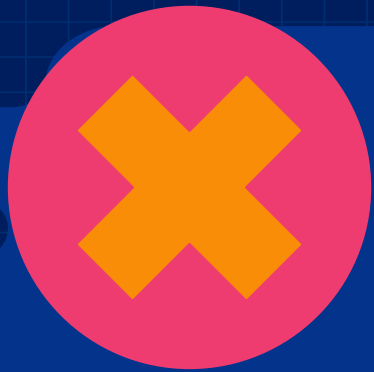


Parent Education Multiplication and Division Strategies Year 3 - Year 6

Help your child become a flexible problem solver!

Agenda

- Vocabulary
- Strategy Toolbox
- Multiplication
 - The Standard Algorithm
 - The Area Model
 - The Lattice Method
- Division
 - Short Division, Line and Dot Strategy
 - Division Lattice Method
 - Division Box Method
- Strategy Toolbox Reflection
- Support Materials and Resources
- Questions
- Feedback
- Sandpit Time *(Time permitting)*



Vocabulary

It is critical for students to understand and use maths terminology in daily maths lessons. Maths has a language of its own. Sometimes it uses symbols and sometimes the written word, but there is no denying that Maths is a language.

Maths terminology plays a critical part in understanding maths concepts.

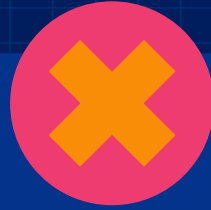
Strategy Toolbox



A student with strong number sense, will learn to select the best TOOL, or the most efficient strategy, from the BOX to solve a problem.

What works for one student may be very different to what works for another. Everyone has their own personal TOOL BOX!



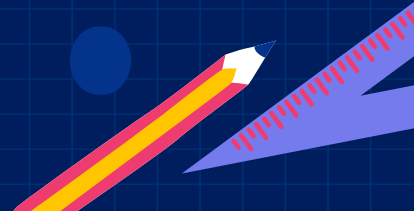
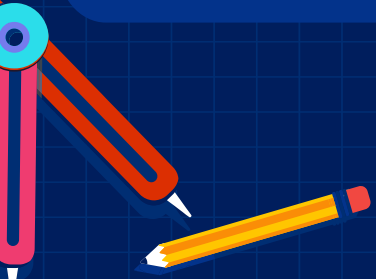


Multiplication

The Standard Algorithm

The Area Model

The Lattice Method

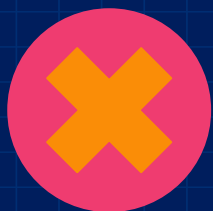


You Do

Strategy Toolbox

$$29 \times 5 =$$

Can you solve $29 \times 5 =$? Can you explain how you solved it to someone else?



The Standard Algorithm

H T O

	1	2	3
x			8
<hr/>			

T H H T O

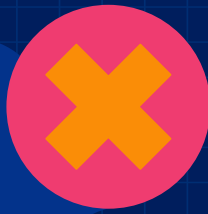
		2	3	2
x			2	6
<hr/>				
<hr/>				

The Area Model

AREA MODEL

$$34 \times 6 = ?$$

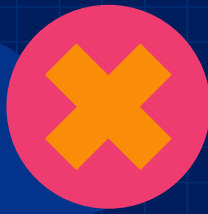
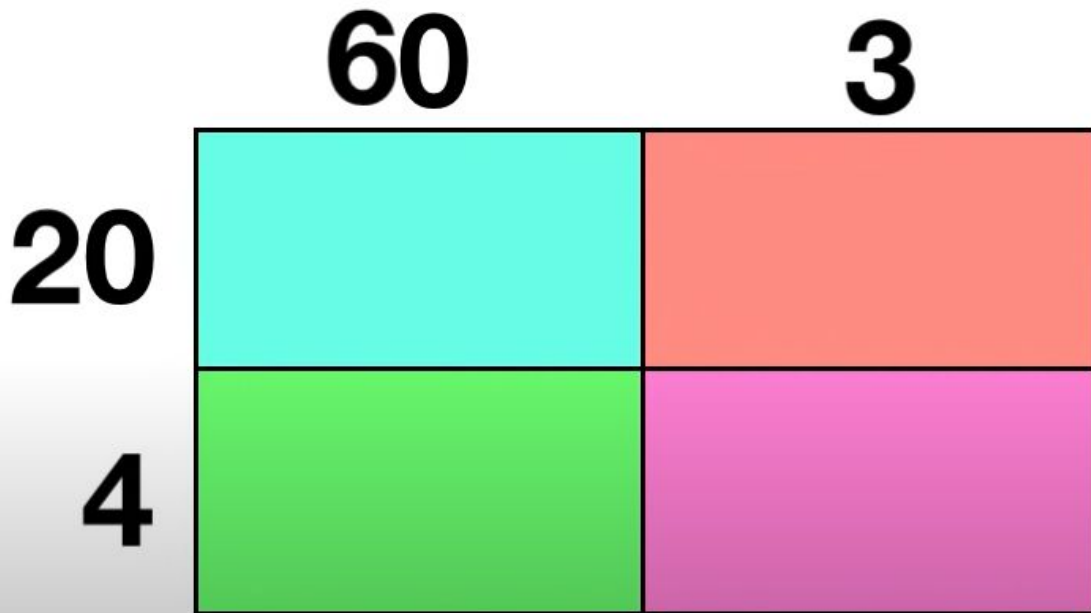
	30	4	
6	30×6 180	4×6 24	180 + 24 <hr/>



The Area Model

We Do

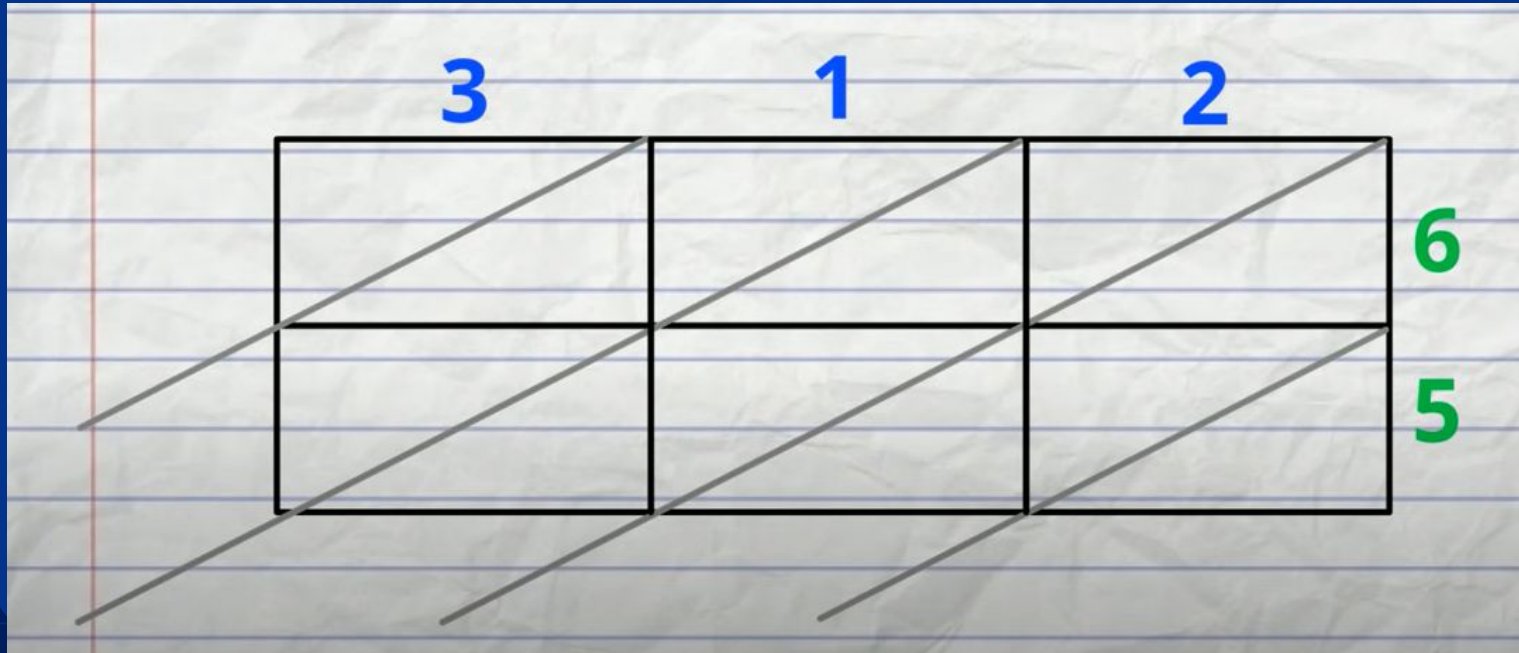
$$63 \times 24 =$$



The Lattice Method

We Do

$$312 \times 65$$



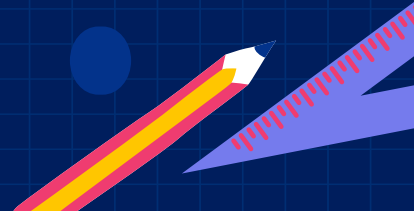
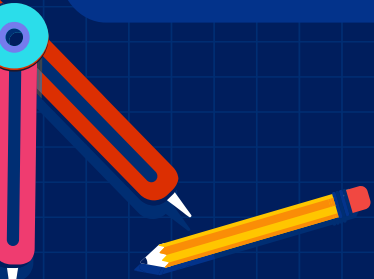


Division

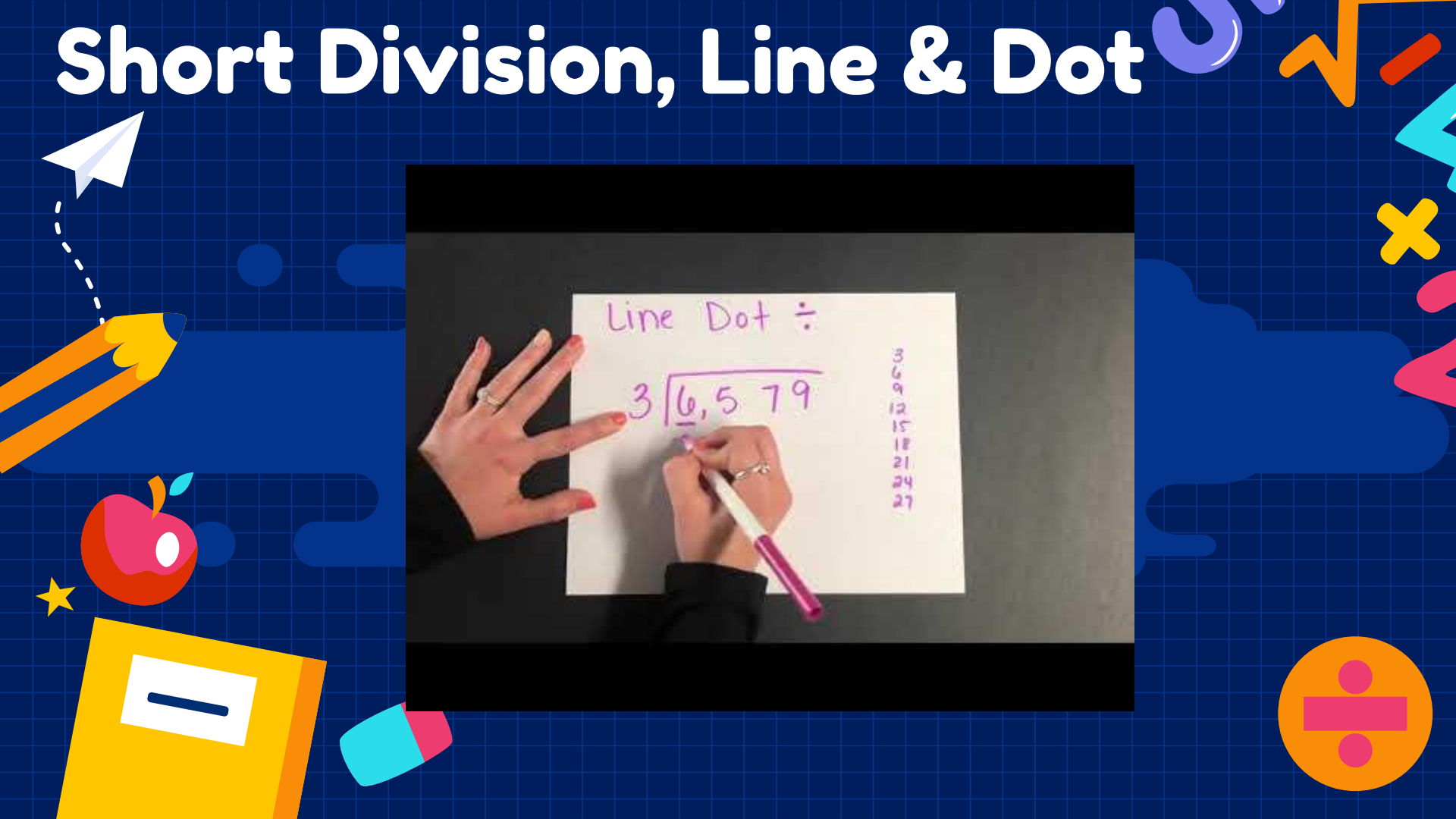
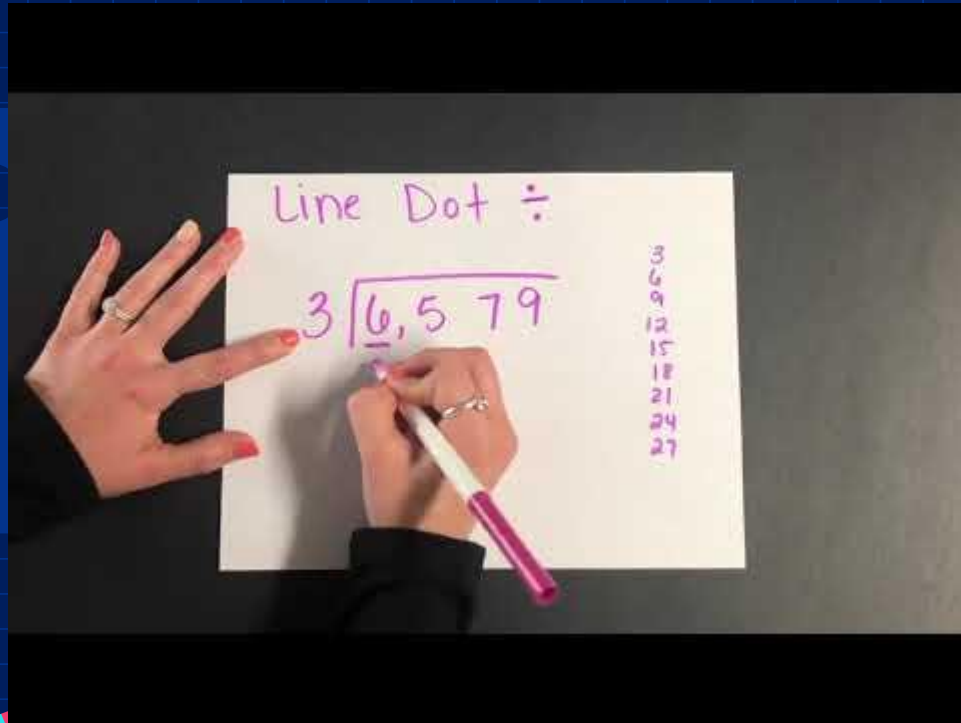
Short Division, Line and Dot Strategy

Division Lattice Method

Division Box Method



Short Division, Line & Dot



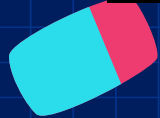
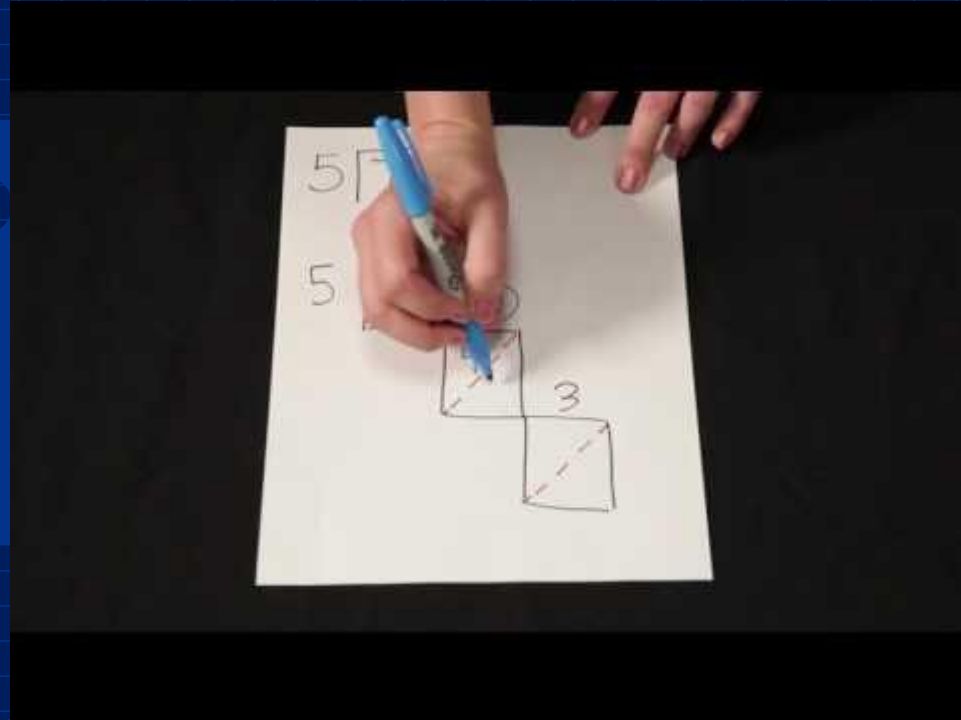
Short Division, Line & Dot

We Do


$$4 \overline{) 7462}$$

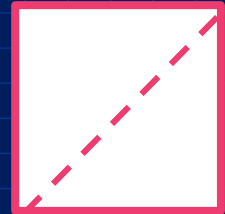
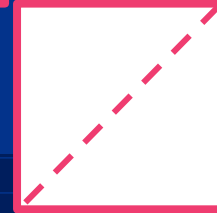
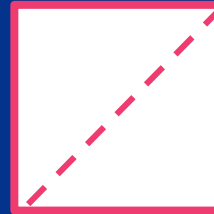


Division Lattice Method



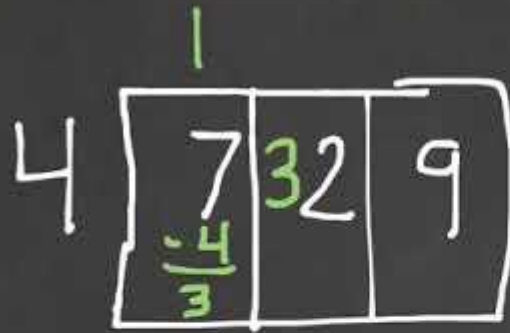
Division Lattice Method

13 $\overline{) 253}$



We Do

Division Box Method



- $4 \times 0 = 0$
- $4 \times 1 = 4$
- $4 \times 2 = 8$
- $4 \times 3 = 12$
- $4 \times 4 = 16$
- $4 \times 5 = 20$
- $4 \times 6 = 24$
- $4 \times 7 = 28$
- $4 \times 8 = 32$

Created with Doceri



Division Box Method

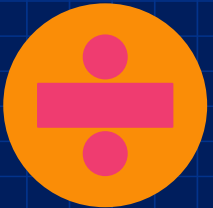
We Do


$$3 \overline{) 79}$$

3

7

9



Strategy Toolbox



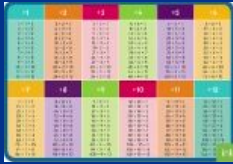
- Did you discover something new today?
- What strategies worked best for you?
- Can you explain to someone else why that strategy appealed to you best?

Reflection



Support Materials and Resources

Enablers



If a child is struggling to solve problems due to their knowledge of fast facts, provide them with the facts.

Mathletics



Explore the Multiverse to build upon multiplication and division fact fluency

MPPS Website



@Home page of the website is a great resource for families.

Maths Showbag



Generate problems to solve using the playing cards or dice.