

Expectations for Time Tables

What we do

At Staverton we use the Wiltshire Time Tables Challenges to teach times tables. This is taught in Year 2 (from T4), throughout Key Stage 2 and as an additional intervention in Years 4 and 5.

The scheme focuses on teaching children 45 core times table facts and 21 'red' facts that are taught towards the end of Year 4 and consist of the 11x and 12x table facts (see below). From Term 4 of Year 2, children learn the 2x, 5x and 10x tables.

Year 2 (from T4)			Year 3			Year 4		
2x	10x	5x	3x	4x	8x	6x	7x	9x
2 x 2								
3 x 2	10 x 3	5 x 3	3 x 3					
4 x 2	10 x 4	5 x 4	4 x 3	4 x 4				
5 x 2	10 x 5	5 x 5						
6 x 2	10 x 6	6 x 5	6 x 3	6 x 4	8 x 6	6 x 6		
7 x 2	10 x 7	7 x 5	7 x 3	7 x 4	8 x 7	7 x 6	7 x 7	
8 x 2	10 x 8	8 x 5	8 x 3	8 x 4	8 x 8			
9 x 2	10 x 9	9 x 5	9 x 3	9 x 4	9 x 8	9 x 6	9 x 7	9 x 9
10 x 2	10 x 10							
9 facts	8 facts	7 facts	6 facts	5 facts	4 facts	3 facts	2 facts	1 fact

Year 4									
11 x 2	11 x 3	11 x 4	11 x 5	11 x 6	11 x 7	11 x 8	11 x 9	11 x 10	11 x 11
12 x 2	12 x 3	12 x 4	12 x 5	12 x 6	12 x 7	12 x 8	12 x 9	12 x 10	12 x 11
									12 x 12

Core facts are those times tables that are frequently used in formal written methods of multiplication and division. As these are more regularly applied in other areas of maths, they are the main focus of times table teaching. 11x and 12x tables facts (red facts) are taught last as they are not used when completing written methods of multiplication and can be derived if needed.

Children learn the tables facts in one way: largest number first. They are then taught that by using the commutative law and inverse operations, they are able to find additional multiplication and division facts. In this way, the number of new

facts children learn across years 2, 3 and 4 reduces as they progress through the scheme, enabling children to practice, rehearse, revise and apply the facts they have previously learnt.

Why we do it

We believe that times tables are vital tools to enable children to progress with their maths. By developing a solid knowledge of times tables facts, children are able to solve mathematical problems in other areas such as division, formal written methods, fractions, decimals, percentages and ratio.

The overlearning aspects of times tables also enable children with special educational needs to retain facts better and access the same learning as their peers.

What that looks like

- All children learn the same table at the same time, including children with SEND.
- Tables are learnt as a memorised phrase by repeating the sound pattern out loud – We use the phrase: 'two twos are four', 'nine fours are 36' in order to reduce the number of syllables being said.
- Tables facts are learnt largest number first e.g. $5 \times 6 = 30$, $3 \times 2 = 6$. Children are taught the commutative law and that by learning the table one way round, they are actually able to derive two division facts and an additional tables facts – free facts.
- Lessons are 10 minutes long and happen daily. They are broken down into sections:
 - Revise – recap previously learnt facts
 - Teach – learn a new tables facts
 - Apply – use the new fact to identify the 'free facts' e.g. inverse division facts and the commutative facts.
 - Practice – 2 minute practice test consisting of 40 questions

- Assess – orally marking practice test and identifying progress and next steps.
- When completing the practice test, children must answer the questions in order, going down the first column and then down the second column. Questions may not be skipped.
- When marking the test, the teacher will display the questions on the board. Children mark their own tests in a different colour. The teacher will call out the table fact for each question (largest number first regardless of the order of the numbers in the test). The children chant the fact back to the teacher. All children are expected to join in. The teacher will write the answer on the board to help those that have not yet secured the commutative law.
- For division facts, the teacher will call out the table fact (largest number first) and the children will chant back. The answer to the division will be written on the board for those that have not yet secured knowledge of the inverse.
- The times table that is being learnt is displayed prominently in the classroom at all times – even when taking the daily test. Tables are displayed largest number first and include the facts for 10x, 11x and 12x even if these are not yet being taught.
- Children are encouraged not to derive the core times table facts there are unsure of. These will be identified and given as additional practice outside of the session through the use of flashcards, games and other media.
- When trying to recall a fact, say are encouraged to say the WHOLE number sentence out loud and see if the answer trips off your tongue.
- One new tables fact is taught at a time. Once a fact is learnt, the flashcard is added to the pack of learnt facts to be kept active at other points in the school day.
- Facts that are actively being learnt and those that have previously be learnt will be 'kept alive' through flashcards (green core facts and red 11x and 12x tables facts), chanting etc during other times of the day e.g. when lining up, PE, on the playground etc.

Times Tables outside of daily sessions

In addition to daily sessions, times tables are also taught in weekly Maths lessons each Friday in Years 2, 3 and 4.

Year 2

In Year 2, children will be taught skip counting. Initially this will be in steps of 2 but will progress to steps of 5 and 10. These lessons allow children to prepare for the introduction of formal times table sessions in term 4 and will then allow them to practice the skills they have learnt.

Year 3 and 4

Year 3 and 4 will focus on times table knowledge and practice. Different methods will be used to allow children to continue to develop their knowledge of times table facts and improve the speed of their recall.

Year 5 and 6

Year 5 and 6 will carry out a weekly arithmetic lesson. This focuses on all four operations and allows children to continue to practice the skills they have learnt in Maths lessons as well as times table sessions.

Additional practice at home

Times Table Rockstars is also used to allow children to continue to practice their times tables at home.

Assessment of times tables

At the start of Year 3, children will be assessed using the Magic 57 baseline assessment. This will allow teachers to see which of the facts taught in Year 2 have been retained and those that need to be targeted. This assessment will be repeated throughout KS2.

In Year 4, children will be assessed weekly using the Purple Mash assessment tool. From this assessment, those children who are not yet secure in their 2x, 5x and 10x table, will take home three times table facts to practice. They will also receive

additional support through an intervention outside of the daily times table session. Other learners, will take home a whole times tables to practice each week.

In Years 3, 5 and 6, assessment points are built into the learning sequence and regular points. These assessments will allow teachers to individually target tables facts that are a weakness for each child. Children in Year 5 who are receiving ongoing times table intervention will take home a whole times table to practice each week.

Useful resources

Below is a list of suggested resources for teaching times tables. This is not an exhaustive list and other resources may be used providing they follow our 'largest number first' format.

- Large Times table grids – should be up in every classroom
- Mini times table grids
- Numicon
- Multilink
- Counting sticks
- Rekenrek
- Times table flashcards
- Purple Mash times table assessments (custom and assessment mode)
- TT Rockstars
- Small objects for grouping and counting
- Wiltshire Bare Necessities resources
- Wiltshire 27 resources
- Mathematical challenges for able pupils resources
- NCETM website
- Nrich website
- Maths No Problem