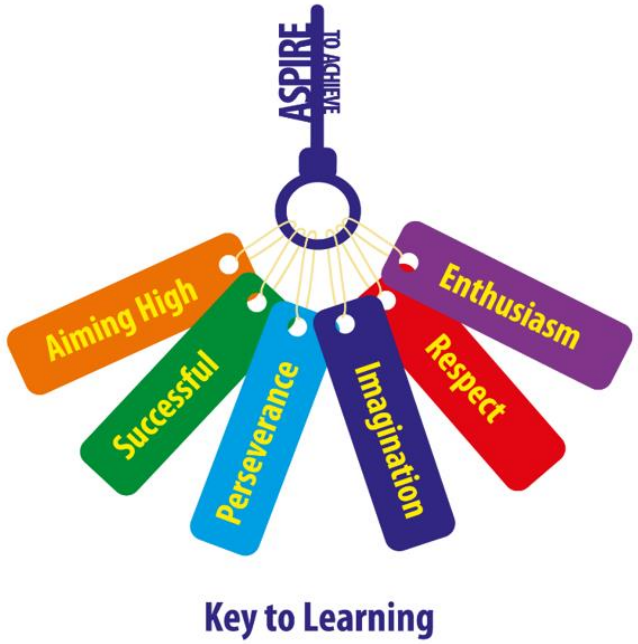
Year 3 and 4

Coffee and Calculations

Our Curriculum Intent at Nevill Road Junior School



Key to Learning

Together Everyone Achieves More

We **Aim High** by challenging ourselves in all aspects of school life.

We are **Successful** learners by using our growth mind set to achieve.

We **Persevere** by being resilient and trying our best in everything we do.

We use our **Imagination** to produce creative work that we can be proud of.

We show **Respect** by including everyone and making sure we all matter.

We show **Enthusiasm** by approaching all learning with a positive attitude.

Our One Voice Conversation at Nevill Road Junior School

Priority 1 – To improve the quality of education for all children in reading through:
• Reviewing reciprocal reading strategies and the role of the child within this. • Reviewing the teaching of the reading cycle, particularly in Year 3 and 4. • Introducing the 100 Books Challenge to encourage the love of reading and exposure to challenging vocabulary. • Using 'Books for Hooks' to make links with writing. • Quality first teaching that meets the needs of SEND and higher attainers.
Priority 2 – To improve the quality of education for all children in writing through
• Using 'Books for Hooks' to make links with reading and quality texts that expose children to challenging vocabulary. • Developing DEAL strategies across the school to immerse and engage children in their writing. • To ensure that Year Group 'Bear Necessities' are picked up and addressed by staff and children with a focus on SPAG and presentation. • Implementing the new SPAG framework across school. • To develop the use of editing and improving to show progress in writing. • Quality first teaching that meets the needs of SEND and higher attainers.

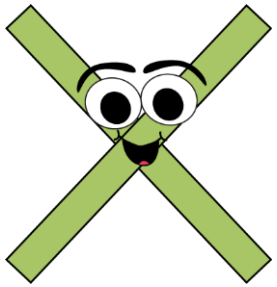
Priority 3- To support all staff to become leaders through:
• Opportunities to improve their pedagogy and subject knowledge through CPD opportunities. • Developing the articulation of the intent, implementation and impact of their subject area. • Ensuring each subject area is planned using a clear sequence of progression across KS2. • Working with the Infant school to understand what has come before. • Developing a knowledge rich curriculum for each subject area. • Quality first teaching that meets the needs of SEND and higher attainers.
Priority 4 - To improve the quality of education for all children in maths through:
• Embedding the maths mastery lesson structure so that it is consistent across school. • Developing teachers subject knowledge and pedagogy through staff participating in Teacher Research Groups • Developing the use of practical resources in maths lessons. • Developing teachers questioning throughout lessons. • Securing mental calculation strategies for all children in Years 3 and 4. • Review how times tables are taught across school in line with the new check. • Quality first teaching that meets the needs of SEND and higher attainers

Aims of the National Curriculum

Fluent recall of **mental maths facts** e.g. times tables, number bonds. Etc.

To **reason** mathematically – children need to be able to **explain** the mathematical concepts with number sense; they must explain **how** they got the answer and **why** they are correct.

Problem solving – applying their skills to real-life contexts.



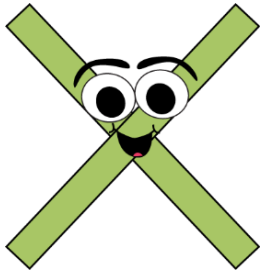
YEAR 3 MULTIPLICATION AND DIVISION

National Curriculum Objectives:

- recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods

- solve problems, including missing number problems, involving multiplication and division



Year 4 Multiplication and Division

National Curriculum Objectives:

- Recall multiplication and division facts for multiplication tables up to 12 × 12
- Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
- Recognise and use factor pairs and commutativity in mental calculations
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout

How many different ways?

18 x 5 =

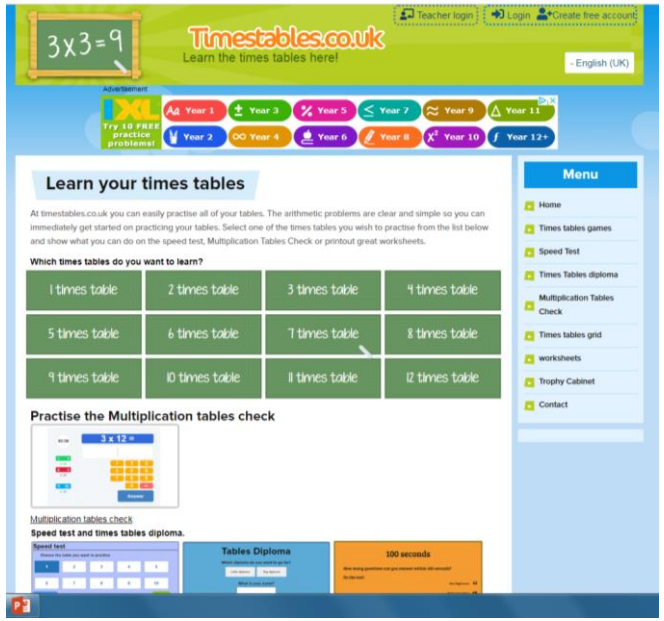
Counting Stick Multiplication

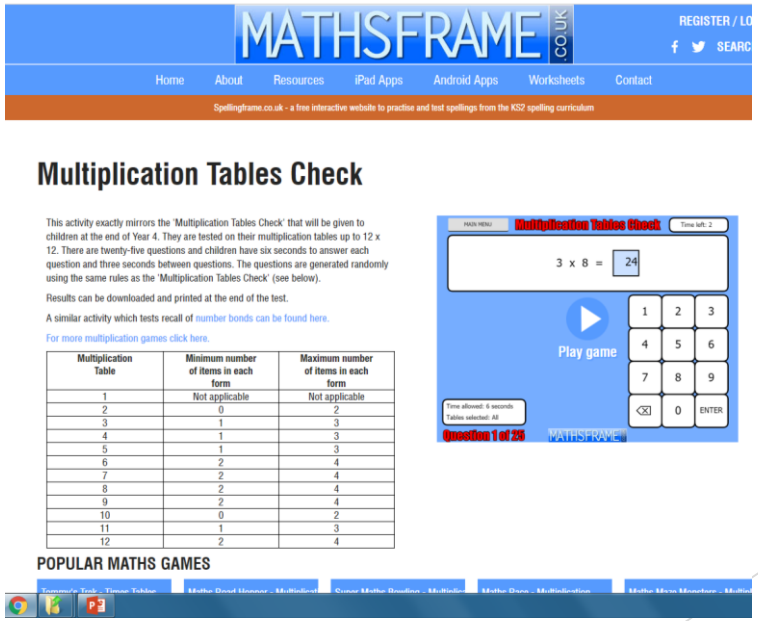
Times Table Rockstars

Games and Activities

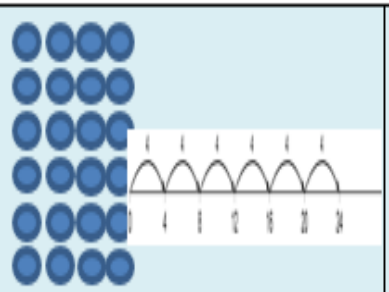
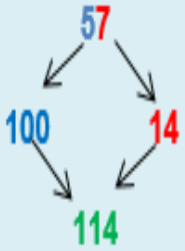
https://mathsframe.co.uk/en/resources/resource/477/Multiplication-Tables-Check

https://www.timestables.co.uk/





MULTIPLICATION

Year 3	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables Multiply single digits by 20,30,40,50 and 80	 4 × 6 = 24 Use arrays and number lines to count in multiples	Using partitioning to multiply 57 × 2 = 114 50 × 2 7 × 2 100 + 14 =114  	Scaling Making a 5cm line 4 times longer 5cm × 4 = 20cm 	48 × 3 = 144 (Partitioning) × 40 8 3 120 24 4 × 10 × 3 or 4 × 3 × 10 120 + 24 = 144

Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods

Multiplication

67 × 9

×	60	7
9	540	63

540 + 63 = 603

437 × 6

×	400	30	7
6	2400	180	42

2400 + 180 + 42 = 2622

Partitioning grid multiplication leading to formal compact methods

67 × 9 =

$$\begin{array}{r} 6\ 7 \\ \times\ \ 9 \\ \hline 6\ 0\ 3 \end{array}$$

Multiplication Rally Coaching

Roll Dice and Rally Coaching

Reasoning with Multiplication

Here are three multiplications.

61	74	26
x 5	x 7	x 4
35	498	824

Correct the multiplications.

Tom baked muffins in a tray like this.

Tom wasn't sure how many he baked, but he used 27, 28 or 29 tins!

When he counted them there were 174 muffins. How many tins did he use?