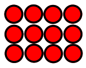
Y5 - Multiplication and Division

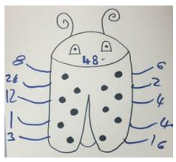
By Year 5, the children are expected to know all of their times tables. They need to be able to use the terms *factor pair* (a pair of numbers that multiply together to make another number, e.g. 4 and 5 are a factor pair of 20) and *multiple* (a multiple of a number is a number in its times table e.g. 12 is a multiple of 3). Number arrays can help children visualise these properties. They can also support understanding of both *square* and *prime* numbers (for instance, can you make an array for the number 13? Why not?) Children should be able to use their multiplication and division facts to multiply or divide multiples of 10 (if I know 6 x 7 = 42, then 6 x 70 = 420 or 6 x 0.7 = 4.2 or 6 x 3.5 = 21 and so on). For information regarding the written multiplication and division methods that the children need to know, please see our school calculation policy.



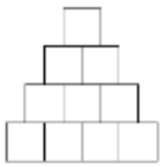
Activities & Games:

★ Write down all the answers for the 3 times table (3,6,9….) and circle all the units. Repeat with the 5 times table (5,10,15…..) Do you notice a pattern of numbers? Now do the same thing with two more times tables.

★★ **Factor Bugs:** Choose a 2 digit number and write it inside the body of a bug you have drawn. Then look for all of the factors that you would multiply to make your number. These will become your legs and antennae of your bug. You could then challenge yourself by choosing a larger number or looking for square factors (when a number is multiplied by itself e.g. 4 x 4 = 16)



★★★ **Product Pyramids**: Choose two 2 digit numbers and two single digit numbers and put them in any order along the bottom of your pyramid. Multiply the two numbers that are next to each other and put the answer in the space above. Keep going until your pyramid is full. How many different totals can you make in the final square by changing the order of the bottom numbers? What is the largest/smallest number you can make?



★★ **Multiplication/division bingo:** Make your own bingo game using multiplication and division (multiplying by 10,100,1000 or dividing by 10,100,or 1000). You will need to have a blank bingo grid, 9 numbers on cards and a series of questions that give the answers printed on the grid. Here is an example for you!

3.4	56	2500
76000	78.5	90
45	0.67	540

The number you get when you multiply 9 x 10.

The number you get when you divide 340 by 100.

My Maths

Use our school login (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.

Going deeper...

Curious Number

Can you order the digits 1,2,3,4,5 and 6 to make a number which is divisible by 6 ...
... so that when the final or last digit is removed it becomes a 5 -figure number divisible by 5 ?
And when the final digit is removed again it becomes a 4 figure number divisible by 4 ?
And when the final digit is removed again it becomes a 3 figure number divisible by 3 ?
And when the final digit is removed again it becomes a 2 figure number divisible by 2 , then finally a 1 figure number divisible by 1 ?

Use the following questions to help you solve this:

What makes a number divisible by one/two/three/four/five/six ...?

Where do the even numbers have to go?

So where do the odd numbers have to go?

Where does the five have to go?

Wonderful websites

angles

Estimating and measuring angles

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!