

Learning Multiplication Facts at WBJS 'Making it stick'

Year 3 and 4

Why is learning times tables so important?

There are many benefits to children being able to quickly recall their tables facts:

- It is an essential building block in maths, and opens the door to multi-digit multiplication, long division, simplifying fractions, and algebra
- It makes mental arithmetic easier, helps children understand number and number relationships, and see patterns in numbers
- It is fundamental to many maths topics and frees up working memory to develop reasoning skills and calculate at a higher level
- It makes it far quicker and easier for children to work out maths problems in their heads, and move beyond using their fingers to work out answers

What are multiplication facts and how is this different to times tables?

Multiplication facts go beyond just being able to recall times table facts and instead explore the patterns and relationships in multiplication.

We want children to be able to recall that

$$7 \times 4 = 28 \text{ (times tables)}$$

but to also eventually know:

- commutative and inverse facts,

e.g. $4 \times 7 = 28$ and $28 \div 7 = 4$

- mini and mega facts,

e.g. $70 \times 4 = 280$ and $0.7 \times 4 = 2.8$

- the distributive law,

e.g. $(5 \times 4) + (2 \times 4) = 7 \times 4$

- related facts,

e.g. 4×7 is the same as $(5 \times 7) - 7$

These can only be learnt once times tables have been committed to long term memory.

How do we teach multiplication facts at WBSJ?

We have a number of different approaches to the teaching of multiplication in school. Strategies for multiplying and exploring patterns in multiplication are taught during our maths lessons in each year group. Times tables are introduced progressively working towards children knowing their tables to 12 x 12 by the end of Year 4. We know this is not always the case for every child so continue to teach times tables in Year 5 and 6. However, the focus changes to the exploration of multiplication facts when children are ready to do so.

At the start of each half term, there is an introductory maths lesson which explores one specific times table. This times table will be the same in every class in that year group and will change every half term. There is also 2 or 3 short planned opportunities throughout the week where children will rehearse that times table through games, songs and interactive activities. We think this rigorous approach, together with practise of times tables at home, will allow children to secure the key knowledge they need in this area by the time they leave us in Year 6.

Year 4 Multiplication Tables Check

During the summer term in Year 4, your child will take part in the multiplication tables check which was introduced by the government to determine whether your child can fluently recall their times tables up to 12. There is no pass mark for this test and data is not published. The test is an online check which is administered in school by your child's class teacher. It consists of 25 questions. They have 6 seconds to answer each question.

For more information, search for "Multiplication tables check: information for parents" on the gov.uk website or follow the link below:

[Multiplication tables check: information for parents \(text version\) - GOV.UK \(www.gov.uk\)](https://www.gov.uk/multiplication-tables-check-information-for-parents)

Learning times tables at home

TT Rock stars

The school buy into the TT rock stars online program which offers every pupil a learning experience tailored to their needs. If used regularly, the algorithm within the program changes the tables facts to those that the children know less well allowing them to gain additional practise in the areas they need it.

At WBJs it is an expectation that all children will spend 15 minutes on TT rock stars at home in Year 3 and 4 each week. Teachers are able to access information about individual pupil use and will closely monitor this. Children who complete their 15 minutes will be awarded dojo points by their class teacher.

What else can I do?

There are a number of other ways that you can teach times tables at home if you feel your child needs additional practise. There are many online resources, worksheets and ideas that can be found just by searching for the particular times table they may need to work on.