## Year 1 Maths home learning week 10 <br> Multiplication

This week's Maths home learning is all about multiplication. This would have been new learning for your child and not previously covered in school. In year 1 we teach this in a variety of different ways. Please watch the Multiplication video to see the strategies we would have taught your child in class so you can best support them at home.

To warm up you can practise the 2, 5 and 10 times tables with your child. Here are a couple of links for songs that might help with their recall of the times tables.
https://www.bbc.co.uk/bitesize/topics/zqbg87h/articles/zc7ygdm
https://www.bbc.co.uk/bitesize/topics/zqbg87h/articles/zw8qxfr
https://www.bbc.co.uk/bitesize/topics/zqbg87h/articles/zq3rk2p

We also talk to the children about the language we use when talking about multiplication. Language to become familiar with:

## Multiply

## Times

## Groups of

## Lots of

## Task 1 multiplication using repeated addition.

Repeated addition is where we count in groups of a number to solve a multiplication problem. For example, $3 \times 5$ is the same as $5+5+5$. As demonstrated in the video we tend to focus on multiplication problems involving the 2,5 and 10 times tables to support the children's knowledge but we also use other numbers. You can practise this
practically using pairs of socks, lego bricks, counters etc so your child can see this visually as well as physically counting out the objects.

5 $+5+$

$$
5
$$

$$
=15
$$



10

$10+$

$10+$

$10=40$

Task 2-multiplication using 'groups of'

Following on from repeated addition we begin to use the term 'groups of' to solve multiplication problems. This is very similar to repeated addition in the sense that there are a certain number of objects in a group. To teach this we usually use hoops and dots. For example, for $8 \times 2$ we would say 8 groups of 2 equals 16 . We would teach the children to draw out the right number of hoops and add the right number of dots in each hoop. If you have paper plates at home, you can also do this practically by putting the right number of cookies or biscuits onto the paper plate. Or you can collect flowers or pebbles when you go out on a walk or in the garden and put them into equal groups to solve a multiplication problem.


This shows $2+2+2+2+2+2+2+2=16$
And it also shows $8 \times 2=16$


This shows $4+4+4=12$
And it also shows $3 \times 4=12$

Task 3 multiplication using arrays

As demonstrated in the video using arrays solves multiplication problems in a more uniformed way. It still involves drawing out dots, but it is much more structured. For example, $4 \times 5$ would look like this. We would say this is ' 4 time 5 ' or ' 4 lots of 5 .' In this array there are 4 columns of dots with 5 dots in each column.


Arrays are also a great way to show your child that $4 \times 5$ is the same as $5 \times 4$ as you could say there are 5 rows of dots with 4 dots in each row. Just like with addition, when we multiply it doesn't matter which order the numbers go in because the answer will be the same. It is commutative.
You can make arrays out of objects too.


The link below has lots of information about arrays and some games too. The numbers are not solely the 2,5 and 10 times tables so you may need to support your child a little.

## Building Bricks Multiplication

Can you add the bumps on the building bricks to complete these multiplication calculations?
1.
 $2+2+2=\square$ $3 \times 2=\square$
2.

 $2 \times 4=\square$
3.

$3+3=\square$ $2 \times 3=\square$
4.
 $3+3+3=$ $\square$ $3 \times 3=\square$
5.

$\square$ $4 \times 1=\square$
6.
 $2+2+2+2+2=$ $\square$ $5 \times 2=\square$
7.
 $8 \times 1=$ $\square$
8.

$\square$ $4 \times 4=\square$
9.

$\square$
10.

$4+4+4+4+4=$ $\square$ $5 \times 4=$ $\square$

## Introducing Multiplication Arrays

Count in $2 \mathrm{~s}, 5 \mathrm{~s}$ or 10 s to find the total in each array.
Write the total in the box.


## Challenge

Draw an array to show: $2 \times 7$
$5 \times 3$

## Number Shape Multiplication

I can write multiplication statements using the multiplication and equals signs.
For each image, write the multiplication fact shown.
For example:

8888888



## 



Challenge: Ben says, " $4 \times 5$ is the same as $2 \times 10$."
Is he correct? Use your number shapes to show how you know.

## Multiplication word problems

Using any of the methods you have now learnt for multiplication, can you have a go at solving these multiplication word problems. Remember to read the question carefully and underline the important information.

1) Mrs Fernandes buys 4 bags of sweets. Each bag has 6 sweets in. how many sweets does she have altogether?

2) Mrs Bosman plants some flowers in her garden. She plants 3 rows with 10 flowers in each row. How many flowers does she plant altogether?

3) Mrs Prior likes to do lots of running. She runs 5 miles each day for 7 days. How many miles does she run altogether?

4) Mrs Arnott keeps all her pencils in a box. She can fit 4 pencils in a box. She has 7 boxes. How many pencils does she have altogether ?

5) Miss Ruck loves buying stickers. She buys 5 packets of stickers. Each packet has 10 sticker in. how many stickers does she have altogether?
