Maths Parent Workshop

Welcome!

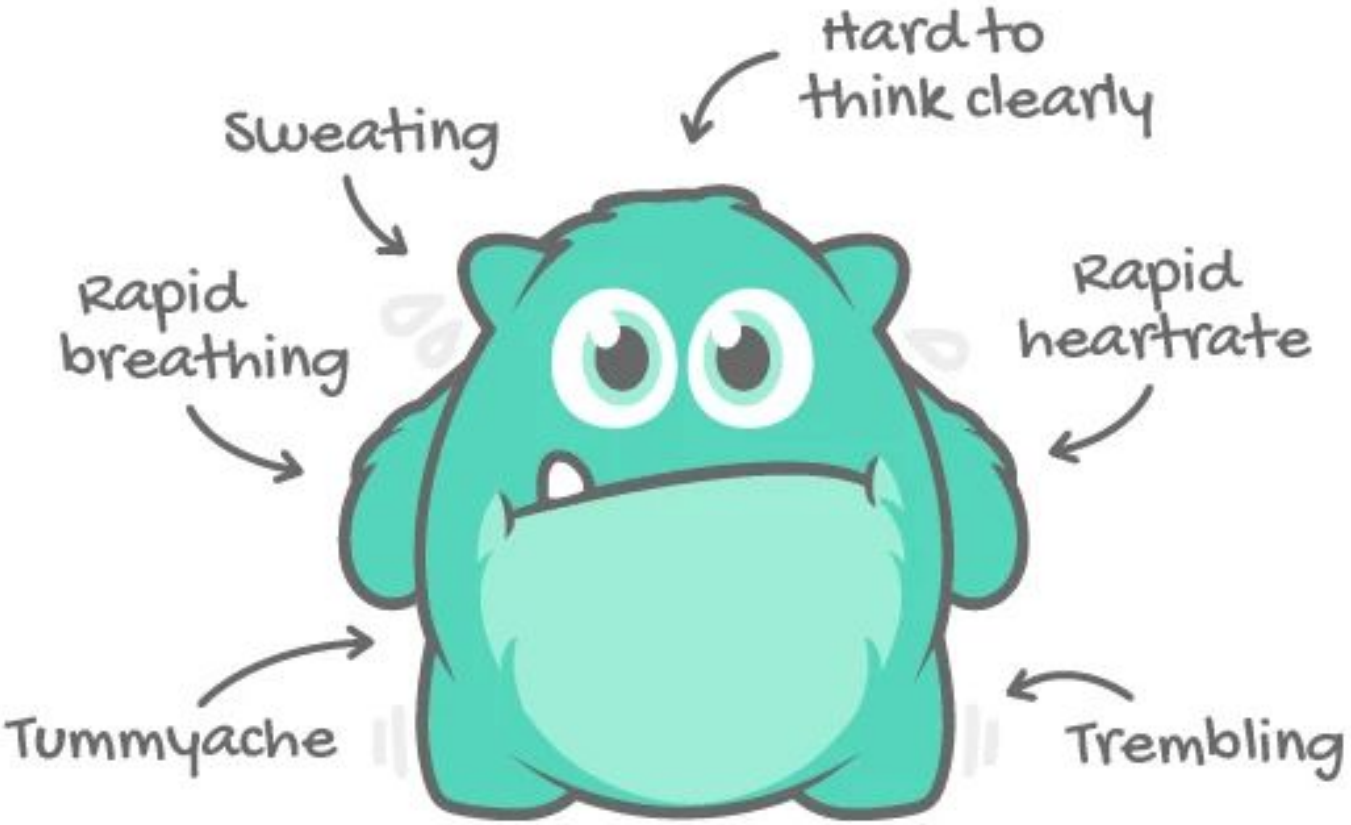
Purpose of meeting

- Share how Maths is taught at Rudston Primary.
- Discuss the importance of committing knowledge to long term memory.
- Share ways to support your child with the subitizing and number sense.
- Share resources to support your children in Maths.

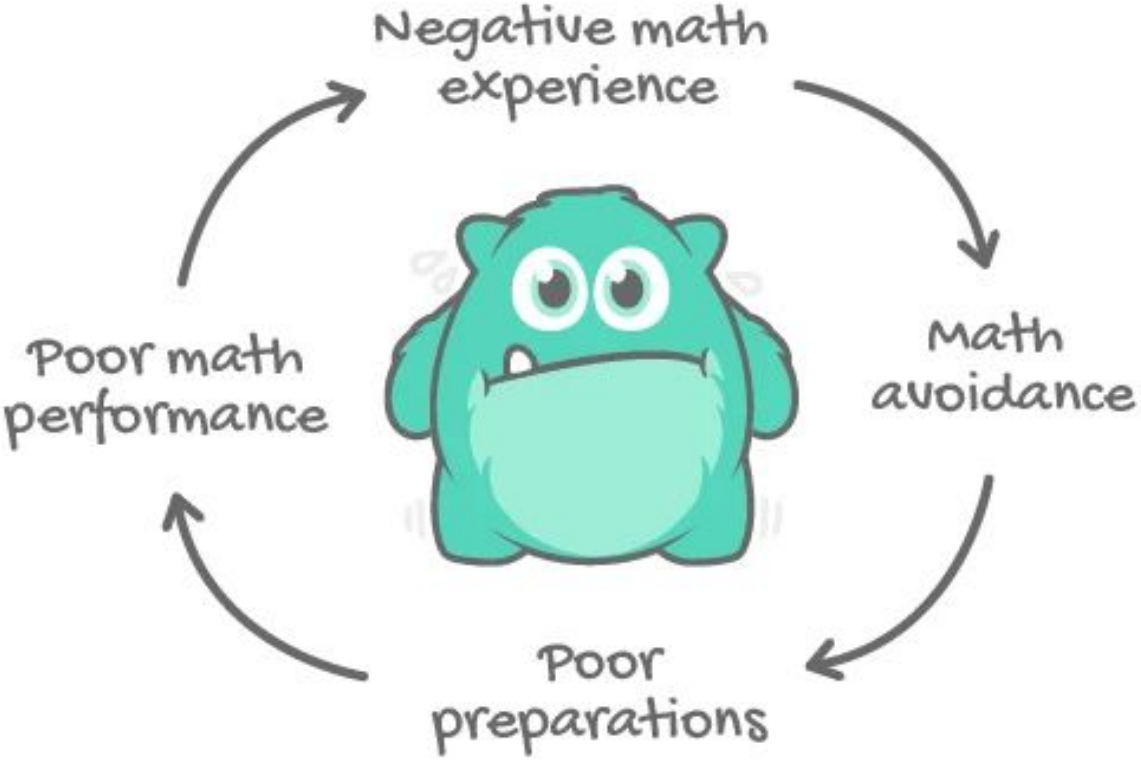
This table shows how many people finished the New York Marathon in each of the first four decades it was held.

New York Marathon	
Decade	**Total number of people who finished**
1st decade	24,863
2nd decade	170,932
3rd decade	282,420
4th decade	350,824

What is the mean number of people who finished the marathon per decade? Round your answer to the **nearest hundred**.


Hard to think clearly
Sweating
Rapid breathing
Rapid heartrate
Tummyache
Trembling

Math anxiety cycle of failure



Maths at Rudston

Throughout Rudston, we encourage our children to view mathematics as a related subject that is very relevant to the world around them - not just within a classroom.

We ensure that our children understand the importance of mathematics in their everyday lives and realise the embedded mathematical links present within all other subjects.

Our mathematical curriculum aims to instil a lifelong passion for reasoning and problem-solving in our children.

We want pupils at Rudston to enjoy maths. We want pupils at Rudston to see that, if they work hard, they can solve challenging problems, and we want pupils to see the value in everyday mathematics.

Maths approaches across the school

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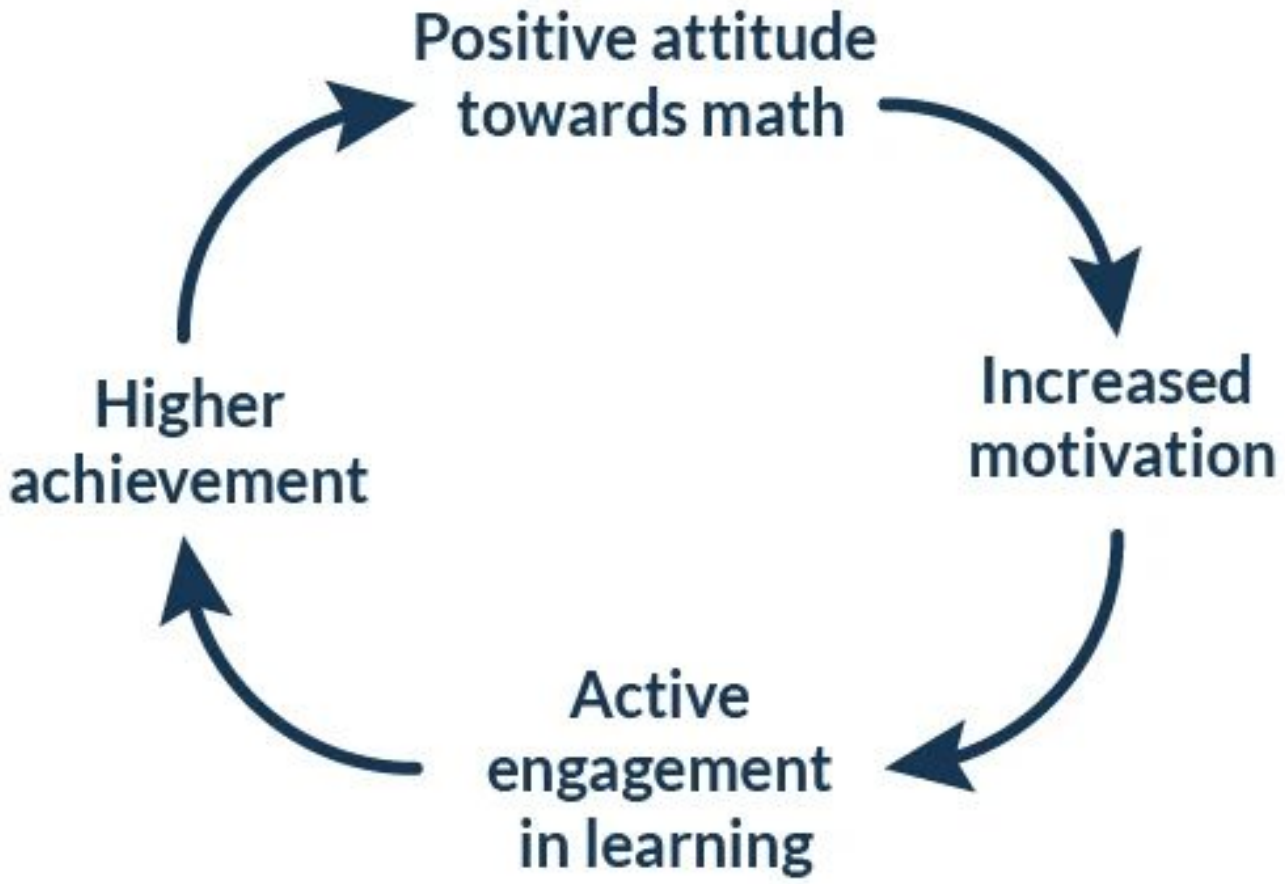
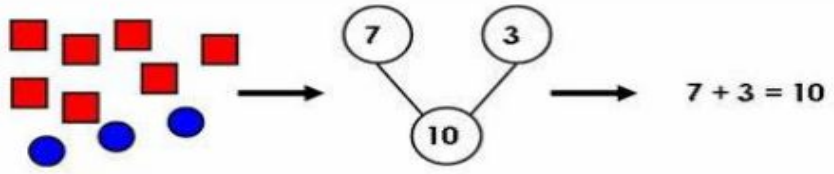
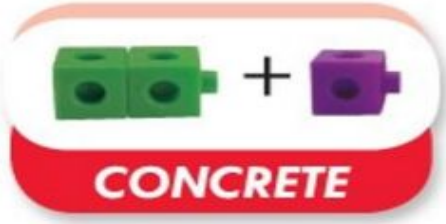

Positive attitude towards math
Increased motivation
Active engagement in learning
Higher achievement

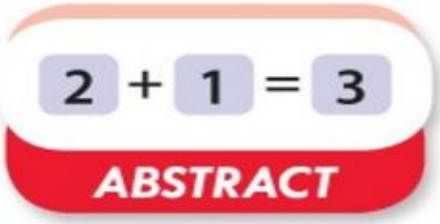
Maths approaches across the school





Concrete is the 'doing' stage, using concrete objects to solve problems. It brings concepts to life by allowing children to handle physical objects themselves.

Pictorial is the 'seeing' stage, using representations of the objects involved in maths problems. This stage encourages children to make a mental connection between the physical object and abstract levels of understanding, by drawing or looking at pictures, circles, diagrams or models which represent the objects in the problem.



Abstract is the 'symbolic' stage, where children are able to use abstract symbols to model and solve maths problems.

Maths approaches in these year groups

Due to the nature of our scheme, the hope is that by Years 5 and 6, the children will be in a position to recall and connect their thinking between topics and learning and will identify how they can use prior learning to solve problems.

We will use manipulatives where appropriate with an aim to come away from these as time progresses but manipulatives will always help and be used in Primary Education.

Year 5 and 6 are about implementation of learning and, particularly in Year 6, we will be looking for children to use their learning in preparation for the coming challenges of KS3.

There is far more emphasis on pace, logic and multi-context problem solving at this level, in line with childhood development.

There is more cognitive demand at this stage as children are often tasked with considering multiple layers of information to calculate and solve.

What does this look like throughout the year?

The books are split into A and B syllabus with a strong emphasis on Number, Place Value, Four operations and Fractions in book A with some application to measures, statistics or the like.

In Years 5 and 6 we see this extended with Decimals, Percentages and Shape with the introduction of some topics such as Further Measures (including metric/imperial conversions) and Shape.

We will be aiming to get to around March when we move to the Book B and will be emphasising application and referring to the Number learning throughout the remainder of the year.

Number Sense

1. An awareness of the relationship between number and quantity
2. An understanding of number symbols, vocabulary, and meaning
3. The ability to engage in systematic counting — including notions of cardinality and ordinality
4. An awareness of magnitude and comparisons between different magnitudes
5. An understanding of different representations of number
6. Competence with simple mathematical operations
7. An awareness of number patterns including recognising missing numbers

Basic Skills expectations and support

Basic Skill and Arithmetic learning is a daily essential for all of our learners.

We have totally revamped our teaching approaches last year and this year to ensure consistency across the school and Key Stages for Maths.

We look at using 5 key questions and will be developing the idea of pace and application of knowledge over the weeks and terms.

This is where you can help us the most! All maths is good maths, taking 15-20 minutes will suffice!

Example!

1) 365.3 + 24.34 =

2) 3 ½ - 2 7/10 =

3) 3472 x 36 =

4) _____ x 100 = 2453

5) 4786 ÷ 6

Progress Paths

https://drive.google.com/drive/folders/15Kp7TnKangD-NsnS3KX1PKGk_cQModSQ?usp=share_link

Maths no problem - What is it? Why?

Singapore has become a “laboratory of maths teaching” by incorporating established international research into a highly effective teaching approach. With its emphasis on teaching pupils to solve problems, Singapore maths teaching is the envy of the world.

- Singapore consistently top the international benchmarking studies for maths teaching
- A highly effective approach to teaching maths based on research and evidence
- Builds students’ mathematical fluency without the need for rote learning
- Introduces new concepts using Bruner’s Concrete Pictorial Abstract (CPA) approach
- Pupils learn to think mathematically as opposed to reciting formulas they don’t understand
- Teaches mental strategies to solve problems such as drawing a bar model

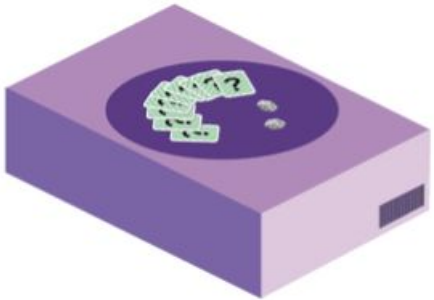
Exemplify the Lesson Approach

Multiplying by a 2-Digit Number

Lesson 5

Explore

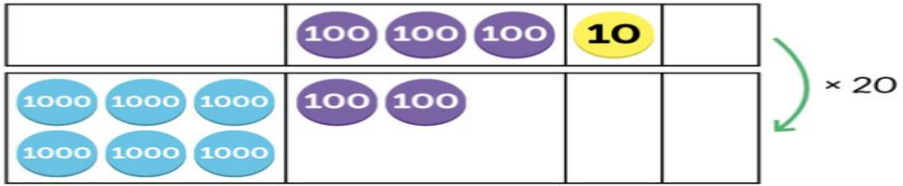
A board game contains 310 question cards. How many question cards are there in 23 sets of the game?



Exemplify the Lesson Approach

Master

1 $310 \times 20 =$ ☐



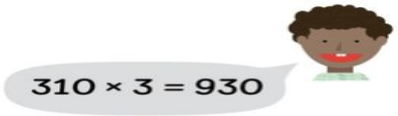
$310 \times 20 = 6200$

2 $310 \times 23 =$ ☐

th	h	t	o
	3	1	0
3	1	0	0

× 10

$310 \times 10 = 3100$
$310 \times 20 = 6200$
$310 \times 23 = 6200 + 930$
$= 7130$



Exemplify the Lesson Approach

3 $310 \times 23 =$ ☐

		3	1	0	
×			2	3	
		9	3	0	→ 310 × 3 = 930
+	6	2	0	0	→ 310 × 20 = 6200
	7	1	3	0	→ 310 × 23 = 7130

There are 7130 question cards in 23 sets of the game.

4 Find the product of 1310 and 23.

		1	3	1	0	
×				2	3	
		3	9	3	0	→ 1310 × 3 = 3930
+	2	6	2	0	0	→ 1310 × 20 = 26 200
	☐					→ 1310 × 23 = ☐

Estimate
1310 × 23 by finding
1300 × 20.

Exemplify the Lesson Approach

3 $310 \times 23 =$ ☐

		3	1	0	
×			2	3	
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	☐					→ 1310 × 23 = ☐

Estimate
1310 × 23 by finding
1300 × 20.

Exemplify the Lesson Approach

Guided Practice

Multiply.

1 (a) $322 \times 10 =$ ☐

(b) $322 \times 20 =$ ☐

(c) $322 \times 30 =$ ☐

(d) $322 \times 3 =$ ☐

(e) $322 \times 13 =$ ☐

Exemplify the Lesson Approach

2 (a) $345 \times 10 =$ ☐

(b) $345 \times 20 =$ ☐

(c) $345 \times 2 =$ ☐

(d) $345 \times 12 =$ ☐

(e) $1345 \times 22 =$ ☐

3 (a)

		2	1	3
×			2	3
	☐	☐	☐	
+	☐	☐	☐	
	☐	☐	☐	

(b)

	1	2	1	3
×			2	3
	☐	☐	☐	☐
+	☐	☐	☐	☐
	☐	☐	☐	☐

(c)

	3	2	2
×		3	3
	☐	☐	☐
+	☐	☐	☐
	☐	☐	☐

(d)

	1	3	2	2
×			3	3
	☐	☐	☐	☐
+	☐	☐	☐	☐
	☐	☐	☐	☐

Exemplify the Lesson Approach

Worksheet 5

Multiplying by a 2-Digit Number

Find the product.

1 (a) $221 \times 10 =$ ☐
$221 \times 20 =$ ☐
$221 \times 30 =$ ☐
$221 \times 3 =$ ☐
$221 \times 33 =$ ☐

(b) $143 \times 10 =$ ☐
$143 \times 20 =$ ☐
$143 \times 30 =$ ☐
$143 \times 2 =$ ☐
$143 \times 32 =$ ☐

2 (a) $303 \times 30 =$ ☐
$303 \times 33 =$ ☐
$1303 \times 33 =$ ☐

(b) $2412 \times 20 =$ ☐
$2412 \times 22 =$ ☐

Exemplify the Lesson Approach

3 Multiply.

(a)

	1	0	3	2
×			2	3
+				

(b)

	2	3	2	1
×			3	3
+				

Homework

https://play.edshed.com/en-gb/login

https://ttrockstars.com/

In Year 6 we also have the CGP books and some further support via Maths.co.uk which is soon to be accessed - any home access will be by choice.

At home - all maths is good maths

Supporting Your Children at Home

https://www.nationalnumeracy.org.uk/helping-children-maths

- White Rose is also a brilliant website. That free home learning videos for all ages from reception.

- https://whiterosemaths.com/homelearning

All maths is good!

Questions and feedback