

St George's CVA



Grow in Faith and have faith in growing.

Times Tables Strategies

The aim of this booklet is to showcase some of the strategies we use in school to teach times tables so that you can use some of them at home to support your child in learning their times tables.

Times tables knowledge underpins much of the Maths curriculum and the sooner your children become fluent with their times tables, the easier it is for them to access and understand new and increasingly complex topics.

In addition, the Department of Education has introduced a compulsory times tables test for all Year 4 pupils.

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

Singing

2	<p>https://www.bbc.co.uk/bitesize/topics/zqbg87h/articles/zc7ygdm</p> <p>https://www.youtube.com/watch?v=9C4EN7mFHCk&list=PLaSZ7kwwxKqXpdLA0hIA9fa8RVmRC32pv (Justin Timberlake)</p> <p>https://www.youtube.com/watch?v=BGWMPqh04o4</p> <p>https://www.youtube.com/watch?v=BHv6TBHxHHU&t=65s</p>
3	<p>https://www.youtube.com/watch?v=uV0ZL2h8IRg</p> <p>https://www.youtube.com/watch?v=1OPTfVcoCO4</p> <p>https://www.youtube.com/watch?v=uneATAeac7Q (Moana)</p>
4	<p>https://www.youtube.com/watch?v=8QU_E0u-tP4 (Elton John)</p> <p>https://www.youtube.com/watch?v=TMdE6ghY4CE (Harry Styles)</p>
5	<p>https://www.youtube.com/watch?v=vCjt1dbhvWU</p> <p>https://www.youtube.com/watch?v=o7Jo26EyoYg</p>
6	<p>https://www.youtube.com/watch?v=dr_zC8f8gjA (Taylor Swift)</p> <p>https://www.youtube.com/watch?v=zINaIPnOZoY</p>
7	<p>https://www.youtube.com/watch?v=wwekMlqb55s&list=RDQMQHsYgsw3N6l&start_radio=1</p> <p>https://www.youtube.com/watch?v=5XT3vxohTBg (Pharrell Williams)</p> <p>https://www.youtube.com/watch?v=BNBvzjut7TQ (Adele)</p> <p>https://www.youtube.com/watch?v=3CQqBlrQXAo</p>
	<p>https://www.youtube.com/watch?v=z_BJr9rdwA (Adele)</p>

8	https://www.youtube.com/watch?v=dSnNkgMbtfs https://www.youtube.com/watch?v=gjNDS4WfKvA (Miley Cyrus)
9	https://www.youtube.com/watch?v=rwEw6Wgxrt0 https://www.youtube.com/watch?v=154VoUQbgv https://www.youtube.com/watch?v=I7LG16y6GHY (Ed Sheeran)
10	https://www.youtube.com/watch?v=VIVJhAlruCc https://www.youtube.com/watch?v=8yxMJUHBsIY https://www.youtube.com/watch?v=5kwlccQGcr0 https://www.youtube.com/watch?v=dYaphiY8RIY
11	https://www.youtube.com/watch?v=p9AxbcO4Kp4 https://www.youtube.com/watch?v=QyLmDk066lo
12	https://www.youtube.com/watch?v=c2vfUOmMxfg https://www.youtube.com/watch?v=VWvQ5F0nS8k (Ed Sheeran) https://www.youtube.com/watch?v=PABb8Hhmt M

Useful links

<https://www.bbc.co.uk/teach/supermovers>

Useful Youtube Accounts

Miss Rachel

Math Songs by NUMBROCK

Laugh along and learn



Online Games

Times tables Rock Stars

We have purchased a subscription. This is a fantastic resource which can be accessed via an a tablet or phone or via a web browser on a computer. It is fast paced, bright, colourful and engaging. Pupils can compete against each other, try to beat their own scores or times or compete against different classes across the school. Teachers can see who has been practising and who has improved the most. Certificates will be given out each week in school to those pupils who are trying really hard.



<https://trockstars.com/>

Online games/ Useful websites

<http://www.tuva.org.uk/>

<https://uk.ixl.com/math/year-4/skip-counting-by-7>

<https://www.topmarks.co.uk/maths-games/7-11-years/times-tables>

- Hit the button, Coconut Multiples
- Maths Fishing, Times tables Grid

www.timestables.co.uk

- Times tables Memory, Times tables Shooting
- Times tables Rally, Spuq Balloons

<https://www.ictgames.com/mobilePage/multiplication.html>

<https://www.mathschase.com/start/>

Games

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



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.'

$4 \times 4 = 16$ 'A 4 by 4 is a mean machine. I'm going to get one when I am 16.'

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 their target tables. Give them a question and if they have the answer they mark the answer off. First one to mark off all their numbers is the winner!





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.

DOMINOES

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



SNAP DRAGON

Make a fortune teller with the times table on it.



Times tables Exercises/ Dance Moves

- Skipping and hopscotch can be combined with chanting or singing times tables facts.
- Tell children they are working on the 7 times tables. Call out answers and pupils have to work out what the answer divided by 7 would be and then do that number of star jumps etc.
- Put times tables answers around a space, call out a fact, children have to run and touch the answer as quickly as possible.

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.

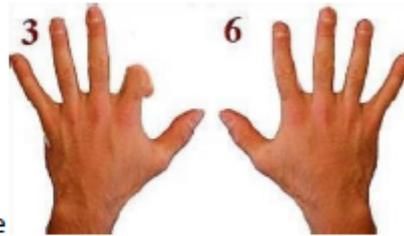


Tricks and Patterns

Below is a list of patterns and strategies which can be used to help learn times tables facts:

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 tables up to 10.



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 tables, 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, $7 \times 9 = 63$

6 x 10 times tables using your fingers.

Watch the video

<https://www.youtube.com/watch?v=x2Nr-f02AUY>



Doubling:

When multiplying by 2 double it, $2 \times 3 =$ double 3 is 6.

When multiplying by 4 double it and double again. $4 \times 3 =$ double 3 is 6, double 6 = 12.

When multiplying by 8 double it, double it, double again! $8 \times 3 =$ double 3 is 6, double 6 is 12, double 12 is 24!

Halving:

If I know $6 \times 10 = 60$, then I know $6 \times 5 = 30$ because 5 is half of ten and 30 is half of 60.

If I know 6×4 is 24, then I know 3×4 is 12 because 3 is half of 6 and 12 is half of 24.

11 and 12 times table:

11×3 is the same as $10 \times 3 = 30 + 3 = 33$

12×3 is the same as $10 \times 3 = 30 + 2 \times 3 = 36$

Ask questions:

How does knowing $5 \times 4 = 20$ help you work out 6×4 ? I know that $10 \times 7 = 70$, how can I use that to find 9×7 ? If I know that $20 \times 3 = 60$, what else do I know?

Known Facts:

Free our working memory by removing facts we don't struggle to remember.

0 x table will always be 0, 1 x tables, 10 tables, 11 tables digits going up.

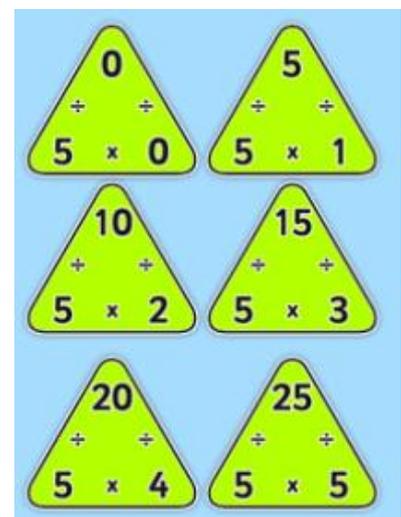
12 X 12 Multiplication Table

X	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

Square numbers can be a good hook point or bridging step. If pupils remember the square numbers they can use these as a point from which to calculate other times tables facts.

Pupils should learn that table facts are related: e.g. $3 \times 4 = 12$ so $4 \times 3 = 12$ so $12 \div 3 = 12$.

Times tables Triangles are a great way of teaching this.



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

$5 \times 4 = 20$
 $2 \times 4 = 8$
 $7 \times 4 = 20 + 8 = 28$

8 TIMES TABLE - 100 SQUARE

1	2	3	4	5	6	7		9	10
11	12	13	14	15		17	18	19	20
21	22	23		25	26	27	28	29	30
31		33	34	35	36	37	38	39	
41	42	43	44	45	46	47		49	50
51	52	53	54	55		57	58	59	60
61	62	63		65	66	67	68	69	70
71		73	74	75	76	77	78	79	
81	82	83	84	85	86	87		89	90
91	92	93	94	95		97	98	99	100

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.

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

Double, Double!

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

For example;

- 3×4 double 3 is 6, double 6 is 12
- 5×4 double 5 is 10, double 10 is 20
- 6×4 double 6 is 12, double 12 is 24
- 9×4 double 9 is 18, double 18 is 36

Rapid Recall and Learning Tips

We will be doing weekly 'Learn it' tests in school. Your child will bring these tests home weekly so you can support them with the facts they are struggling to remember.

How can you help?

- Use flash cards to help your child learn their times tables facts in any order.
- Practise writing down the times tables in order and then reverse order.
- Use a variety of multiplication and division questions to ensure pupils are confident and flexible with their knowledge.
- Timed quizzes – can they better their score or speed?
- Use these quizzes to identify facts that your child finds difficult.
- Display times tables poster or tricky facts somewhere easily seen.

Get creative in the ways the ways that you practise:

