

## Maths - Home Learning Year Two Multiplication and Division

## One Hundred Square

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |



## Mental Mathematics

## Mental Mathematics on Walter Tube

The children need to practise their mental mathematics as regularly as possible. Visit our Walter Tube channel to find the following videos. You can access these on a phone, tablet, computer or even a smart TV. The more the children practise at these the faster and better they will get. Try practising just a few each day.

| Subitising - instantly see how many things there are without counting. https://www.youtube.com/watch?v=xosFB4sFTK4 - Numicon |  |
| :---: | :---: |
|  |  |
| https://www.youtube.com/watch? ? $=$ anLFEKFAmkk - Pound Coins |  |
| https://www.youtube.com/watch? ${ }^{\text {a }}$ =XPwTyBQHI U - Pennies |  |
| https://www.youtube.com/watch?v=p62sssP8zdk - Dots |  |
| https://www.youtube.com/watch? ${ }^{\text {a }}$ =SxwalAc609Q - Dice |  |
| https://www.youtube.com/watch?v=7 Trs3nhitkM - Bears |  |
| Counting Patterns | Mixed Up Counting Patterns |
| 2s - https://youtu. be/lsmaHD2MSHY | 2 s - https://youtu.be/cTAvwMTW 2c |
| 3 s - https://youtu.be/hhiFQRg2GoU | 3s - https:// youtu beelmnPHxxIICZq4 |
| 5s - https://youtu. be/kMAzgbqGove | $5 s-h$ htps:// youtu bee/TQ3XR-uqzns |
| 10 s - https /// $/$ woutu. be/6K2ReOAZTiE |  |
| Multipication Challenge | Division Challenge |
| $\times 2-\mathrm{https}: / / \mathrm{youtu}$. belbSwTUZvDDNg | $\div 2$ - https://youtu.belp78FGUAbrUU |
| $\times 3-\mathrm{https}$ : //youtu. belzuKjix $N$ IxjmQ | $\div 3$ - https://youtu.be/Bnd TB03gC0 |
|  | $\div 5$ - https:///youtu.beloXPYkJgLdzU |
| $\times 10-\mathrm{https}. / / /$ youtu.bel872Pip--Xvg | $\div 10-\mathrm{https}: / /$ youtu be/hGJhYYgH1RM |

## Other Online Resources

Don't forget there are lots of maths activities on Education City, Purple Mash, The Oak National Academy and BBC Bitesize. We have lots of links and resources on our school website, under Home Learning. https://www.walter.wokingham.sch.uk/website/home learning/


## Multiplying Numbers

Look at the symbol below. Talk to an adult at home or think about this to yourself. What is this operation called? What does it mean? Does the answer get bigger or smaller?


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Look at the symbol below. Talk to an adult at home or think about this to yourself. What is this operation called? What does it mean? Does the answer get bigger or smaller?


## Activity 1 - multiplying by 2 and 3

First, lets start by practising the 2 s and 3 s counting patterns forwards and backwards.

| 0 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 24 | 22 | 20 | 18 | 16 | 14 | 12 | 10 | 8 | 6 | 4 | 2 | 0 |
| 0 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 |
| 36 | 33 | 30 | 27 | 24 | 21 | 18 | 15 | 12 | 9 | 6 | 3 | 0 |

## Activity 1 - multiplying by 2 and 3

Which method should I use? You could either use an array to find the answer or use your counting patterns.

## $4 \times 3=12$



## Activity 1 - using arrays

## Sorting objects into arrays



We group objects in a more structured way. This is called an array.

## Activity 1 - using arrays

## Drawing arrays

$6 \times 5=30$


We draw the arrays in our books. These can be done either way ( $6 \times 5$ or $5 \times 6$ )

## Activity 1 - using our fingers and counting patterns to multiply.

 Multiplying using fingers$8 \times 10=80$
$10 \times 8=80$


Using fingers count in the known counting pattern ( $2,3,5$ or 10) up to the other number in the calculation.

## Activity 1 - multiplying by 2 and 3

Multiplication is commutative. That means that it can be done either way round and you would get the same answer. Look at the example below.

$$
\begin{aligned}
& 4 \times 3=12 \\
& 3 \times 4=12
\end{aligned}
$$



## Activity 1 - multiplying by 2 and 3

Use the grid below to help you compose some multiplication number sentences. Use your counting patterns and fingers to help you multiply. Do as many as you can in 30 minutes.

| 2 | 7 | 6 | 10 |
| :---: | :---: | :---: | :---: |
| 9 | 4 | 1 | 12 |
| 5 | 11 | 8 | 3 |



NB: if you want to make the work more challenging then try to find all of the multiples of 2 and 3. Can you put them in order? Have you noticed any patterns?

## Activity 2 - multiplying by 5 and 10

First, lets start by practising the 5 s and 10 s counting patterns forwards and backwards.

| 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 60 | 55 | 50 | 45 | 40 | 35 | 30 | 25 | 20 | 15 | 10 | 5 | 0 |


| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 120 | 110 | 100 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Activity 2 - multiplying by 5 and 10

Use the grid below to help you compose some multiplication number sentences. Use your counting patterns and fingers to help you multiply. Do as many as you can in 30 minutes.

| 2 | 7 | 6 | 10 |
| :---: | :---: | :---: | :---: |
| 9 | 4 | 1 | 12 |
| 5 | 11 | 8 | 3 |



NB: if you want to make the work more challenging then try to find all of the multiples of 5 and 10. Can you put them in order? Have you noticed any patterns?

## Dividing Numbers

Look at the symbol below. Talk to an adult at home or think about this to yourself. What is this operation called? What does it mean? Does the answer get bigger or smaller?


## Dividing Numbers

Look at the symbol below. Talk to an adult at home or think about this to yourself. What is this operation called? What does it mean? Does the answer get bigger or smaller?

## share equally



## shared

## divide



## groups of



## divided into

## Activity 3 - using arrays to divide

## Sorting objects into arrays

$$
30 \div 5=6
$$



We group objects in a more structured way. The first number (30) tells us how many we need altogether and the second number tells us how many need to be in each row (5). Count the number of columns (6).

## Activity 3 - using fingers and counting

 patterns to divide Multiplying using fingers$$
\begin{aligned}
& 8 \times 10=80 \\
& 10 \times 8=80
\end{aligned}
$$



Using fingers count in the known counting pattern (2, 3, 5 or 10) up to the other number in the calculation.

## Activity 3 - dividing by 2 and 3

Use the grid below to help you compose some division number sentences. Use your counting patterns and fingers to help you divide. Do as many as you can in 30 minutes.

| 4 | 10 | 22 | 6 |
| :---: | :---: | :---: | :---: |
| 20 | 18 | 2 | 12 |
| 16 | 8 | 14 | 24 |



NB: if you want to make the work more challenging then see if you can make any links with multiplying by 2 and 3 . Are there any patterns or similarities? Discuss this with the adults at home.

## Activity 4 - dividing by 5 and 10

Use the grid below to help you compose some division number sentences. Use your counting patterns and fingers to help you divide. Do as many as you can in 30 minutes.

| 25 | 40 | 55 | 20 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 35 | 5 | 15 | 30 | $\circ$ | $\vdots$ | $<$ |
| 10 | 50 | 45 | 60 |  |  |  |


| 70 | 50 | 30 | 20 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 60 | 90 | 120 | 80 | $\div$ | 0 | $<$ |
| 10 | 110 | 40 | 100 |  |  |  |

NB: if you want to make the work more challenging then see if you can make any links with multiplying by 5 and 10. Are there any patterns or similarities? Discuss this with the adults at home.

## Activity 5 - solving word problems

When solving word problems we use the RUCSAC strategy to help us to break down the problem. There is a full page copy of this on the next page.


Underline the numbers and important information.


Choose the correct operation and write the number sentence

$$
23+12=3
$$

Solve the calculation using a method you know well.



## Activity 5 - solving word problems

Use the RUCSAC strategy to help solve the word problems. You will need to decide if it is a multiply or divide word problem. Part of the first one has been done for you.

| Read and Underline | Choose | Solve, Answer \& Check |
| :--- | :---: | :--- |
| Blake has 12 cars. He shares them with <br> 2 of his friends. How many do they get <br> each? | - | $12 \div 2=$ |
| Henry has 10 boxes of crayons, and each <br> box has $\underline{8}$ crayons inside. How many <br> does he have altogether? | X | $10 \times 8=$ |
| Noah has bought 15 sweets. He divides <br> them amongst 5 bags. How many is in <br> each bag? |  |  |


| Read and Underline | Choose | Solve, Answer \& Check |
| :--- | :--- | :--- |
| There are 6 pencils in each pot and there <br> are 5 pots for each table. How many <br> pencils are in the classroom? |  |  |
| Eve has 21 balloons. She shares them <br> with 3 friends. How many do they get <br> each? |  |  |
| Leona has 50p and she buys 10 pears. <br> How much do they cost each? |  |  |
| There are 2 packets of pencils. Each <br> packet has 12 pencils each. How many <br> are there altogether? |  |  |


| Read and Underline | Choose | Solve, Answer \& Check |
| :--- | :--- | :--- |
| There are 7 rulers in 3 trays. How many <br> are there altogether? |  |  |
| Charlie bought 14 stickers for his birthday <br> party. 2 people share them. How many <br> do they get each? |  |  |
| Sienna bought 5 bags of apples. In every <br> bag there are 8 apples. How many <br> apples does she have in total? |  |  |
| Alfie has bought 3 bags of sweets. Each <br> bag has 8 sweets. How many are there <br> altogether? |  |  |

