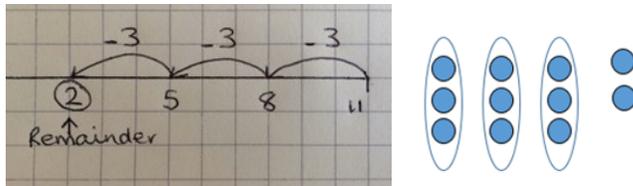
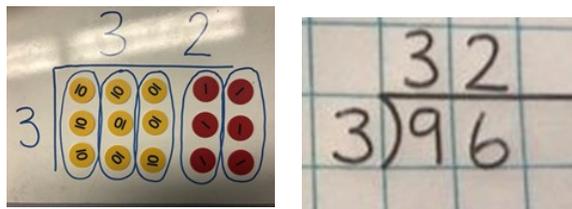


Division

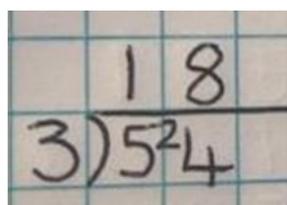
We will recap our use of practical equipment and number lines for showing division, and will start working with remainders.



We will then be introduced to short division, dividing a two-digit number by a one-digit number using short division.



Once we have a secure understanding of the above, we will move onto questions where remainders occur within the calculation.



We will also be practising our recall of our division facts linked to

our 2, 3, 4, 5, 8 and 10 times tables.

At Home

The following activities are ideas for how your child can practise their maths at home:

- Counting from 0 in 4s, 8s, 50s and 100s.
- Practising 2, 3, 4, 5, 8 and 10 times tables.
- Playing on maths games such as those on www.topmarks.co.uk - e.g. Hit the Button to help improve quick recall of number bonds, times tables and division facts.

If you have any questions about your child's maths learning or how you can support them at home, please do ask your child's teacher.



Year 3 Written Calculations



Place Value

In Year 3, we focus on the place value of three-digit numbers. We add and subtract three-digit numbers, multiply two-digit numbers by one-digit numbers and divide two-digit numbers by one-digit numbers.

This leaflet summarises your child's learning terms of written calculations. Our full calculation policy, which gives further information and includes mental strategies, is available on our website.

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Addition

In Year 3, we develop our understanding of addition, by building up in stages towards using the traditional column method.

Firstly, we will use an expanded column method to ensure we understand the value of the digits we are adding.

$$\begin{array}{r} 437 \\ + 225 \\ \hline \end{array} = 400 + 30 + 7 + 200 + 20 + 5 = 600 + 50 + 12 = 662$$

We will then explore how this looks if we record our expanded method vertically, alongside the compact column method, so that we have a clear understanding before we move onto using the compact column method for our addition.

$$\begin{array}{r} 238 \\ + 87 \\ \hline 110 \\ 200 \\ \hline 325 \end{array}$$

We will be practising the correct use of vocabulary E.g. in this calculation, we are adding 3 tens and 8 tens (30 and 80) to make 11 tens or 110, as opposed to 3 and 8 equals 11.

$$\begin{array}{r} 237 \\ + 82 \\ \hline 319 \end{array}$$

Subtraction

We will start our subtraction by using an expanded column method, which doesn't involve any exchanging.

$$\begin{array}{r} 87 - 33 = 54 \\ 80 + 7 \\ - 30 + 3 \\ \hline 50 + 4 = 54 \end{array}$$

We will then learn what do if we have a larger number to subtract in one of the columns. We will need to 'exchange'. We will explore this using practical equipment where we can physically exchange a ten for example, for ten ones and move them to the ones column. We will learn how to record this in an expanded column.

$$\begin{array}{r} 242 - 154 = 88 \\ 100 + 30 \\ \cancel{200} + \cancel{40} + 12 \\ - 100 + 50 + 4 \\ \hline 0 + 80 + 8 = 88 \end{array}$$

$$\begin{array}{r} 54 \\ 88 \\ - 365 \\ \hline 287 \end{array}$$

If we have a secure understanding of the above, we may start to use a compact

Multiplication

Once we have recapped and consolidated our previous understanding of multiplication we will start to use the grid method for multiplication. We will use resources and pictures to help us.

$$\begin{array}{r|l} \times & 20 & 4 \\ \hline 3 & \textcircled{10} \textcircled{10} & \textcircled{1} \textcircled{1} \textcircled{1} \textcircled{1} \\ & \textcircled{10} \textcircled{10} & \textcircled{1} \textcircled{1} \textcircled{1} \textcircled{1} \\ & \textcircled{10} \textcircled{10} & \textcircled{1} \textcircled{1} \textcircled{1} \textcircled{1} \\ \hline & = 60 & = 12 \\ & 60 + 12 = 72 \end{array}$$

$$\begin{array}{r|l} \times & 30 & 5 \\ \hline 7 & 210 & 35 \\ \hline & 210 + 35 = 245 \end{array}$$

Once we have a secure understanding of the grid method, we will start recording the same calculations as short multiplication, comparing the two.

$$\begin{array}{r} 23 \\ \times 6 \\ \hline 138 \end{array}$$

We will also be practising our recall of our 2,3,4, 5, 8 and 10 times tables.