

Mastery of Times Tables

- 1. What to learn and when?
- 2. How to learn times table facts.
- 3. How you can help at home.

Times Tables Summary

	Times tables saminal
	National Curriculum
Year 1	Count in 2's, 5's and 10's and make connections with arrays, number patterns and sharing small quantities. Begin to understand multiplication and division
Year 2	Count in 2's, 3's and 5's Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. Recall and use multiplication and division facts for the 2, 5 and 10 times tables. Calculate and write mathematical statements for multiplication and division using the multiplication (X), division (÷) and equals sign (=)
Year 3	Connect the 2, 4 and 8 times tables through doubling. Recall the 3, 4 and 8 times tables and corresponding division facts.
Year 4	Recall all times table and corresponding division facts up to 12 X 12.
Year 5 and 6	Application of facts

Times Tables Summary

	National Curriculum	At BPS
Year 1	Count in 2's, 5's and 10's and make connections with arrays, number patterns and sharing small quantities. Begin to understand multiplication and division.	Counting and concept.
Year 2	Count in 2's, 3's and 5's. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. Recall and use multiplication and division facts for the 2, 5 and 10 times tables. Calculate and write mathematical statements for multiplication and division using the multiplication (X), division (÷) and equals sign (=).	Counting and concept. Use of mathematical symbols.
Year 3	Connect the 2, 4 and 8 times tables through doubling. Recall the 3, 4 and 8 times tables and corresponding division facts.	Recall the 10, 5, 2, 4 and 8 times tables (and division facts).
Year 4	Recall all times table and corresponding division facts up to 12 X 12.	Recall the 3, 6, 9, 7, 11 and 12 times tables (and division facts).

Over-learning and

consolidation.

Application of facts.

Year 5

and 6

1 X table	2 X table	3 X table	4 X table	5 X table	6 X table	7 X table	8 X table	9 X table	10 X table	11 X table	12 X table
1 X 1	1 X 2	1 X 3	1 X 4	1 X 5	1 X 6	1 X 7	1 X 8	1 X 9	1 X 10	1 X 11	1 X 12
2 X 1	2 X 2	2 X 3	2 X 4	2 X 5	2 X 6	2 X 7	2 X 8	2 X 9	2 X 10	2 X 11	2 X 12
3 X 1	3 X 2	3 X 3	3 X 4	3 X 5	3 X 6	3 X 7	3 X 8	3 X 9	3 X 10	3 X 11	3 X 12
4 X 1	4 X 2	4 X 3	4 X 4	4 X 5	4 X 6	4 X 7	4 X 8	4 X 9	4 X 10	4 X 11	4 X 12
5 X 1	5 X 2	5 X 3	5 X 4	5 X 5	5 X 6	5 X 7	5 X 8	5 X 9	5 X 10	5 X 11	5 X 12
6 X 1	6 X 2	6 X 3	6 X 4	6 X 5	6 X 6	6 X 7	6 X 8	6 X 9	6 X 10	6 X 11	6 X 12
7 X 1	7 X 2	7 X 3	7 X 4	7 X 5	7 X 6	7 X 7	7 X 8	7 X 9	7 X 10	7 X 11	7 X 12
8 X 1	8 X 2	8 X 3	8 X 4	8 X 5	8 X 6	8 X 7	8 X 8	8 X 9	8 X 10	8 X 11	8 X 12
9 X 1	9 X 2	9 X 3	9 X 4	9 X 5	9 X 6	9 X 7	9 X 8	9 X 9	9 X 10	9 X 11	9 X 12
10 X 1	10 X 2	10 X 3	10 X 4	10 X 5	10 X 6	10 X 7	10 X 8	10 X 9	10 X 10	10 X 11	10 X 12
11 X 1	11 X 2	11 X 3	11 X 4	11 X 5	11 X 6	11 X 7	11 X 8	11 X 9	11 X 10	11 X 11	11 X 12
12 X 1	12 X 2	12 X 3	12 X 4	12 X 5	12 X 6	12 X 7	12 X 8	12 X 9	12 X 10	12 X 11	12 X 12

1 X 1	1 X 2	1 X 3	1 X 4	1 X 5	1 X 6	1 X 7	1 X 8	1 X 9	1 X 10	
2 X 1	2 X 2	2 X 3	2 X 4	2 X 5	2 X 6	2 X 7	2 X 8	2 X 9	2 X 10	
3 X 1	3 X 2	3 X 3	3 X 4	3 X 5	3 X 6	3 X 7	3 X 8	3 X 9	3 X 10	
4 X 1	4 X 2	4 X 3	4 X 4	4 X 5	4 X 6	4 X 7	4 X 8	4 X 9	4 X 10	
5 X 1	5 X 2	5 X 3	5 X 4	5 X 5	5 X 6	5 X 7	5 X 8	5 X 9	5 X 10	
6 X 1	6 X 2	6 X 3	6 X 4	6 X 5	6 X 6	6 X 7	6 X 8	6 X 9	6 X 10	
7 X 1	7 X 2	7 X 3	7 X 4	7 X 5	7 X 6	7 X 7	7 X 8	7 X 9	7 X 10	
8 X 1	8 X 2	8 X 3	8 X 4	8 X 5	8 X 6	8 X 7	8 X 8	8 X 9	8 X 10	
9 X 1	9 X 2	9 X 3	9 X 4	9 X 5	9 X 6	9 X 7	9 X 8	9 X 9	9 X 10	
10 X 1	10 X 2	10 X 3	10 X 4	10 X 5	10 X 6	10 X 7	10 X 8	10 X 9	10 X 10	

2 X 2	2 X 3	2 X 4	2 X 5	2 X 6	2 X 7	2 X 8	2 X 9	2 X 10
3 X 2	3 X 3	3 X 4	3 X 5	3 X 6	3 X 7	3 X 8	3 X 9	3 X 10
4 X 2	4 X 3	4 X 4	4 X 5	4 X 6	4 X 7	4 X 8	4 X 9	4 X 10
5 X 2	5 X 3	5 X 4	5 X 5	5 X 6	5 X 7	5 X 8	5 X 9	5 X 10
6 X 2	6 X 3	6 X 4	6 X 5	6 X 6	6 X 7	6 X 8	6 X 9	6 X 10
7 X 2	7 X 3	7 X 4	7 X 5	7 X 6	7 X 7	7 X 8	7 X 9	7 X 10
8 X 2	8 X 3	8 X 4	8 X 5	8 X 6	8 X 7	8 X 8	8 X 9	8 X 10
9 X 2	9 X 3	9 X 4	9 X 5	9 X 6	9 X 7	9 X 8	9 X 9	9 X 10
10 X 2	10 X 3	10 X 4	10 X 5	10 X 6	10 X 7	10 X 8	10 X 9	10 X 10

2 X 2	2 X 3	2 X 4	2 X 5	2 X 6	2 X 7	2 X 8	2 X 9
3 X 2	3 X 3	3 X 4	3 X 5	3 X 6	3 X 7	3 X 8	3 X 9
4 X 2	4 X 3	4 X 4	4 X 5	4 X 6	4 X 7	4 X 8	4 X 9
5 X 2	5 X 3	5 X 4	5 X 5	5 X 6	5 X 7	5 X 8	5 X 9
6 X 2	6 X 3	6 X 4	6 X 5	6 X 6	6 X 7	6 X 8	6 X 9
7 X 2	7 X 3	7 X 4	7 X 5	7 X 6	7 X 7	7 X 8	7 X 9
8 X 2	8 X 3	8 X 4	8 X 5	8 X 6	8 X 7	8 X 8	8 X 9
9 X 2	9 X 3	9 X 4	9 X 5	9 X 6	9 X 7	9 X 8	9 X 9

2 X 2							
3 X 2	3 X 3	3 X 4	3 X 5	3 X 6	3 X 7	3 X 8	3 X 9
4 X 2	4 X 3	4 X 4	4 X 5	4 X 6	4 X 7	4 X 8	4 X 9
5 X 2	5 X 3	5 X 4	5 X 5	5 X 6	5 X 7	5 X 8	5 X 9
6 X 2	6 X 3	6 X 4	6 X 5	6 X 6	6 X 7	6 X 8	6 X 9
7 X 2	7 X 3	7 X 4	7 X 5	7 X 6	7 X 7	7 X 8	7 X 9
8 X 2	8 X 3	8 X 4	8 X 5	8 X 6	8 X 7	8 X 8	8 X 9
9 X 2	9 X 3	9 X 4	9 X 5	9 X 6	9 X 7	9 X 8	9 X 9

2 X 2							
3 X 2	3 X 3						
4 X 2	4 X 3	4 X 4	4 X 5	4 X 6	4 X 7	4 X 8	4 X 9
5 X 2	5 X 3	5 X 4	5 X 5	5 X 6	5 X 7	5 X 8	5 X 9
6 X 2	6 X 3	6 X 4	6 X 5	6 X 6	6 X 7	6 X 8	6 X 9
7 X 2	7 X 3	7 X 4	7 X 5	7 X 6	7 X 7	7 X 8	7 X 9
8 X 2	8 X 3	8 X 4	8 X 5	8 X 6	8 X 7	8 X 8	8 X 9
9 X 2	9 X 3	9 X 4	9 X 5	9 X 6	9 X 7	9 X 8	9 X 9

2 X 2							
3 X 2	3 X 3						
4 X 2	4 X 3	4 X 4					
5 X 2	5 X 3	5 X 4	5 X 5	5 X 6	5 X 7	5 X 8	5 X 9
6 X 2	6 X 3	6 X 4	6 X 5	6 X 6	6 X 7	6 X 8	6 X 9
7 X 2	7 X 3	7 X 4	7 X 5	7 X 6	7 X 7	7 X 8	7 X 9
8 X 2	8 X 3	8 X 4	8 X 5	8 X 6	8 X 7	8 X 8	8 X 9
9 X 2	9 X 3	9 X 4	9 X 5	9 X 6	9 X 7	9 X 8	9 X 9

2 X 2							
3 X 2	3 X 3						
4 X 2	4 X 3	4 X 4					
5 X 2	5 X 3	5 X 4	5 X 5				
6 X 2	6 X 3	6 X 4	6 X 5	6 X 6	6 X 7	6 X 8	6 X 9
7 X 2	7 X 3	7 X 4	7 X 5	7 X 6	7 X 7	7 X 8	7 X 9
8 X 2	8 X 3	8 X 4	8 X 5	8 X 6	8 X 7	8 X 8	8 X 9
9 X 2	9 X 3	9 X 4	9 X 5	9 X 6	9 X 7	9 X 8	9 X 9

2 X 2							
3 X 2	3 X 3						
4 X 2	4 X 3	4 X 4					
5 X 2	5 X 3	5 X 4	5 X 5				
6 X 2	6 X 3	6 X 4	6 X 5	6 X 6			
7 X 2	7 X 3	7 X 4	7 X 5	7 X 6	7 X 7	7 X 8	7 X 9
8 X 2	8 X 3	8 X 4	8 X 5	8 X 6	8 X 7	8 X 8	8 X 9
9 X 2	9 X 3	9 X 4	9 X 5	9 X 6	9 X 7	9 X 8	9 X 9

2 X 2							
3 X 2	3 X 3						
4 X 2	4 X 3	4 X 4					
5 X 2	5 X 3	5 X 4	5 X 5				
6 X 2	6 X 3	6 X 4	6 X 5	6 X 6			
7 X 2	7 X 3	7 X 4	7 X 5	7 X 6	7 X 7		
8 X 2	8 X 3	8 X 4	8 X 5	8 X 6	8 X 7	8 X 8	8 X 9
9 X 2	9 X 3	9 X 4	9 X 5	9 X 6	9 X 7	9 X 8	9 X 9

Now it's only 36 key facts to learn!

2 X 2						key	tact	5
3 X 2	3 X 3							
4 X 2	4 X 3	4 X 4						
5 X 2	5 X 3	5 X 4	5 X 5					
6 X 2	6 X 3	6 X 4	6 X 5	6 X 6				
7 X 2	7 X 3	7 X 4	7 X 5	7 X 6	7 X 7			
8 X 2	8 X 3	8 X 4	8 X 5	8 X 6	8 X 7	8 X 8		
9 X 2	9 X 3	9 X 4	9 X 5	9 X 6	9 X 7	9 X 8	9 X 9	

2. How to learn times table facts.

$$1 \times 6 = 6$$

$$2 \times 6 = 12$$

$$3 \times 6 = 18$$

$$4 \times 6 = 24$$

$$5 \times 6 = 30$$

$$6 \times 6 = 36$$

$$7 \times 6 = 42$$

$$8 \times 6 = 48$$

$$9 \times 6 = 54$$

$$6 \times 6 = 36$$

$$7 \times 6 = 42$$

$$8 \times 6 = 48$$

$$9 \times 6 = 54$$

Times Table Practice Booklet G 6 Times Table

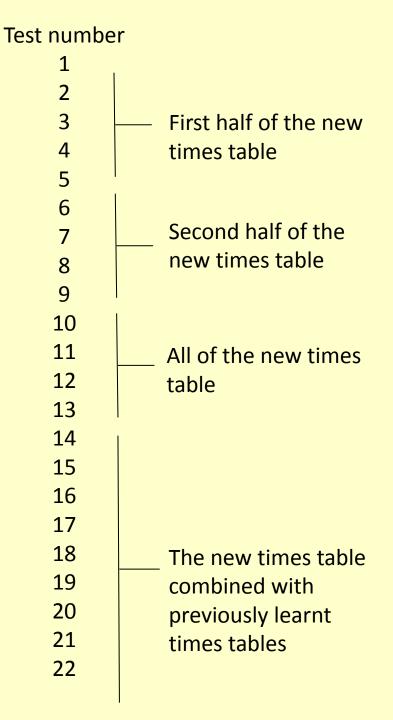
Class:

New facts in this booklet:

$$6 \times 6 = 36$$

$$7 \times 6 = 42$$

$$9 \times 6 = 54$$



When times tables will be introduced in Year 3 and 4

	Year 3	Year 4		
Autumn 1	10 X table	Consolidation		
Autumn 2	5 X table	3 X table		
Spring 1	2 X table	6 X table		
Spring 2	4 X table	9 X table		
Summer 1	8 X table	7 X table		
Summer 2	Consolidation	11 and 12 X table		

3. How you can help at home.

Encourage your children to learn one sound pattern for each times table fact...

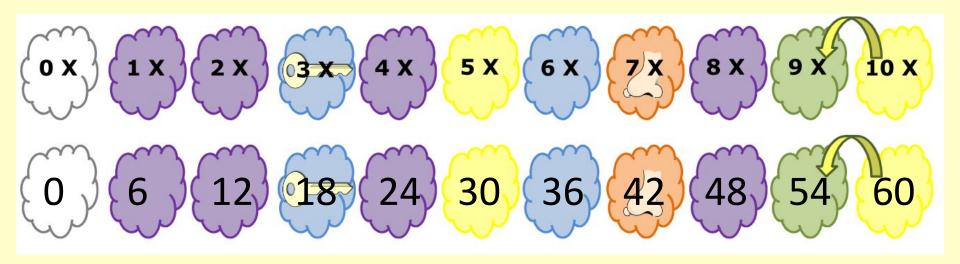
Let's practise chanting!

Key fact:
$$7 \times 6 = 42$$

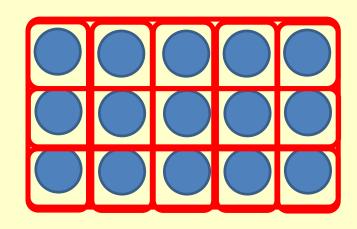
"seven sixes are 42"

"<u>Mm</u> sixes are 42?
Seven sixes are 42"

Encourage your children to see the relationships between times table facts



One times table fact is actually 4 number facts! Let me show you how...



$$15 \div 3 = 5$$

15 divided into groups of three's is 5 groups of three.

$$15 \div 5 = 3$$

15 divided into groups of five's is 3 groups of five.

Can you see four facts? What is the same? What is different?

2 X 2	Year 4, 5 and 6								
3 X 2	3 X 3					·			
4 X 2	4 X 3	4 X 4							
5 X 2	5 X 3	5 X 4	5 X 5						
6 X 2	6 X 3	6 X 4	6 X 5	6 X 6					
7 X 2	7 X 3	7 X 4	7 X 5	7 X 6	7 X 7				
8 X 2	8 X 3	8 X 4	8 X 5	8 X 6	8 X 7	8 X 8			
9 X 2	9 X 3	9 X 4	9 X 5	9 X 6	9 X 7	9 X 8	9 X 9		

Which facts do you know instantly?

Which are your gap facts?

Could you make some fact cards?

Just practise one gap a day!

Times tables Bingo!



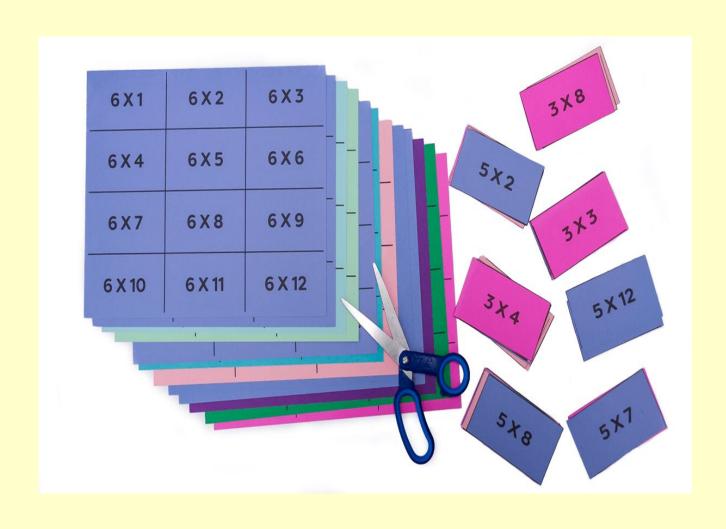
Rock, paper, times table.

Two pupils would be picked to go head to head. Just like rock, paper, scissors except on the third lowering of your fist, you reveal a number with your fingers. For example, one player may hold up 7 fingers and the other may hold up 2. The calculation that needs to be solved is 7 x 2. The first player to get the correct answer remains on their chair and faces another opponent.

This game works best if the children have had sufficient opportunities to practise in advance, so working in pairs for a few minutes each day can be fun. Alternatively, if it is an adult working with a child and you are aware that they need to work on their 6x, 7x and 9x tables, you can restrict the game to those multiplication tables by only holding up fingers representing those numbers.



Quickfire flashcards!



Multiplication board game





Single Player

Jamming

The only game mode without a timer, players chose the table and operation 4 or 8 coins/correct answer (× or ÷ or both) they want to practise. Answer 10, 20 or 30 questions.

Gig

10 coins per correct answer

Gig games last 5 minutes and contain up to 100 questions, which come in 'waves', starting with the 10s, then the 2s, 5s, 3s, 4s, 8s, 6s, 7s, 9s, 11s and 12s. Novices are not expected to get past the 5s.

Gigs provide the child (and their teacher) with a simple measure of their current skills, which is why learners should concentrate fully for the whole Gig as they won't get another try until next month.

Garage

10 coins per correct answer

Players are given a personalised set of 6 multiplication questions (and their matching division questions) in each round. The questions they get keep adjusting to provide the best fit for every learner's needs. This is probably the best game made for improving their recall while they're still learning.

Studio

1 coin per correct answer

Here your child earns their Rock Status, which is based on their Studio Speed. The faster they are the better their status. Studio Speed is the average of their most recent 10 Studio games. Suitable for confident players.

Soundcheck

5 coins per correct answer

Soundcheck games ask 25 multiplication questions (up to 12×12), allowing 6 seconds for each question. Suitable for confident players.

Times tables songs:

https://www.youtube.com/watch?v=e7rYbk9PNuM 6 times table (Shake It Off)

https://www.youtube.com/watch?v=9os1VUUp5io 6 times table (Teachers cover) (Dr DeMaio)

https://www.youtube.com/watch?v=8QU_E0u-tP4 4 times table (I'm Still Standing)

https://www.youtube.com/watch?v=UJY1 fzzM6Y 4 times tables (break dancing rap)

<u>https://www.youtube.com/watch?v=z_BJjR9rdwA</u> 8 times table (Rolling In the Deep)

https://www.youtube.com/watch?v=TdqAA9Ky2DY 8 times table (Skip counting at faster rate - guitar)

https://www.youtube.com/watch?v=5XT3vxohtBg 7 times table (Happy)

Times tables games:

https://mathsframe.co.uk/en/resources/resource/318/Tommys-Trek-Times-Tables Mario like game to encourage to use at home

https://www.mathschase.com/all-games/ Rapid recall fun! Mixed or single TT to 12 with chaser if mixed manually. Also adding/subtracting/dividing by different numbers. Skip counting in TT sequences. Place Value up to 1000 words and digits.

https://www.topmarks.co.uk/maths-games/hit-the-button all timestables. Hit the answer or hit the question tabs for challenge after mastering rapid recall of all to 12 x 12

https://www.mathplayground.com/brain_workouts/brain_workout_02_multiplication.html Make a line of 3 to multiply to reach product target challenge.

http://www.mathszone.net/mw/number/100sq/index.html 100 square to show patterns of each time table for skip counting.

https://www.timestables.co.uk/speed-test/ 100 second speed text can be programmed.

To extend!

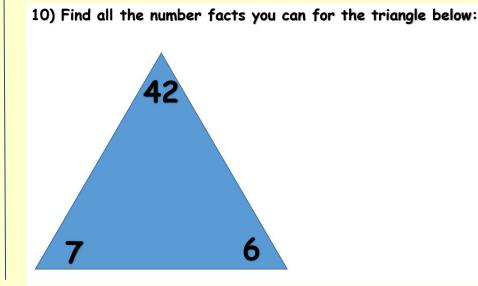
6) Fill in the gaps below



3) Katie pays £54 for 6 tops. How much do they cost on average?

I know ____ so ____

I know "six 7's are 42"
So.... "sixty 7's are 420"
So.... "six lots of 7p is 42p"



- 1. What to learn and when?
- 2. How to learn times table facts.
- 3. How you can help at home.

Thank you for listening 😂