

Times Tables

Games and Strategies

We often get asked at parents' evenings what can be done to help children at home with their maths– learning times tables is a brilliant way of helping your child and it really can make a huge difference. The quick recall of multiplication and division facts (times tables) are of high importance. This skill enables children to answer related mathematical questions with ease. We have put together a booklet with ideas to help you support your child learn their times tables. Playing board games such as Monopoly and games of cards is also great, as children are thinking about adding the two numbers on the dice, working out whether they have enough money to buy the properties, giving change (if they are banker)etc...

It is also important that we approach the teaching and testing of times tables in a progressive format from Year 2 to Year 6. According to the National Curriculum 2014 the expectation of times tables in each Year Group is as follows:

Year 2: 2x, 5x, 10x

Year 3: 3x, 4x, 8x

Year 4: 6x, 7x, 9x, 11x, 12x

Year 5: All x and ÷ facts (12×12)

Year 6: All x and ÷ facts (12×12) and related language/symbols

Times Table Square!

The times table square could be used for:

- Revising tables
- Exploring patterns
- Checking answers in independent work

	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	56	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Learning Tables

2x2

I'm sure we all remember standing up, chanting tables at school (I know I do!) Learning by rote is one strategy, but there are also other activities we can do with children to help them learn their tables.

4x8

3x8

5x2

The aim of this booklet is to show you some strategies we use in school and that you could try at home to help children with their tables.

7x5

9x4

We hope you find it useful.

4x9

6x2

7x6

2 X 1 = 2	3 X 1 = 3	4 X 1 = 4	5 X 1 = 5
2 X 2 = 4	3 X 2 = 6	4 X 2 = 8	5 X 2 = 10
2 X 3 = 6	3 X 3 = 9	4 X 3 = 12	5 X 3 = 15
2 X 4 = 8	3 X 4 = 12	4 X 4 = 16	5 X 4 = 20
2 X 5 = 10	3 X 5 = 15	4 X 5 = 20	5 X 5 = 25
2 X 6 = 12	3 X 6 = 18	4 X 6 = 24	5 X 6 = 30
2 X 7 = 14	3 X 7 = 21	4 X 7 = 28	5 X 7 = 35
2 X 8 = 16	3 X 8 = 24	4 X 8 = 32	5 X 8 = 40
2 X 9 = 18	3 X 9 = 27	4 X 9 = 36	5 X 9 = 45
2 X 10 = 20	3 X 10 = 30	4 X 10 = 40	5 X 10 = 50
2 X 11 = 22	3 X 11 = 33	4 X 11 = 44	5 X 11 = 55
2 X 12 = 24	3 X 12 = 36	4 X 12 = 48	5 X 12 = 60
6 X 1 = 6	7 X 1 = 7	8 X 1 = 8	9 X 1 = 9
6 X 2 = 12	7 X 2 = 14	8 X 2 = 16	9 X 2 = 18
6 X 3 = 18	7 X 3 = 21	8 X 3 = 24	9 X 3 = 27
6 X 4 = 24	7 X 4 = 28	8 X 4 = 32	9 X 4 = 36
6 X 5 = 30	7 X 5 = 35	8 X 5 = 40	9 X 5 = 45
6 X 6 = 36	7 X 6 = 42	8 X 6 = 48	9 X 6 = 54
6 X 7 = 42	7 X 7 = 49	8 X 7 = 56	9 X 7 = 63
6 X 8 = 48	7 X 8 = 56	8 X 8 = 64	9 X 8 = 72
6 X 9 = 54	7 X 9 = 63	8 X 9 = 72	9 X 9 = 81
6 X 10 = 60	7 X 10 = 70	8 X 10 = 80	9 X 10 = 90
6 X 11 = 66	7 X 11 = 77	8 X 11 = 88	9 X 11 = 99
6 X 12 = 72	7 X 12 = 84	8 X 12 = 96	9 X 12 = 108
10 X 1 = 10	11 X 1 = 11	12 X 1 = 12	
10 X 2 = 20	11 X 2 = 22	12 X 2 = 24	
10 X 3 = 30	11 X 3 = 33	12 X 3 = 36	
10 X 4 = 40	11 X 4 = 44	12 X 4 = 48	
10 X 5 = 50	11 X 5 = 55	12 X 5 = 60	
10 X 6 = 60	11 X 6 = 66	12 X 6 = 72	
10 X 7 = 70	11 X 7 = 77	12 X 7 = 84	
10 X 8 = 80	11 X 8 = 88	12 X 8 = 96	
10 X 9 = 90	11 X 9 = 99	12 X 9 = 108	
10 X 10 = 100	11 X 10 = 110	12 X 10 = 120	
10 X 11 = 110	11 X 11 = 121	12 X 11 = 132	
10 X 12 = 120	11 X 12 = 132	12 X 12 = 144	

9 x table on your fingers!

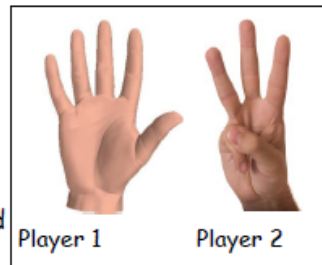
1. Hold your hands in front of you with your fingers spread out.
2. For 9×4 bend your 4th finger down (like the picture).
3. You have 3 fingers in front of the bent finger and 6 after the bent finger. Thus the answer must be 36!
4. The technique works for the 9 times table up to 10.



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.

Multiplication Snap!



You will need a deck of cards for this game!



1. Flip over the cards as though you are playing snap.
2. The first to say the fact based on the cards turned over (a 2 and a 3 = say 6) gets the cards.
3. The person to get all of the cards wins.

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.

One less = nine!

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

1. Subtract 1 from the number you are multiplying by. E.g. 7×9 , one less than 7 is 6.
2. This number becomes the first number in the answer. $7 \times 9 = 6 _ _$
3. The two numbers in the answer add up to 9 so the second number must be 3. $7 \times 9 = 63$

BINGO!

This game will need 2 players!

Make a grid of six squares on a piece of paper and ask your child to write a number in each square from the target tables. Give them a question and if they have the answer, they mark them off. First one to mark off all their numbers is the winner!



Looking for patterns...

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

- **Odd number x odd number = odd number** (E.g. $3 \times 5 = 15$)
- **Even number x even number = even number** (E.g. $4 \times 6 = 24$)
- **Odd number x even number = even number** (E.g. $3 \times 6 = 18$)

Flash Cards

Once children know the times table facts in order, they can use flash cards to practise the facts out of order. They could just use them to answer questions, or for an extra challenge, try it against the clock!

Flash cards could also be stuck around the house to help children learn the facts!

Websites

<http://www.woodlands-junior.kent.sch.uk/maths/timestable/index.html>

<http://www.topmarks.co.uk/Flash.aspx?f=HitTheButton10>

<http://www.topmarks.co.uk/Flash.aspx?f=SpeedChallenge>

<http://www.what2learn.com/home/examgames/maths/subtraction/>

<http://www.bbc.co.uk/skillwise/numbers/wholenumbers/multiplication/timestables/game.shtml>

<http://www.sumdog.com/>



Tricky Sixes

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

$$\underline{2} \times 6 = 1\underline{2}$$

$$\underline{4} \times 6 = 2\underline{4}$$

$$\underline{6} \times 6 = 3\underline{6}$$

$$\underline{8} \times 6 = 4\underline{8}$$

Double, Double!

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



E.g. 3×4

double 3 is 6, double 6 is 12

$3 \times 4 = 12$

Sing a song of Tables!



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

Speed Tables!

Time challenges can be a really good way of helping times tables become automatic. Some ideas we use in school are:

- Measuring the time it takes to write the tables, then trying to beat the time.
- Seeing how many times you can write that table in 1 minute.
- Race/challenges against other people.

