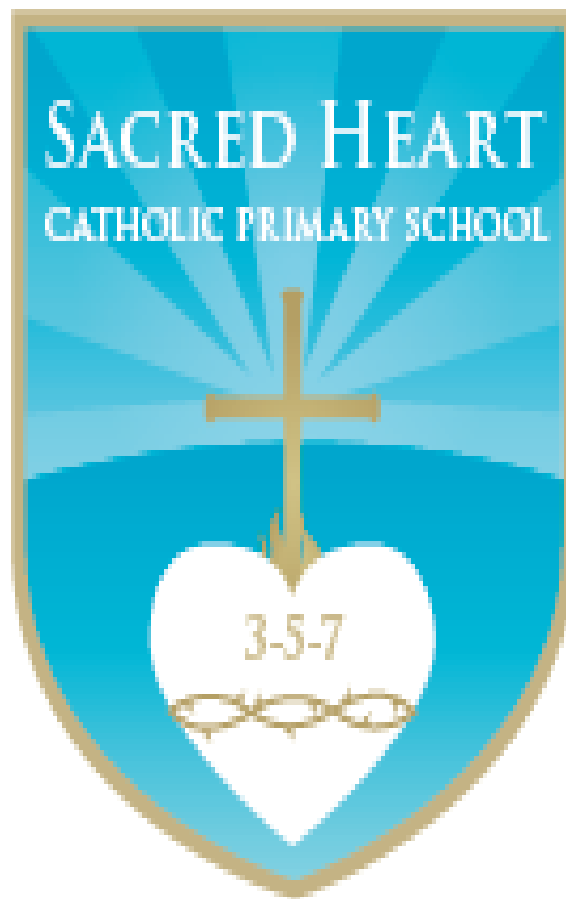


Tricks For Learning Times Tables



Trick 1: You already know the 1 times table!

Think about it: 1 times 5 =5, 1 times 7 = 7, 1 times 3 million = 3 million!

SO anything multiplied by one is itself; how easy is that?

Here are the easiest tables you will ever learn:

$1 \times 1 = 1$
 $2 \times 1 = 2$
 $3 \times 1 = 3$
 $4 \times 1 = 4$
 $5 \times 1 = 5$
 $6 \times 1 = 6$
 $7 \times 1 = 7$
 $8 \times 1 = 8$
 $9 \times 1 = 9$
 $10 \times 1 = 10$
 $11 \times 1 = 11$
 $12 \times 1 = 12$

Trick 2: The 2 times table just means 'double' !

Think about this:

$3+3 = 6$, so double 3 is 6, so $2 \times 3 = 6$.

$5+5 =10$, so double 5 is 10, so $2 \times 5 = 10$

Look at this pattern:

$2+2 = 4$	$2 \times 2 = 4$
$3+3 = 6$	$3 \times 2 = 6$
$4+4 = 8$	$4 \times 2 = 8$
$5+5 =10$	$5 \times 2 =10$
$6+6 = 12$	$6 \times 2 = 12$
$7+7 = 14$	$7 \times 2 = 14$
$8+8 = 16$	$8 \times 2 = 16$
$9+9 = 18$	$9 \times 2 = 18$
$10+10=20$	$10 \times 2 = 20$
$11+11=22$	$11 \times 2 = 22$
$12+12=24$	$12 \times 2 = 24$

Work on this pattern until you know your 2 times table, without counting.

Trick 3: Adding a Zero Gives us the 10 times table!

Think about it: 10 times 5 = 50, 10 times 6 = 60, 10 times 3 = 30

SO any whole number multiplied by ten stays the same, but adds a ZERO at the end; this is to do with 'Place Value': the columns in which digits are placed in to create larger numbers.

E.g. $2 \times 10 = 20$

Hundreds	Tens	Units
		2
	2	0

Here are the tables you should learn now:

$$1 \times 10 = 10$$

$$2 \times 10 = 20$$

$$3 \times 10 = 30$$

$$4 \times 10 = 40$$

$$5 \times 10 = 50$$

$$6 \times 10 = 60$$

$$7 \times 10 = 70$$

$$8 \times 10 = 80$$

$$9 \times 10 = 90$$

$$10 \times 10 = 100$$

$$11 \times 10 = 110$$

$$12 \times 10 = 120$$

Trick 5: Five is Half of Ten !

Because 5 is half of 10, we can work out our 5s by halving ($\div 2$) our 10s. So, if $6 \times 10 = 60$, then 6×5 is half of 60 (30).

Look at this pattern:

$$1 \times 10 = 10. \text{ Halving this means that } 1 \times 5 = 5$$

$$2 \times 10 = 20 \quad \text{“} \quad \text{“} \quad 2 \times 5 = 10$$

$$3 \times 10 = 30 \quad \text{“} \quad \text{“} \quad 3 \times 5 = 15$$

$$4 \times 10 = 40 \quad \text{“} \quad \text{“} \quad 4 \times 5 = 20$$

$$5 \times 10 = 50 \quad \text{“} \quad \text{“} \quad 5 \times 5 = 25$$

$$6 \times 10 = 60 \quad \text{“} \quad \text{“} \quad 6 \times 5 = 30$$

$$7 \times 10 = 70 \quad \text{“} \quad \text{“} \quad 7 \times 5 = 35$$

$$8 \times 10 = 80 \quad \text{“} \quad \text{“} \quad 8 \times 5 = 40$$

$$9 \times 10 = 90 \quad \text{“} \quad \text{“} \quad 9 \times 5 = 45$$

$$10 \times 10 = 100 \quad \text{“} \quad \text{“} \quad 10 \times 5 = 50$$

To sum up: “to find 5 times any whole number, add a zero and halve”.

Trick 6: Nine Fingers!

Hold both hands palm up in front of you so that you can see ten fingers in a row. Call the left thumb “one” and the right thumb “ten”. To find the answer to 9×3 , fold down finger number “three” (the middle finger on your left hand). Count the number of fingers to the left of the folded finger (there are 2.) Now count the fingers to the right of the folded one; (there are 7.) This tells us that $9 \times 3 = 27$. Try this for other multiples of 9, it’s fantastic!

Look at this pattern:

$$1 \times 9 = 9$$

$$2 \times 9 = 18$$

$$3 \times 9 = 27$$

$$4 \times 9 = 36$$

$$5 \times 9 = 45$$

$$6 \times 9 = 54$$

$$7 \times 9 = 63$$

$$8 \times 9 = 72$$

$$9 \times 9 = 81$$

$$10 \times 9 = 90$$

Notice two things: firstly, the tens digit is always one less than the number you are multiplying by 9. Secondly, the two digits always add up to 9; so if you know the tens digit you can work out the units digit very easily.

To sum up: “To find 9 times any whole number, subtract one to find the tens; subtract that from 9 to find the units figure.”

Trick 7: The Secret of Six-cess!

This trick is a play on words. 'Six-cess' sounds like 'success', and success is what you will experience with this trick. Six-cess isn't even a real word, of course, but just look what happens when you **multiply 6 by an even number**:

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

Do you notice anything unusual about the green digits?
You probably saw straight away that they match!

So 6 times any even digit will always end in that digit.

Now, remember that this trick is a play on words. The next thing to do is to say each of the four tables above over and over again in a rhythm, and they will stick in your memory.

Practise putting the emphasis on the last syllable of each table: "Six fours are twenty FOUR, six fours are twenty FOUR", and so on.

Do the same with "Six sixes are thirty SIX, six sixes are thirty SIX", and finally with "Six eights are forty EIGHT, six eights are forty EIGHT". (You already know 6 twos of course).

Now you know that $6 \times 2 = 12$, $6 \times 4 = 24$, $6 \times 6 = 36$, $6 \times 8 = 48$

Also if you know the 3 times table then you know the 6 times table.

Again you can use doubling, if you multiply the number by 3 and double the answer this will give you the answer.

$6 \times 2 = 12$	$3 \times 2 = 6$	Double 6 = 12
$6 \times 3 = 18$	$3 \times 3 = 9$	Double 9 = 18
$6 \times 4 = 24$	$3 \times 4 = 12$	Double 12 = 24
$6 \times 5 = 30$	$3 \times 5 = 15$	Double 15 = 30
$6 \times 6 = 36$	$3 \times 6 = 18$	Double 18 = 36
$6 \times 7 = 42$	$3 \times 7 = 21$	Double 21 = 42
$6 \times 8 = 48$	$3 \times 8 = 24$	Double 24 = 48
$6 \times 9 = 54$	$3 \times 9 = 27$	Double 27 = 54
$6 \times 10 = 60$	$3 \times 10 = 30$	Double 30 = 60

Trick 8: Fairs squares

This trick uses a visual example. All tables can be displayed as a rectangle.

For example, here are two ways of showing $2 \times 4 = 8$

1	2	3	4
5	6	7	8

1	2
3	4
5	6
7	8

But only a few tables can be displayed as squares: they are 1×1 , 2×2 , 3×3 , 4×4 , 5×5 , 6×6 , etc. The first few look like this:

1

$$1 \times 1$$

1	2
3	4

$$2 \times 2 = 4$$

1	2	3
4	5	6
7	8	9

$$3 \times 3 = 9$$

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

$$4 \times 4 = 16$$

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25

$$5 \times 5 = 25$$

Here are the squares number you'll need to know:

$$1 \times 1 = 1$$

$$2 \times 2 = 4$$

$$3 \times 3 = 9$$

$$4 \times 4 = 16$$

$$5 \times 5 = 25$$

$$6 \times 6 = 36$$

$$7 \times 7 = 49$$

$$8 \times 8 = 64$$

$$9 \times 9 = 81$$

$$10 \times 10 = 100$$

$$11 \times 11 = 121$$

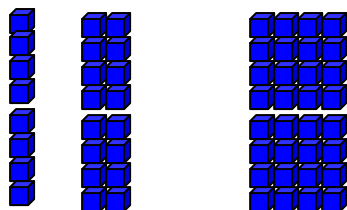
$$12 \times 12 = 144$$

Trick 9: If you can double then you can multiply by 2, 4 and 8

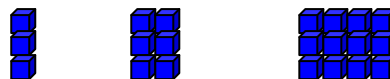
If you multiply a number 2 and double it, then you know how to multiply by 2.

$8 \times 4 = 32$ 8×2 is 16 Double 16 is 32.

$3 \times 4 = 12$ $3 \times 2 = 6$ Double 6 is 12



8×1 $8 \times 2 = 16$ $8 \times 4 = 32$



$3 \times 1 = 3$ $3 \times 2 = 6$ $3 \times 4 = 12$

$4 \times 1 = 4$ $1 \times 2 = 2$ Double 2 is 4
 $4 \times 2 = 8$ $2 \times 2 = 4$ Double 4 is 8
 $4 \times 3 = 12$ $3 \times 2 = 6$ Double 6 is 12
 $4 \times 4 = 16$ $4 \times 2 = 8$ Double 8 is 16
 $4 \times 5 = 20$ $5 \times 2 = 10$ Double 10 is 20
 $4 \times 6 = 24$ $6 \times 2 = 12$ Double 12 is 24
 $4 \times 7 = 28$ $7 \times 2 = 14$ Double 14 is 28
 $4 \times 8 = 32$ $8 \times 2 = 16$ Double 16 is 32
 $4 \times 9 = 36$ $9 \times 2 = 18$ Double 18 is 36
 $4 \times 10 = 40$ $10 \times 2 = 20$ Double 20 is 40

If you know the 4 times tables you can double these to work out the 8 times tables

$8 \times 1 = 8$ $4 \times 1 = 4$ Double 4 is 8
 $8 \times 2 = 16$ $4 \times 2 = 8$ Double 8 is 16
 $8 \times 3 = 24$ $4 \times 3 = 12$ Double 12 is 24
 $8 \times 4 = 32$ $4 \times 4 = 16$ Double 16 is 32
 $8 \times 5 = 40$ $4 \times 5 = 20$ Double 20 is 40
 $8 \times 6 = 48$ $4 \times 6 = 24$ Double 24 is 48
 $8 \times 7 = 56$ $4 \times 7 = 28$ Double 28 is 56
 $8 \times 8 = 64$ $4 \times 8 = 32$ Double 32 is 64
 $8 \times 9 = 72$ $4 \times 9 = 36$ Double 36 is 72
 $8 \times 10 = 80$ $4 \times 10 = 40$ Double 40 is 80

Times Table - 12x12												
	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Below are a list of games you can play to help you learn your times tables.

<http://resources.woodlands-junior.kent.sch.uk/maths/timestable/interactive.htm>

<http://www.maths-games.org/times-tables-games.html>

<http://www.coolmath-games.com/1-number-games-times-tables-multiplication-division.html>

<http://www.ninalazina.info/free-maths-games-html/times-tables-games-fun-interactive-html>

Below are the names of some free times table apps for Ipads and Iphones

- Times table quiz
- Times table cloud
- My times tables
- Times Table Football
- Multiplication Genius