

Bourne Westfield Primary Academy's Parents' Guide to Times Tables.



**Help your child to
achieve their best in
mathematics.**

Top Times Table Hints

It may seem a daunting task to learn so many multiplication facts, but because of the commutative property of multiplication, there are fewer facts than you may think. For example, 3×4 and 4×3 give the same answer so you need to only learn this once.

Zero Times Table Anything multiplied by zero will always equal zero. Multiplication is repeated addition so 3×0 is $0 + 0 + 0$, which equals 0.

One Times table Any number multiplied by one is itself.

Two Times Table Any number multiplied by two is double the number.
 $7 \times 2 = 14$ $7 + 7 = 14$ double 7 is 14

Three Times Table Digits within this times table add up to multiples of 3. For example: 3, 6, 9, 12 ($1+2=3$), 15 ($1+5=6$), 18 ($1+8=9$) 21 ($2+1=3$), 24 ($2+4=6$) etc. The numbers also follow the pattern of: odd, even, odd, even (3,6,9,12).

Four Times Table The four times table is double the two times table.
 $4 \times 2 = 8$, $4 \times 4 = 16$, 16 is double 8. Alternatively the fours can be thought of as double double. So double 3 (6) and double again (12) is the same as $3 \times 4 = 12$.

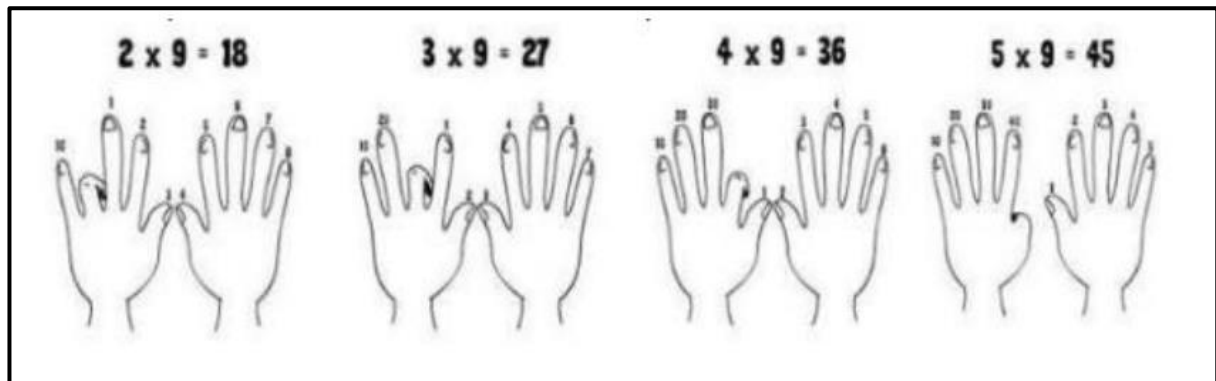
Five Times Table All multiples of 5 end in five or zero. For even numbers (e.g. 8×5) you can halve the number (4) and then put a zero after it (40). For odd numbers (e.g. 7×5) you can subtract one from the number (6), halve it (3) and then put a 5 after it (35). Any odd number times 5 ends in a 5. Any even number times 5 ends in 0.

Six Times Table The six times table is double the three times table. So $5 \times 3 = 15$, $5 \times 6 = 30$, 30 is double 15.

Seven Times Table Combine the 5 and the 2 times table: $7 \times 4 = 28$
or $(5 \times 4) + (2 \times 4) = 28$

Eight Times Table The eight times table is double the four times table. So $7 \times 4 = 28$, $7 \times 8 = 56$, 56 is double 28. The units in the multiples of eight also go down in twos. 8, 16, 24, 32, 40, 48, 56, 64, 72, 80 (8, 6, 4, 2, 0, 8, 6, 4, 2, 0).

Nine Times Tables Fingers can be used to work out the nine times table up to 10×9 . The first finger is put down for 1×9 and the remaining fingers show 9 units ($1 \times 9 = 9$). Then the second finger is put down for 2×9 and the remaining fingers show 1 ten (to the left) and 8 units (to the right) which equals 18, and so on.



Ten Times Table All the digits in the ten times table end in zero.

Eleven Times Table Most of the multiples in the eleven times table are recalled by putting two of the number side by side. $7 \times 11 = 77$, $8 \times 11 = 88$.

Twelve Times Table The units in the twelve times table go up in twos. 12, 24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144 (2, 4, 6, 8, 0, 2, 4, 6, 8, 0). The multiples of 12 are also the multiples of 10 and the multiples of 2 combined.

Learning Tables

SUPERFINGERS

This is a game for two players.

The game is basically a version of 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 and the quickest wins.

player 1

player 2



MULTIPLICATION SNAP

You will need a deck of cards for this game



Flip over the cards as though you are playing snap. The first person to say the correct fact based on the cards turned over (a 2 and a 3 = say 6) gets the cards. The person with the most cards at the end wins.

ANOTHER VERSION OF MULTIPLICATION SNAP

Using a deck of cards. When focussing on a particular times table then place that card face up e.g. 7. The rest of the pack is face down. Flip the top card over and multiply e.g. 3×7 . The first person to say the answer gets the card. If the answer is wrong put the card to the bottom of the pile. The person with

DOMINOES

Each player turns over a domino and multiplies the two ends together.



FORTUNE TELLERS

Make a fortune teller with the times table on it.



BINGO

This game will need 2 players and an adult to ask you the questions. Make a grid of six squares on a piece of paper and write a number in each square from your target tables. Get an adult to ask you some questions. If you have the answer mark it off on your grid. The first player to mark off all their numbers is the winner.



SPEEDY TABLES

Time challenges can be a really good way of helping times tables become automatic.

- Measuring the time it takes to write the tables, then trying to beat the time.
- How many times can you write a particular times table in 1 minute?
- Using a pack of cards with the king removed. The jack = 11 and the queen = 12. Focus on a particular table. Turn over the cards one at a time. Multiply that number by your focus times table and call out the answer. How quickly can you get through the whole pack? Can you beat your time?

COUNTING UP, COUNTING DOWN

Use your stairs. Every time you go up a step say a multiple. Say it backwards when coming down. E.g. for the 4 times table count 4,8,12,16 etc. on the way up and count 48, 44, 40, 36 etc. on the way down.



OUTDOOR TIMES TABLES

- Use twigs, pebbles, cones, leaves to make arrays.



- Play times table hopscotch. Try it with division!
- Play target maths for the tricky tables you find hard to learn.
- Bounce a ball/ skip/ star jump/and say your times tables or count in multiples of the one you are learning.



SING A SONG OF TABLES

Singing tables can be a really good way for you to learn your tables. Most books shops and toy shops will have CDs of times table songs that the children can sing along to, or you could always make up your own to a known tune!



RHYME TIME

Silly rhymes can help children learn tricky tables, e.g.

$8 \times 8 = 64$ He ate and ate and was sick on the floor, eight times eight is 64.

$3 \times 3 = 9$ Swing from tree to tree on a vine, three times three is nine.

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

DOUBLE, DOUBLE

A quick trick for learning the fours is just to double double. Double the number and then double it again.

TRICKY SIXES

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

$$\begin{array}{r} 2 \times 6 = 12 \\ 4 \times 6 = 24 \\ 6 \times 6 = 36 \\ 8 \times 6 = 48 \end{array}$$

LOOKING FOR PATTERNS...

Being able to spot patterns in numbers is an important skill and can also help with learning times tables. You can investigate these multiplication 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. $3 \times 6 = 18$

9 TIMES TABLE ON YOUR FINGERS

Hold your fingers in front of you with your fingers spread out.

For 9×4 bend your 4th finger down (like in the picture). You have 3 fingers in front of the bent finger and 6 after the bent finger. Thus the answer must be 36!



The technique works for the 9 times table up to 10.

ONE LESS = NINE

This is a strategy for learning the $9 \times$ table. The key to it is that for the answer in the nine times table, both digits add up to 9. Try it and see!

Subtract 1 from the number you are multiplying by. E.g. 7×9 , one less than 7 is 6.

This number becomes the first digit in the answer. $7 \times 9 = 6_$

The two digits in the answer add up to 9 so the second digit must be 3.

$7 \times 9 = 63$

FLASH CARDS

Use flashcards to practise the facts out of order. They could also be stuck around the house to help you learn the tricky ones!



TIMES TABLES ON A KEYRING

Make a keyring with all the times tables on them. You can add to it as you have more to learn.

10X

You need to be confident when multiplying by 10 and 100. The short cut of adding 0 does not work for multiplying decimal numbers so it is best not to use this. Multiplying by 10 makes the number ten times bigger. Learn the rule that to multiply by 10 we move the digits one place left and to divide by 10 we move the digits one place to the right.

POSTER TABLES

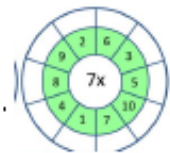
Make a tables poster for your bedroom. Decorate it and use colours to help you remember the ones you find tricky.

CIRCULAR TABLES



Make a circular table and complete the answers. Time yourself. Try to beat your time next time you do it.

When you can do it in order try mixing up the numbers.



CIRCULAR DIVISION

Put the table you are learning in the centre. Put the multiples around the outside (mixed order!) then work out the missing numbers.

FACT FAMILY

Learn the relationship between multiplication and division. You should learn that $6 \times 3 = 18$, $3 \times 6 = 18$, $18 \div 3 = 6$, $18 \div 6 = 3$. Make a set of cards e.g. 18, 6, 3. Ask an adult to cover one card and then you have to explain the relationship.

What is 3 multiplied by to give 18?

How many 6s in 18?

What is 18 divided by 3?

For older children: use this knowledge to look at related facts of e.g. 30, 60, 180



FIZZ BUZZ (if you have older siblings this works well)

Count around in a group with each person taking it in turns so say the next number. Count again, but instead of saying the number you have to say fizz instead of the multiples of 5. For example 1,2,3,4, fizz,6,7,8,9, fizz. Repeat this time saying buzz for multiples of 3. A challenge is to say fizz for the multiples of 3 and buzz for the multiples of 5, e.g. 1,2,fizz,4,buzz, 6,7,8,fizz, buzz, etc. What do you say for 15? This game can be adapted for other multiples.



<u>Times table with fact family reversal</u>	<u>Rhyme</u>
4 x 12 and 12 x 4	<ul style="list-style-type: none"> • At the park with my mate... 4 times 12 is 48 • I left the park a little late... 12 times 4 is 48
11 x 11	<ul style="list-style-type: none"> • Fancy going for a run... 11 times 11 is 121
7 x 8 and 8 x 7	<ul style="list-style-type: none"> • My house is made of bricks... 7 times 8 is 56 • This old house needs a fix... 8 times 7 is 56
4 x 6 and 6 x 4	<ul style="list-style-type: none"> • Please sir, can I have some more?... 4 times 6 is 24 • More made my belly sore... 6 times 4 is 24
7 x 7	<ul style="list-style-type: none"> • This one's my favourite rhyme... 7 times 7 is 49
8 x 9 and 9 x 8	<ul style="list-style-type: none"> • Get in line, there's a queue... 8 times 9 is 72 • This long line will not do... 9 times 8 is 72
8 x 8	<ul style="list-style-type: none"> • I ate and ate 'til I was sick on the floor... 8 times 8 is 64
9 x 12 and 12 x 9	<ul style="list-style-type: none"> • Saving the world is our fate... 9 times 12 is 108 • A beautiful world we'll create... 12 times 9 is 108
6 x 7 and 7 x 6	<ul style="list-style-type: none"> • Fancy a trip to the zoo? 6 times 7 is 42 • At the zoo, I saw elephant poo... 7 times 6 is 42
6 x 8 and 8 x 6	<ul style="list-style-type: none"> • At the doctor's, I had a long wait... 6 times 8 is 48 • The doctor said her name was Kate... 8 times 6 is 48
6 x 12 and 12 x 6	<ul style="list-style-type: none"> • Above the clouds, the bird flew... 6 x 12 is 72 • The bird had an amazing view... 12 times 6 is 72
4 x 7 and 7 x 4	<ul style="list-style-type: none"> • Zooming down, I roller-skate... 4 times 7 is 28 • Hurtling down towards the gate... 7 times 4 is 28
12 x 12	<ul style="list-style-type: none"> • What's that running past the door? 12 times 12 is 144
8 x 12 and 12 x 8	<ul style="list-style-type: none"> • I saw a magician doing tricks... 8 times 12 is 96 • This magician had walking sticks... 12 times 8 is 96
6 x 9 and 9 x 6	<ul style="list-style-type: none"> • Digging down to the core... 6 times 9 is 54 • I had to dig more and more... 9 times 6 is 54
4 x 8 and 8 x 4	<ul style="list-style-type: none"> • Where's my car? It's brand new... 4 x 8 is 32 • This car is shiny blue... 8 times 4 is 32
7 x 12 and 12 x 7	<ul style="list-style-type: none"> • Chicken tastes great, that's for sure... 7 times 12 is 84 • Scrumptious chicken, I want more! ... 12 times 7 is 84
11 x 12 and 12 x 11	<ul style="list-style-type: none"> • Is that the train leaving for Crewe? ... 11 x 12 is 132 • Before the train, let's grab a brew... 12 x 11 is 132

Useful websites and games for practising times tables.

Times tables rock stars (log in at front of Learning Journal)

<https://play.ttrockstars.com/>

Purple Mash (log in at front of Learning Journal)

<https://www.purplemash.com>

Search: Monster Multiplication

Top Marks www.topmarks.co.uk

Search 'times tables'. Possible games: Hit the button, Mental maths train, Coconut

multiples, Fishy times tables, Tommy's Trek, Super maths bowling multiplication,

Carroll Diagrams - multiples, Daily 10, Dartboard multiplication, Tables teaser and

many more...

ICT games www.ictgames.com

Click 'Maths games'. Scroll to 'Multiplication and division'. Games include: Times

tables tennis, Bunny battlefront, Pop n drop, Times tables truckers, Tug of war, Array

display.

Timestables.co.uk <https://www.timestables.co.uk/games/>

Multiplication.com <https://www.multiplication.com/games/all-games>

Meteor multiplication <https://www.arcademics.com/games/meteor>

<https://tablestest.com/>

https://www.transum.org/Tables/Times_Tables.asp