How can you support your child with learning their times tables?

Top tips

1) Learn a little at a time. If you start a new times table, don't try to master it all overnight. Start with $1 \ge 5$, $2 \ge 5$ one day, then add more in when they are used to the sequence.

2) Try different strategies. All children learn in different ways, so what worked for an older sibling may not work for another child.

3) Constant revision of all of the tables is important, as they are easy to forget when you move on to a new set.

4) Demonstrate using concrete apparatus so that children can see it in front of them. For example, 3 lots of 4 as 3 rows of 4 matchsticks.

5) Use real-life situations to develop understanding of times tables. For example, "If you save 3p every day, how much do you think you would have saved in a week?"

6) There is no 'right' way to learn the times tables, and it helps to know lots of tricks, 'cheats' and links between times tables facts. The next few pages will help you to identify some ways of making the times tables more fun and relevant than just rote learning.

Online games

www.topmarks.co.uk

http://www.bbc.co.uk/skillswise/maths/games

www.what2learn.com/home/examgames/maths/subtraction

MyMaths have a variety of times table games

Apps

- Squeebles times tables
- Gurgle numbers
- DiscoG Times Tables
- Operation math code squad
- 10 Minutes a Day Times Tables by Dorling Kindersley

Tricks and cheats

Multiplication is Commutative

(Commutative means that it doesn't matter which way around the numbers go, so 3×4 is the same as 4×3). This can be demonstrated very easily by drawing a rectangle 4 squares by 2:



Here you have 2 rows of 4 squares but it is exactly the same if you turn it around so that there are 4 rows of 2 squares.

Use mnemonics to aid the memory

For example - I ate and I ate 'til I was sick on the floor: 8 times 8 is 64! Wakey, wakey, rise and shine: seven 7s are 49!

Talk the tables

Count forwards and backwards in 2s, 3s, 4s, etc.

Put one more finger up every time you move onto the next number in the sequence, if this will help the child to remember which number they are up to.

Don't always go in order

Don't always go up the table in order when practising – move it around a bit. For example, go from 4x6 to 9x6 to 6x5 etc.

Using fingers to calculate the nine times tables

1) Lay both hands flat, palms down, on the table.

2) Number the fingers, from left to right, 1 - 10.

3) If you want 7×9 , wiggle the third finger and then curl it under.

4) On the left of this finger there are 6 fingers (6 TENS).

5) On the right of this finger there are 3 fingers (3 UNITS)

6) 9 x 7 = 63

Look for number patterns in the tables

Ox: Think of `empty pockets'. Ask your child how many pockets he or she has in the clothes they are wearing at the moment. If there are three pockets, all with nothing in them, then they have nothing. It doesn't matter how many pockets they have, if they are all empty, then there will be nothing.

 $3 \times 0 = 0$ etc.

2x: After 2, 4, 6, 8, 10, the pattern is repeated in the last digit (e.g. 12 14 16 18 20 22 24)

3x: The numbers follow the pattern of: Odd, Even, Odd, Even (e.g. 3, 6, 9, 12, 15)

4x: All of these are double the two times table 2 4 6 8 10 (2 x table) 4 8 12 16 20 (4x table)

5x: Any odd number times 5, ends in a 5. Any even number tunes 5 ends in a O. (E.g. $1 \times 5 = 5$, $2 \times 5 = 10$, $3 \times 5 = 15$, $4 \times 5 = 20$)

6x: These answers are just double those in the 3x table: 3 6 9 12 15 18 21 (3x table) 6 12 18 24 30 36 42 (6x table)

8x: These answers are all double the 4x table:
4 8 12 16 20 (4x table)
8 16 24 32 40 (8x table)

9x: All of the digits add up to 9 (e.g. $3 \times 0 = 27$ and 2 + 7 = 9).

10x: All numbers end in a zero! (Please note we are not `adding a zero'. What is actually happening is that the digits which are being multiplied move one column to the left, to make them ten times bigger – they are 'held' in that position by putting a zero into the empty column).

11x: Both digits are the same (for answers up to 100). You can also think of it as 10x tables, plus one more 'lot' of the number that you are multiplying by 11. (E.g. 9×11 is the same as $9 \times 10 + 9$)

12x: If you've learnt all the other tables - there actually should only be one thing to learn by this stage (e.g. $12 \times 12 = 144$).

Games

Playing games is always a really effective way of learning. These are some examples that can be adapted, but please see your child's teacher if you want some more ideas. Buy a set of blank business cards from any good stationer. Snip one corner of each card so that you can tell which way up they should be when the cards are face down. Write a variety of times tables questions and answers the cards.

Pelmanism (or Pairs):

- Shuffle the cards and arrange them in a neat order on the table, face down.
- The players take it in turn to reverse any two cards; the cards must be left on the table face upwards so that everybody gets a good chance to look at them.
- If the two cards are equivalent, the player gets to keep the pair and has another go.
- If the two cards are not a pair, they are turned over once more and left on the table.
- The game continues until all the cards have been claimed.
- You could write 'questions' on half of the cards and 'answers' on the other half.

Bingo

- Each player selects five answers from one of the times tables.
- Roll two die, add the dots together.
- Multiply that total by whichever table it is you are doing
- e.g. you are learning the 6 x table
- five and two is rolled on the dice
- five and two is 7
- 7 x 6 = 42
- Any player who has 42 on their `Bingo card' can cross it off. The next player rolls the dice.

Fishy Fingers

- Two player stand facing each other with their hands behind their backs.
- They say 'Fishy-fishy fingers' and then present their hands with numbers shown by raised fingers (like in Rock, Paper, Scissors).
- The players then need to multiply the number on their hands with their partner's number.
- The first to say the answer wins a point and play continues.

Times Tables Table Tennis

• Each player holds an imaginary table tennis bat and one player starts with the first number in the times tables that they are learning (e.g. 3)

• Players try to build a rally by 'batting' the next number in that times table back to their partner (e.g. 6).

• The aim is to say the times tables as quickly as possible in order.

Songs

Times table songs to have on in the car are also a great way of helping children remember their times tables.

Praise for progress:

As the tables are learned, they can be coloured or highlighted both horizontally and vertically. You can use this opportunity again to emphasise that $3 \times 6 = 6 \times 3$, so therefore as well as learning the entire $3 \times$ table, part of the $6 \times$ table has also been leaned so this can be coloured in as well! Therefore, by the time all the tables up to and including the $5 \times$ have been learnt, there is actually only one quarter of this grid left to commit to memory.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | ٩ | 10 |
|----|----|----|----|----|----|----|----|----|-----|
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |