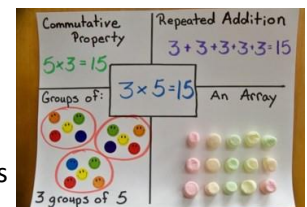


Y3 - Multiplication and Division

In Year 3, children need to be able to recall, and use, **multiplication and division facts for the 3, 4 and 8 times tables**. This is in addition to the 2, 5 and 10 times table knowledge that they learnt in Year 2. It is useful for children to be able to recite these times tables using the structure 'One three is 3, two threes are 6...' and so on, but they should also be able to simply count forwards and backwards in increments of these numbers. However, this does not necessarily represent sufficient understanding. They should also be able to spot patterns in the times tables and recognise the link between the 4 and the 8 times table. Children should use their times table knowledge to derive division facts too. For instance, with $33 \div 3$, they should know that there are eleven 3s in 33, so therefore $33 \div 3 = 11$. Once mental strategies are secure, children will be introduced to more formal written methods of multiplication. Please see the school calculation policy on our website for more information.

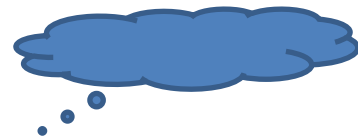
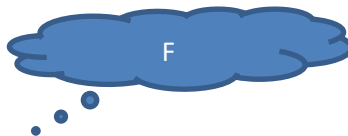
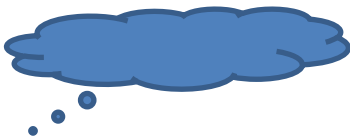
Activities & Games:

- ★ Practise your times tables—focus on the 2s, 5s, 10s, 3s, 4s, and 8s. Can you recite them backwards as well?
- ★ 2 player game, using a deck of playing cards. Sort the cards into 2 piles. Turn over 1 card from each pile and multiply the numbers together. The person who gives the correct answer first, wins a point. You could also play this game with dominoes by multiplying the 2 sides of the domino.
- ★★ Create a board game of your own to practise multiplication facts. You could create an adventure game with times table treasure cards, or a pathway game such as Snakes and Ladders with questions in the squares.
- ★ Online, there are lots of examples of times table songs that people have written to help them remember their times tables. Write your own song to help you to remember one of the times tables. If you have permission, record yourself singing your song so that we can play it in class.
- ★★ Choose a multiplication fact that you struggle to remember, e.g. $7 \times 8 = 56$. Create a poster showing this fact in as many ways as you can think of.
- ★★★ Get some squared paper. Write the units digits of the numbers in the two times table from 1×2 up to 10×2 in a line. Now do the same thing for the multiples of 3, directly underneath, remembering only to write the *units*. It should start to look like the picture on the right. Add in the unit digits for the 4 and the 5 times tables now. Look at your array of numbers - what patterns do you notice? Why do you think they occur? Now add in the 6, 7, 8, 9 and 10 times tables. What patterns are there now?



	2	4	6	8	0	2	4	6	8	0
	3	6	9	2	5	8	1	4	7	0

Maths

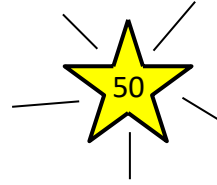


Going deeper...

1. Take the number 50. Write down all the possible ways of making the number 50 using addition, subtraction, multiplication and division. Can you find 5 different ways of making 50?

For an extra challenge, work systematically to find all the possible ways of making 50. Can you be sure that you have got them all.

Try this for the following numbers: 100, 64, 26, 128



2.

$$\star \times \triangle = \uparrow + \oplus$$

$$\uparrow \times \triangle = \triangle$$

Can you work out which digit each of these symbols represents? Make up some examples of your own.

Wonderful websites

[Hit the Button](#)

[Mad4Maths](#)

[Beatbox Tables](#)

[Mad4Maths8](#)

[Times Tables Shift](#)

[Matching cards](#)

Whilst it can be very tempting to encourage your child to have a go at the more challenging activities, it is far better to work with them at a level they feel confident with. Significant and regular practise of even the most basic skills outlined in this document will lead to a much deeper understanding and greater proficiency, and ultimately a much more pleasant 'homework' experience for you and your child!