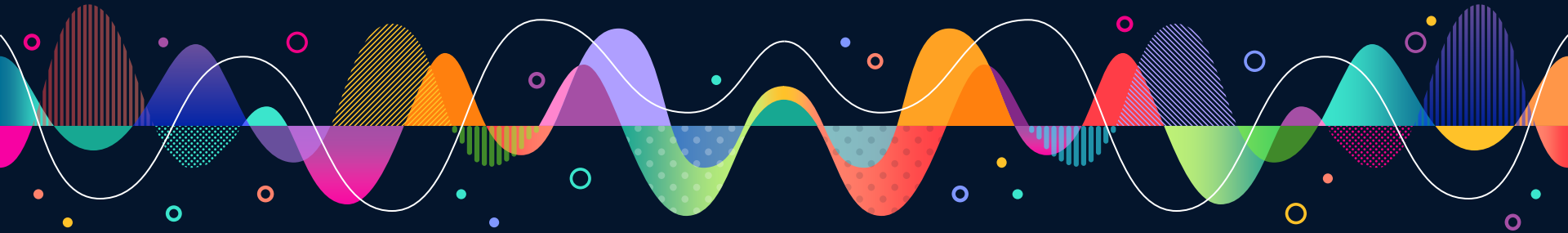


# Books and Materials Used



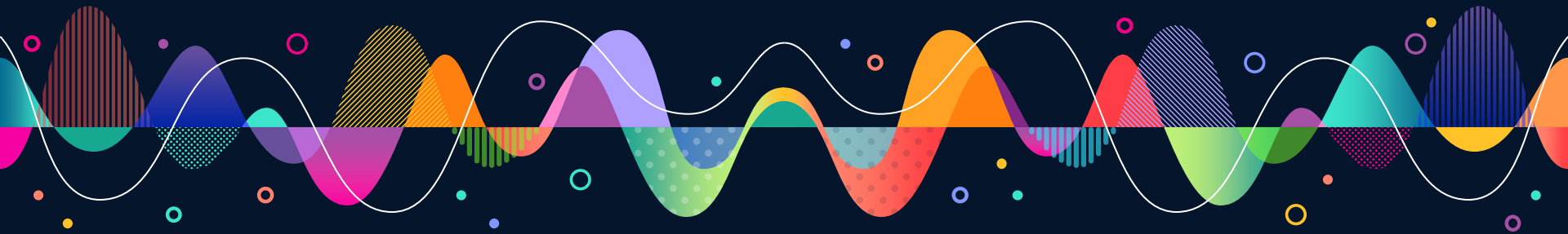
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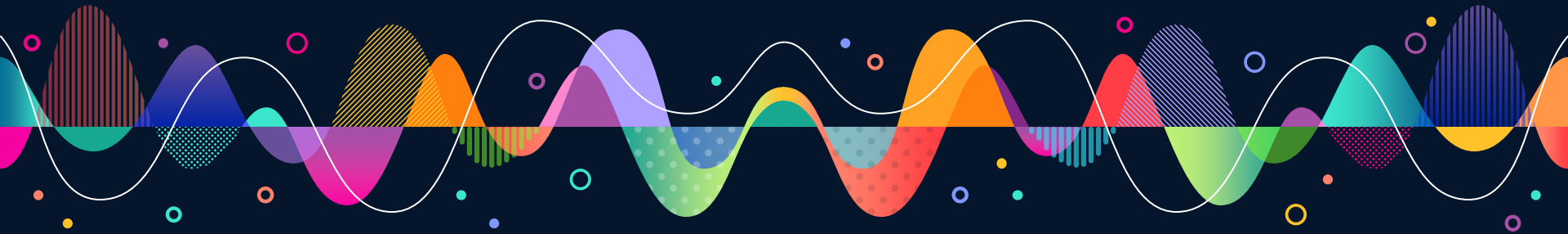
# Programmes for Lower Primary

- ▶ Learning Experiences using manipulatives and other learning materials through the Concrete-Pictorial-Abstract (C-P-A) Approach
- ▶ Maths Baking experiential learning
- ▶ Maths Games
- ▶ Learning Support for Maths (LSM)



# Support for a strong foundation

- Students who demonstrate an aptitude for Maths will be engaged further in class through other **challenging tasks**.
- **Enrichment programmes** from Primary 4 onwards
- Students who require additional support are placed in the **Learning Support for Maths (LSM)** programme.
- Some students are also placed in smaller groups for more **focused teaching**.



# Maths Support at Home

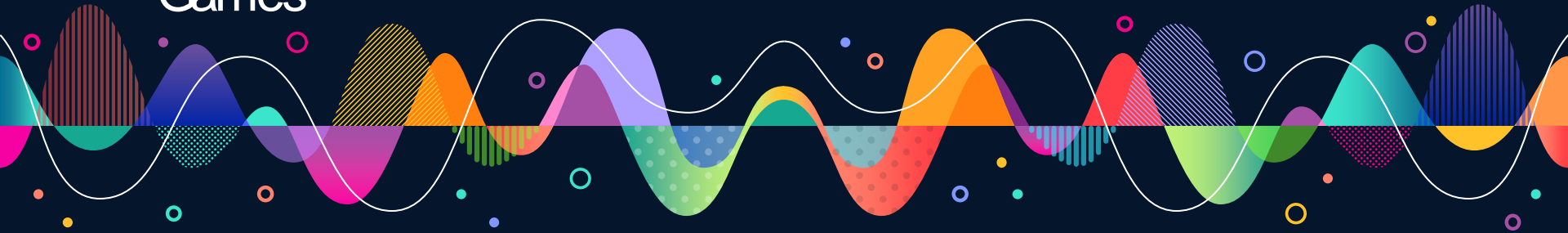


- ▶ Work and **communicate closely** with your child's Maths teacher
- ▶ **Monitor / Follow up on homework**
- ▶ Train your child to show proper and **detailed working steps**
- ▶ Make it a habit to **check for accuracy** and **reasonability** after completion

# Maths Support at Home

**Daily/ Frequent practice** is important

- Factual fluency (Quick recall of basic facts)
- Flash cards
- Mini-whiteboard
- Q & A
- Puzzles
- Games



# Maths Support at Home

- ▶ Discuss the **strategy** with them. Help them to recall their learning. *Is this the best way? What did you learn?*
- ▶ Structured and purposeful questioning to clarify  
*What did you see / know? What does this tell us?*
- ▶ **Do not give your child the answers straight away**
- ▶ Cultivate **tenacity**
- ▶ Encourage (Praise) for **effort**



# GROWTH Mindset – Carol Dweck

A decorative graphic at the top of the slide features a dark blue background with a horizontal line. Above and below this line are various colorful shapes and patterns, including waves, triangles, and circles in shades of red, orange, yellow, green, blue, and purple. Some shapes have internal patterns like stripes or dots. A white quote icon is centered below the title.

Emphasizing **effort** gives a child a variable that they can control.

They come to see themselves as **in control of their success**.

Struggles and challenges are **opportunities for growth and learning**.

**“I can’t do it, YET.”**

# Maths Support at Home

Learning through play cultivates:

- Patience & Character
- Maths reasoning, communication & vocabulary
- Communication and negotiation skills
- Interpersonal and relationship management skills
- Application of Maths knowledge and skills
- Promotion of interest in Maths

# Maths in the Real World

- ▶ **Real-life application**
- ▶ Gives meaning to the learning of Maths
- ▶ Usefulness and importance of Maths
- ▶ Builds confidence
- ▶ Allow your child opportunities to demonstrate their Maths knowledge

Eg. Supermarket, sharing and counting items, visualisation & measurement skills



The best thing parents can do is to teach their children to love challenges, be intrigued by mistakes, enjoy effort, and keep on learning.

— Carol S. Dweck —

Author of *“The Secret to Raising Smart Kids”*

AZ QUOTES