

Supporting your child with Times Tables

Why do children need to learn Times Tables?

Times tables are really important because they form the foundation for knowledge in so many different aspects of mathematics including multiplication, division, fractions, percentages, word problems, measurement and even algebra. Solid knowledge of tables and instant recall of times table facts supports children in their learning across the key stages and helps them to make better progress.

Children who do not have good recall of times tables often find that other areas of maths are hard to understand, which can result in them falling behind. Times table knowledge is also an essential life skill and will support pupils in everyday problem solving e.g. calculating a shopping bill, doubling a recipe or converting a measurement.

Being able to recall the times tables and related division questions accurately within 3 seconds indicates that a child has 'mastered' the times tables.

National expectations for times tables for each year group:

Year 1:	Count in multiples of 2, 5 and 10. Recall and use doubles of all numbers to 10 and corresponding halves.
Year 2:	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.
Year 3:	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
Year 4:	Recall multiplication and division facts for multiplication tables up to 12×12 .
Year 5:	Revision of all times tables and division facts up to 12×12 .
Year 6:	Revision of all times tables and division facts up to 12×12 .

To help your children learn their times tables you can download and print the Times Tables Booklet and the Times Tables Grids. There is also a list of games you could play together below.

Are times tables learned in a particular order?

Children begin to learn the easiest tables first, which are the 2x and 5x and 10x times tables. When learning the 2x tables and the inverse nature (division), this is often related to doubling and halving.

Once these tables have been learnt, it continue with the tables listed as above e.g. the 3x, 4x and 8x. When working with your child, remind them that the 4x tables is double the 2x tables and 8x tables is double the 4x tables. It is then best to try the 6 x, 7x and 9 x tables, which are generally regarded as more difficult.

The 11x and 12 x tables will then be learned last and separately. Children usually find the 11x table easy because of its pattern e.g. $1 \times 11 = 11$, $2 \times 11 = 22$, $3 \times 11 = 33$.

Times Tables Language

There are many different ways to say the times tables and it is good for children to hear a range of sentences. However, it helps if you are consistent and adopt the language your child already uses at school. Examples include:

- two times eight is . . .
- two multiplied by six is ...
- two eights are . . .
- two lots of four are . . .
- what is four divided by two?
- how many twos in four?

Do not encourage your child to memorise times table answers alone e.g. 2,4,6,8 because this does not help them understand the relationship between the numbers when they later come to learning division facts e.g. $2 \times 2 = 4$, $4 \div 2 = 2$, or when solving word problems.

Which methods should I use?

- Begin with one times table at a time to minimise confusion
- Start by chanting them together and writing them out slowly in order
- Move onto completing the answers quickly in order - on paper or verbally with your child
- Finally, move on to completing the answers in a random order
- Remind your child that 5×4 is the same as 4×5 and they will often know the times table fact from their knowledge of another table
- Once your child is more confident, look for and learn square numbers e.g. 5×5 , 7×7 (see the coloured numbers in the tables grid)
- Talk about times table answers in relation to real life
e.g. "35 (7×5) – that's my lucky number," " $5 \times 8 = 40$ that's Mummy's age", " $5 \times 6 = 30$ that's our house number." This will help them to memorise
- Try some of the times table games listed below.

Tips and Tricks

- Remember the 2s, 4s and 8 times tables are doubles of each other, with many common answers e.g. $2 \times 8 = 16$, $4 \times 4 = 16$, $8 \times 2 = 16$

- For the nine times table, remind your child that the answer will be 10x the number, take away the number e.g. $9 \times 6 = 54$ ($10 \times 6 = 60 - 6 = 54$).
- With a tricky times table e.g. 7x remind your child they already know many table facts from other times tables e.g. $7 \times 4 = 28$, $7 \times 3 = 21$
- Regular practise is key. Ask questions in order, out of order, include multiplication and division facts, anytime and anywhere!

Times Tables Games

Multiplication Snap 1

You will need a pack of cards for this game. Flip over the cards as if you are playing snap. The first person to say the fact based on the cards turned over (a 2 and a 3 = 6) gets the cards. The person who has the most cards at the end is the winner.

Multiplication Snap 2

Take a pack of playing cards and remove all the picture cards including the aces. Then shuffle the pack and split it into 2 piles - one for you and one for your child.

Choose a times table to work with e.g. 5 x table. Like **Snap**, each person deals a card and the learner has to work out 5 x the number dealt. If they get it right they keep the card, if they get it wrong the dealer gets to keep them. When you are taking your turn, ask the child if you have got the answer right. You could try giving an incorrect answer to test their knowledge!

In order to speed up the recall of times tables, you can also introduce a speed requirement e.g. gradually decrease the answer time when the learner is ready, for example, "Answer before 5/3 seconds or the dealer wins!"

Alternatively, each player can deal a card at the same time and players can take it in turns to multiply the numbers together.

You can also remove some "easier" cards (e.g. 2, 3, 5, 10) from the pack if you want to focus on the harder times tables. If you want to extend the activity, use the Jack card as 11 and the Queen card as 12 to introduce the 11 and 12 times tables.

Times Table Games with Dice

Practice tables up to 6x6 using two normal dice. Throw the dice and ask the learner to multiply the numbers together. This activity can be extended up to the 10 x table using a 10 sided dice.

In order to improve the speed of recall, roll the dice quickly and gradually reduce the time allowed so that answers are given within a couple of seconds.

Fizz Buzz

Fizz Buzz can be played during situations like a car journey or when out on a walk. The idea is to choose two times tables, e.g. the 3's and the 5's. Within your group, take it in

turns to start counting and when you come to a number from the 3 times table say FIZZ. When you come to a number from the five times table say BUZZ eg:

1, 2, FIZZ, 4, BUZZ, FIZZ, 7, 8, FIZZ, BUZZ, 11, FIZZ, 13, 14, FIZZ BUZZ, 16

This game can be practiced with any combination of times tables.

Buzz (simplified version of Fizz Buzz)

Choose one times table and play Buzz – saying Buzz instead of the multiples of the times table you are using. If a player forgets to say Buzz or says it at the wrong time, he or she is out. Continue until the players reaches the last multiple of the number times 10.

Hands Up!

This is a game for two players. This is played like ‘rock, paper, scissors’ but with numbers. Two players count to 3 and then make a number using their fingers. Both players then have to multiply both numbers together. The one who says the answer quickest is the winner.

Rhymes/ Mnemonics

Silly rhymes can help children to learn tricky times tables facts. Your child can make up their own for add fun.

e.g.

$8 \times 8 = 64$ He ate and ate and was sick on the floor, eight times eight is 64 OR I ate and ate till I fell on the floor!” 8×8 is 64

$7 \times 7 = 49$ Seven times seven is like a rhyme, it all adds up to 49. 4.

One less = nine This is a strategy for learning the 9 times tables. The key is that for any answer in the nine times tables, both digits in the answer add up to 9.

E.g. Subtract 1 from the number you are multiplying so if its 7×9 , one less than 7 is 6. This number becomes the first number in the answer so $7 \times 9 = 6_$. The two numbers in the answer add up to 9, so if the first digit is 6, the second digit is 3 because $6 + 3 = 9$.

Bingo

This game will need two players. Make a grid of six squares on a piece of paper and ask your child to write a number in each square from their target tables. Give them a question and if they have the answer they can cross it off. The first person to mark all their numbers off is the winner.

Speed tables

Time challenges can be a good way of helping times tables become automatic. Some ideas include:

- Time how long it takes to write out a times table, then try to beat that time.
- See how many times table facts from the target times tables can be written in one minute.
- Races against other people at home.

Flashcards

Create your own times tables flashcards. Write the question on the front and the answer on the back, this way the child can use them on their own and check the answers on the back.

Move It!

Children can use their bodies to learn their tables! Decide on a physical movement that represents $1x\dots$, $2x\dots$, $3x\dots$ etc and the children then run through this routine as they chant their tables. E.g. $1x\dots$ could be the left shoulder up, $2x\dots$ the right shoulder up, $3x\dots$, the left shoulder down, $4x\dots$ the right shoulder down, $5x\dots$ stretch the arms out in front and wiggle the fingers! Etc.

Beat your partner

Your topic could be a multiplication table. Two players needed. They stand with their backs to each other. Ask the pair a question - whoever knows the answer s/he turns around, gives the answer. The winner can then choose somebody else to play against. This is a good way of practising multiplication facts and can be differentiated to suit the children that are playing each question.

Record it

Make a recording of you saying the times tables to help your child learn. You can even have your child do it on their own as they may learn faster if they hear their own voice.

Times Tables Table Tennis

Each player holds a tennis bat that is imaginary aiming to get to the next number in the times tables before striking the imaginary ball.

Look for patterns

Being able to spot patterns in numbers is an important skill and can also help with learning times tables. Children can investigate the following rules:

Odd number \times odd number = odd number (E.g. $3 \times 5 = 15$)

Even number \times even number = even number (E.g. $4 \times 6 = 24$)

Odd number \times even number = even number (E.g. $3 \times 6 = 18$)

Tricky Sixes

Six times tables can be difficult to learn. One trick is that in the 6 times tables, when you multiply an even number by 6, they both end in the same digit.

$2 \times 6 = 12$, $4 \times 6 = 24$, $6 \times 6 = 36$, $8 \times 6 = 48$