

Times Tables Policy

Ledbury Primary School



Approved by: Sue Box and Catriona Cole

Date: September 2022

Last reviewed on: September 2022

Next review due by: September 2023

Rationale Understanding and good recall of number facts such as multiplication tables are considered to be essential precursors for learning traditional vertical algorithms (methods) for multiplication and division. Lack of fluency with multiplication tables is a significant impediment to fluency with multiplication and division. (Ofsted 2011)

Progression

Year group	Number objectives
1	Count in multiples of 2s, 5s and 10s
2	Count in steps of 2,3 and 5 from 0 and in 10s from any number forward or backward Recall and use multiplication and division facts for the 2,5 and 10 multiplication tables
3	Count from 0 in multiples of 4,8, 50 and 100 Recall and use multiplication and division facts for the 3,4 and 8 multiplication tables
4	Count in multiples of 6,7,9, 25 and 1000 Recall multiplication and division facts for multiplication tables up to 12x12
5	Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 Recognise and use square numbers and cube numbers and the notation for square and cubed
6	Continue to revise multiplication tables up to 12x12 and squared/cubed numbers.

Organisation

In year 1, children will continue their learning from EYFS and will be encouraged to count in groups of 2, 5 and 10 from 0 as well as other given numbers.

In year 2, children will begin learning and practising formal multiplication tables for the 2,5 and 10 times tables. It is essential that children are taught the multiplication and division facts together, understanding the commutative law, and that they are able to recall all four facts for each multiplication table they learn (eg $2 \times 5 = 10$, $5 \times 2 = 10$, $10/2 = 5$, $10/5 = 2$).

The expectation is that by the end of KS1, children will be fluent in the recall of the 1,2,5 and 10 multiplication tables (up to $12 \times$ a given number). This represents 30 new calculations.

In year 3, children will learn the 3, 4 and 8 multiplication tables (up to $12 \times$ a given number). This represents 19 new calculations.

In year 4, children will practise the remaining times tables (17 new calculations). Year 4 children will be expected to take the national Multiplication Tables Check so it is essential that early intervention takes place for any children who need it; this should include working with parents.

The expectation is that by the end of LKS2, children will be fluent in the recall of all multiplication and division facts up to 12×12 and be well prepared for the Multiplication Tables Check.

In year 5 and 6, children will continue to practise multiplication and division facts up to 12×12 and will be taught to recognise squared and cubed numbers (and notation). The expectation is that by the end of KS2, children will be fluent in the recall of all multiplication and division facts up to 12×12 and will be able to apply these in all areas of mathematics, including the manipulation of these facts with varying place values.

At all stages parents should be encouraged to work with their child on multiplication tables at the appropriate level. Interventions need to be planned in order for all children to meet the required level and parents need to be involved.

Strategies for teaching and learning in multiplication tables

- Before learning tables, children need to understand times tables in context – a variety of concrete and pictorial resources will be required to see grouping objects as repeated addition. Resources such as numicon, diennes, multi-link cubes, real objects to group and count, arrays of pictures and number link boards will be used.
- The school has class sets of Funkey Maths Times Tables Cards and these should form the basis for learning times tables. These will encourage children to make links when working multiplicatively; if they are familiar with the 2 times table, then they should be encouraged to think about how this will help them with their 4 times table. If they know the facts for the 4 times tables they should link this to knowledge of division by 4
- Correct mathematical language will be introduced where appropriate – children will learn that a number in the 3 times table is referred to as a multiple of 3. Any number that is divisible by 3, producing a whole number answer, is referred to as a multiple of 3.
- Variation – children will be encouraged to look at different ways to represent a table (eg 2×3 is the same as 3×2) – becoming aware of the commutative law as well as being able to see multiplication as repeated addition in KS1.
- It is essential that children are able to rapidly recall learned multiplication facts so in addition to teaching them, children should practise regularly. This may be to music, with actions, using a counting stick or bead bars, Funkey Times Tables Cards etc..
- As they progress through the school, deeper variation should be encouraged in the way children express times tables facts. For example 5×10 is also $(2 \times 10) + (3 \times 10)$. Children should be able to draw on other areas of maths (such as the use of brackets).
- As children become more confident, they should make links between place value and times tables facts. For example, if they know 3×4 is 12, they can calculate 30×4 as being 120.
- Once learned, children should continue to practise times tables facts in a variety of ways. This will include chanting, playing games where they must identify multiples (such as fizz buzz) and applying their tables facts in reasoning/ problem solving situations.