Times Tables Workshop at Newburgh

Newburgh
Primary School

Our Aim

For all children to be fluent in all times tables by end of Year 4.

What does fluent mean?

A deep conceptual understanding. An ability to recall accurately and rapidly. It is not just repeating back the fact. It is about flexibility, efficiency and accuracy.

A deep conceptual understanding

Understanding the meaning of operations and their relationships to each other.

For example, commutativity, inverse and multiplication as repeated addition

$4 \times 6 = 24$ so $6 \times 4 = 24$

If $4 \times 6 = 24$ then $24 \div 6 = 4$

$4 \times 6 = 6+6+6+6$

$6 \times 4 = 4+4+4+4+4+4$

Flexibility and efficiency

Knowing facts and how they relate to each other.

If we know this what else do we know?

4 x 5 = 20 so I know 4 x 50 = 200

Molly has 2 baskets with 6 apples in each. How many apples does she have altogether?

"Do you need to know your 6 times tables?"

What times tables should my child know?

Year 2

Children are taught 10x, 2x, 5x and 3x tables.

Year 3

Children recap Year 2 times tables and are then taught 3x, 4x and 8x tables.

Year 4

Children recap Year 3 and then learn up to 12x tables.

Statutory Multiplication Check

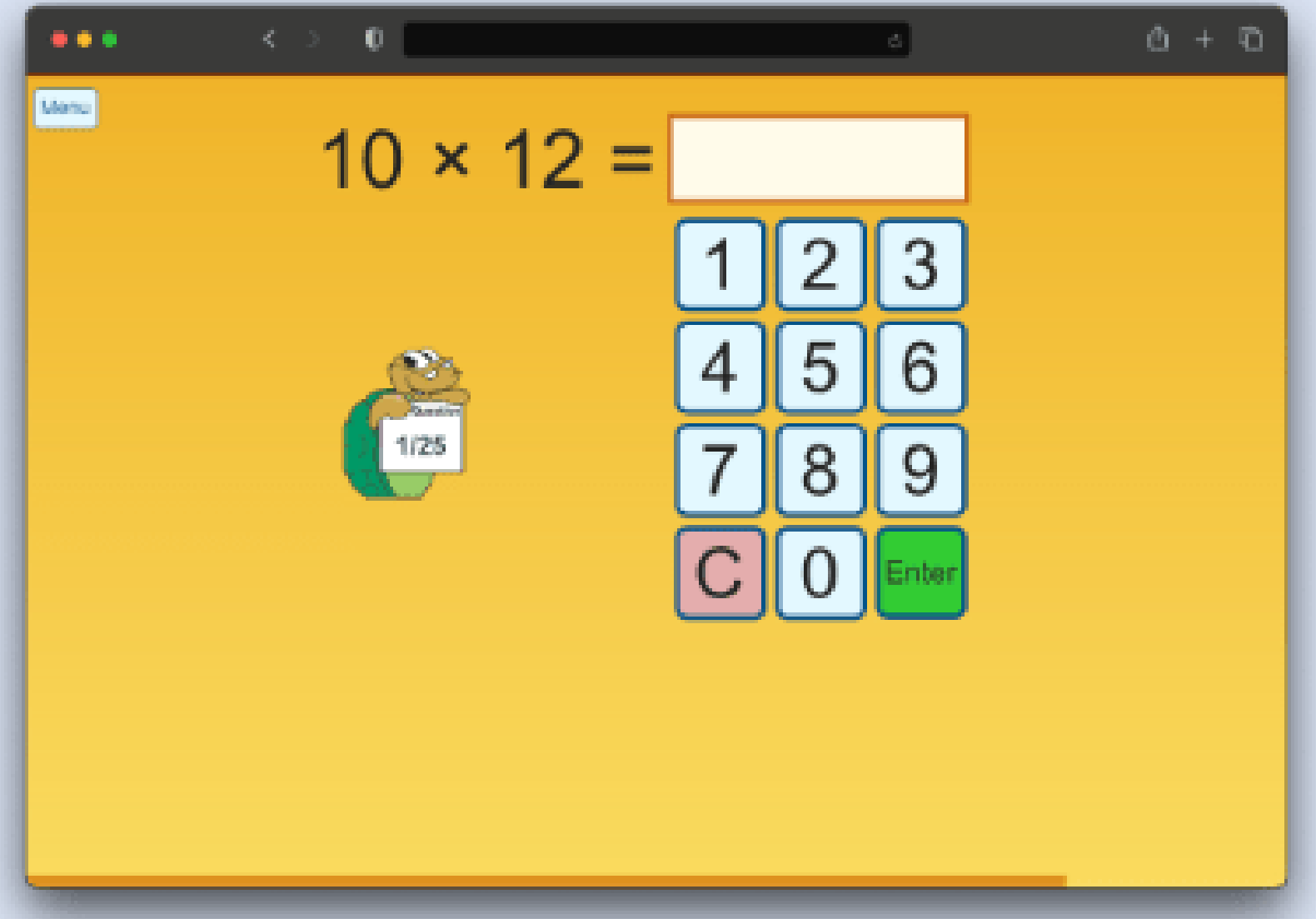
Taken by all children in Year 4 in June.

The purpose of the check is to determine whether your child can fluently recall their times tables up to 12, which is essential for future success in mathematics.

It is an on-screen check consisting of 25 times table questions. Your child will be able to answer 3 practice questions before taking the actual check. They will then have 6 seconds to answer each question.

On average, the check should take no longer than 5 minutes to complete.

What it looks like:



How we check progress of times tables at Newburgh in Year 3 and Year 4.

Once a week, the children take part in the 44 Times Tables Challenge, starting with the 10x tables and progressing through all of the times tables in the order which they have learnt them from Y2 onwards.

The children are given 3 minutes to complete all of the questions and then have time to check their answers. If children get all questions correct within the 3 minutes, they move onto the next times table.

Once they have completed the 12x table, children move onto 'Mixed tables' and 'Division facts' before finally reaching a 'Speedy Challenge' if working at Greater Depth.

Children are given a bookmark to colour in as they progress through the times tables.

The first sheet:

Name: _____ 10X Table Questions Date: _____

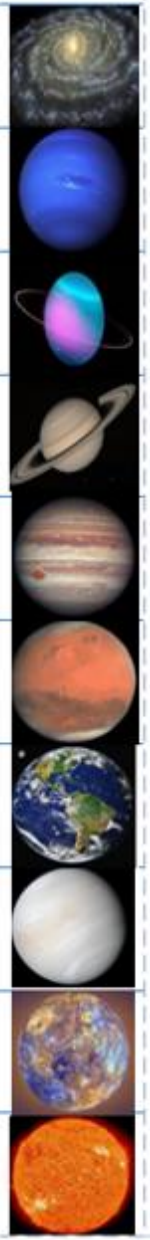
10 x 0	10 x 5	10 x 10	10 x 12	10 x 1	10 x 7	10 x 7	10 x 12	10 x 3
10 x 2	10 x 9	10 x 6	10 x 3	10 x 6	10 x 4	10 x 9	10 x 2	10 x 5
10 x 8	10 x 7	10 x 0	10 x 11	10 x 5	10 x 8	10 x 10	10 x 8	10 x 9
10 x 3	10 x 11	10 x 12	10 x 7	10 x 12	10 x 0	10 x 12	10 x 1	10 x 2
10 x 10	10 x 1	10 x 8	10 x 7	10 x 4	10 x 11	10 x 6	10 x 4	TOTAL

The final speedy challenge:

Speedy Tables

X	5	4	12	1	11	3	6	10	2	9	7	8
4												
11												
3												
1												
9												
6												
2												
8												
7												
10												
5												
12												

X7	The universe!
X12	Milky Way
X9	Neptune
X6	Uranus
X11	Saturn
X8	Jupiter
X4	Mars
X3	Earth
X5	Venus
X2	Mercury
X10	Sun



How can you help your child to learn their times tables?

We begin by looking at groups of in Year 2 so that children understand what multiplication is before we teach facts.

When teaching a new multiplication, we always begin with physical objects to make groups and by drawing pictures. This is to make sure that children understand the concepts behind multiplication and skip counting.

Once children understand this, focus on learning the multiples in order, but can they also notice them out of order?

Practise chanting the times tables sentences in order: 1 x 2 = 2; 2 x 2 = 4.

Discuss which multiples are 'easy' and why. Use doubling and inverse of known facts.

Rhymes and songs

5,6,7,8… 56 is 7x8.

Wakey wakey rise and shine, seven sevens are 49!

I ate and I ate ‘til I was sick on the floor, eight eights are 64.

6 times 6 is 36, now go outside to pick up sticks.

6 times 7 is 42, and don’t forget to tie your shoe.

Could they make up their own rhymes?

Helpful tips and tricks

Times Table	Hint
2 x table	Answer is always double the given number
3 x table	Answer always adds up to 3, 6 or 9
4 x table	Answer is double, then double again
5 x table	Answer always ends in 5 or 0
9 x table	Answer always adds up to 9*
10 x table	Answer is always sequence number with 0 on the end
11 x table	Answer is always repeat digits**

* Rule doesn't apply to 11 x 9
** Rule doesn't apply to 11 x 11 and 11 x 12

A recap of ideas for learning times tables

Practise chanting AND writing them out.

Try the inverse 12 x 12 = 144 so 144 ÷ 12 = 12

Missing boxes! 6 x ___ = 24

The answer is … what is the question?

Be careful not to reinforce any misconception that multiples stop at 12x!

Independent practice

- Children are expected to practise their known times tables on TT Rock Stars when at home.

- They can also play Hit the Button to practise the specific times table that they are learning. https://www.topmarks.co.uk/maths-games/hit-the-button

- And U R Brainy once they know up to 12 x 12. https://urbrainy.com/mtc/test