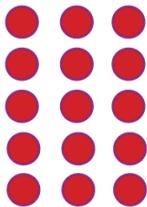


Y4 Maths What they need to know...

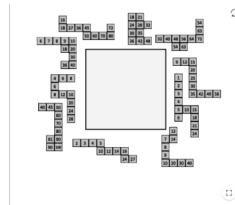
The focus of this home learning is **multiplication and division**. By the end of Year 4, children should have a fluent knowledge of all times tables, up to 12×12 ; they should be able to recall both the multiplication and division facts. Frequent practice of these at home will aid this. Children are expected to use their times table knowledge to support their mental computation of larger calculations too. For example, if I know that $21 \div 7 = 3$, I also know that $210 \div 7 = 30$. Children will be taught formal written methods of calculation for the multiplication of 2 or 3-digit numbers by a 1-digit number. Please see our calculation policy for more information about this. They will also learn efficient strategies for multiplying three 1-digit numbers together (e.g. $3 \times 4 \times 5$) by deciding which is the most helpful order for them to do it in. In addition to this, children are taught the distributive law of multiplication. For example, 15×6 can be solved by doing $(10 \times 6) + (5 \times 6) = 60 + 30 = 90$, where 15 is partitioned into 10 and 5.

Activities & Games:

★ Display the same multiplication in different ways, such as with Cheerios to show arrays and stickers to show groups. Choose a times tables fact, (e.g. $6 \times 8 = 48$) and then get creative! See if you can represent this calculation in a number of different ways - equal groups, arrays, a number line, repeated addition or another technique you feel comfortable with. Can you find something around the house that will help you? You could use pieces of paper, stickers, bottle tops, anything!



★★ Choose a times table that you find hard, and design and create an activity to help you get better at it. You could write a song/poem/rap or a story that includes all of the multiplication facts for that number. Perhaps you could display the facts around the house - on your bedroom door, or your bathroom mirror - so that you are seeing them all the time.



[Complete a multiplication table square puzzle](#) (click on the link)

★★★ These coloured shapes stand for eleven of the numbers from 0 to 12. Each shape is a different number. Can you work out what they are from the shape multiplications?

$\blacksquare \times \blacksquare \times \blacksquare = \bigcirc$	$\blacksquare \times \blacksquare = \star$
$\blacksquare \times \blacksquare = \bigcirc$	$\blacksquare \times \star = \blacksquare$
$\blacksquare \times \blacksquare = \blacksquare$	$\blacksquare \times \blacksquare = \blacksquare$
$\blacksquare \times \blacksquare = \blacksquare$	$\blacksquare \times \blacksquare = \blacksquare$
$\blacksquare \times \blacksquare = \blacksquare$	$\blacksquare \times \blacksquare = \blacksquare$
$\blacksquare \times \blacksquare = \blacksquare$	$\blacksquare \times \blacksquare = \blacksquare$

★★★ Write out the 5 and 6 times table like this:

5	10	15	20	25	30
6	12	18	24	30	36

What do you notice? Why do you think that is? Perhaps you could use drawings to explain your reasoning. Do this for other pairs of times tables too. What other patterns can you spot?

★★ I am thinking of two numbers. The sum of the numbers is 17, the product of the numbers is 72. What are my secret numbers? Can you choose your own two secret numbers and create clues for your partner?

Going deeper...



This is a game you can play against an adult, and against the clock, using the 4 operations and various methods to solve calculations. Make a set of cards with the numbers 100, 50, 25 and 10 on. Then, on different coloured paper write the numbers 1-9. Lastly, roll a dice to make a 3-digit target number. Now you are ready to play. Choose two of the big numbered cards and three of the small numbered cards. How can you use those numbers and the 4 operations to get as close to the target number as possible? You can only use the number cards once but you may not need to use them all!

Click [here](#) for an interactive version of this game.

My Maths

Use our school log in (Username: **coleridge1**, Password: **success74**), and then your own login details to access activities related to our current topic on the MyMaths website. You can also have a look to see if there are some other fun games you would like to play. If you have misplaced your personal login, please see your class teacher to re-issue you one.



Wonderful websites

[Hit the Button](#)

[Monty's Maths Wall](#)

[Division](#)

[Mathsbot](#)

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!