Year 2 Maths Activities - Week Beginning 1.2.21

Dear Parents and Carers,

We are going to continue with our multiplication learning this week which has been building up, hopefully, to your child being secure with multiplying using arrays. Activity 10 is the piece we'd like to see which will give us a good indication of how well they've grasped it as all questions are covered at some point during the week.

Here is a recap for about the multiplication method the children should be using.

Multiplication

- By now, the children should know that multiplication can be done in any order and that it is the same as **repeated addition**. So 3 X 4 is the same as 4 X 3, which is also the same as 3 + 3 + 3 + 3, and this is also the same as 4 + 4 + 4.
- Now the children should know that if they see a multiplication question that they don't know the answer to, they can draw an array.

Drawing arrays:
The easiest way to think of an array is like an egg box. You might have an egg box that holds 12 eggs and it is set out in 2 rows of 6. This shows us that 2 X 6 = 12.
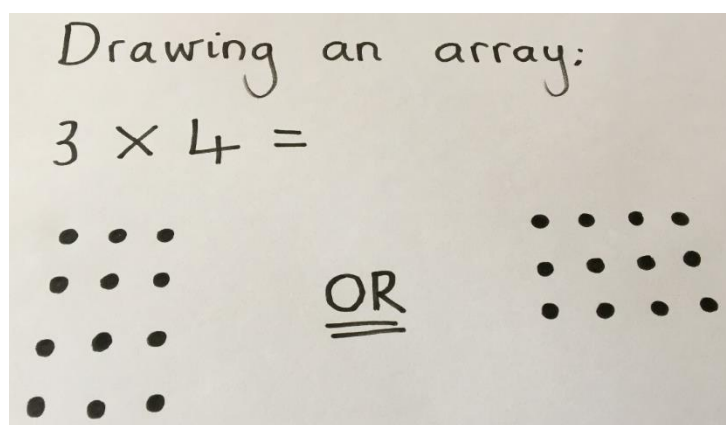
It doesn't matter if you do 3 rows or 4 or 4 rows of 3, you will still get the same answer.

- The children in year 2 should use their times tables as a first resort (by the end of year 2 they should know their 2s, 5s 10s and 3s). They might automatically know that 3 x 4 = 12 (if they know their tables off by heart), or they might be able to count in 3's (3, 6, 9, 12) to find the answer
- Arrays should be used when children don't know the answer (e.g. 6 x 7 as neither times table is covered in year 2).

Day 1	**Objective:** To use arrays to solve multiplication questions. **Starter:** https://youtu.be/2if9JVXJ1qY It's time for the children to apply what they learnt and practiced last week in maths. Today's activity asks a mixture of quick recall questions and questions in which the children will need to use arrays to help them. Please check as your child is going along to ensure they're drawing their arrays out correctly! **Activity:** Use **Activity 1**. Please read the text for your child to ensure they have understood the tasks.
Day 2	**Objective:** To recap doubles and use the 2 times-table correctly We want the children to be confident in the early times tables ($x2$, $x5$, $x10$) ready for the rest in Key Stage 2. Being secure with these times tables will give your child confidence in answering anything linked to them. We will be moving on to division soon and knowing these early tables will help a lot when making connections between divisions. Please do help your child learn their $x2$, $x5$, $x10$ (and $x3$) tables if they don't already know them securely. **Starter:** https://youtu.be/2k1swhxAto4 If your child is secure with their 2 times-table, they may not need to watch today's learning video. If so, move straight on to Activity 3 and try some of the 'stretching further' activities. However, if your child needs a bit of practise doubling, then Activity 2 will help as a warm up. Then they should start Activity 3 (which can be completed alongside the video). **Learning video:** https://vimeo.com/490420447 **Activities: Activity 3** and **Activity 4** provide many opportunities to rehearse the 2 times-table in different ways.

Doubling Challenge Cards

Double these numbers.

54 → _____	22 → _____
60 → _____	26 → _____
69 → _____	31 → _____
73 → _____	37 → _____

Doubling Challenge Cards

Double these numbers.

52 → _____	83 → _____
59 → _____	89 → _____
63 → _____	90 → _____
68 → _____	95 → _____

Also, use **Stretching Further 1** sheet to give your child the chance to not only double, but half! These word problems may need to be read to them.

| Day 3 | **Objective:** To be secure with the 5 times-table
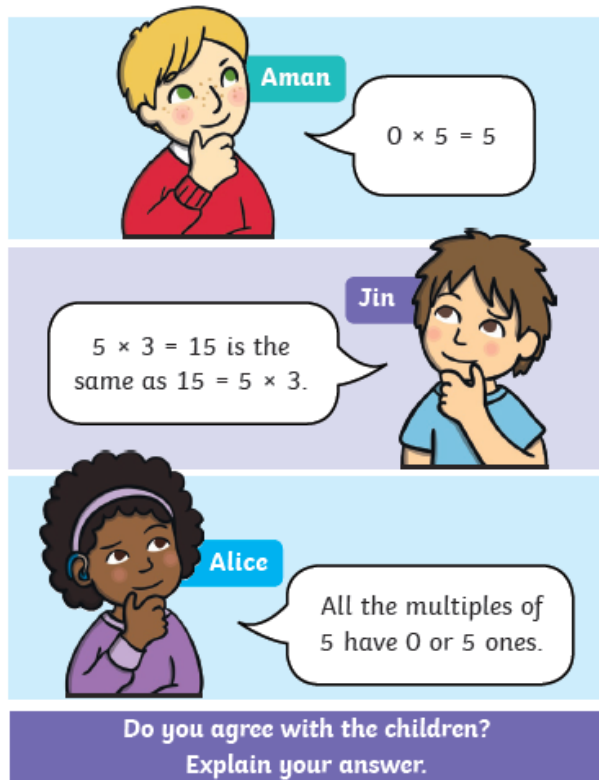
Starter: https://youtu.be/Uvd91XYw2j0

Use **Activity 5** worksheet alongside the learning video. For question 5, the children should work out the answers to either side of the circle to then be able to use < > or = correctly.
It may be worthwhile watching, but if your child is confident with their 5 times-table they may not need the learning video. They can go straight onto **Activity 5** and **Activity 6** worksheets which provide opportunities to rehearse the 5 times-table in different ways (like yesterday with the 2s).

Learning video: https://vimeo.com/490421314

Activity 7 (below) is just three statements about the 5 times table for the children to consider. We want them to say if they agree or not and try to give reasons. They could use equipment to help if needed or if available. |
|---|---|

Activity 7:

Aman

$0 \times 5 = 5$

Jin

$5 \times 3 = 15$ is the same as $15 = 5 \times 3$.

Alice

All the multiples of 5 have 0 or 5 ones.

Do you agree with the children?
Explain your answer.

Possible answers:

Aman is incorrect. Any number multiplied by zero gives the answer zero.

Jin is correct. The equals sign means that both sides are equal to one another so it doesn't matter if it is at the beginning or end of the calculation so long as the sides are equal.

Alice is correct. All the multiples of five have zero or five ones.

At the café, all hot chocolate toppings are 5p.

Alice chose cream, a flake and strawberry sauce.

Aman asked for marshmallows, fudge, cream and nuts.

Jin had all the toppings.

Write a calculation for each child to show how much each of them spent.

Alice's mum spent 25p on toppings.

Aman's dad spent 30p on toppings.

Jin's Grandma spent 10p on toppings.

How many toppings did they each have?
Write a calculation for each adult.

What toppings would you have?
Work out the cost.

Answers:

Alice: $3 \times 5p = 15p$

Aman: $4 \times 5p = 20p$

Jin: $6 \times 5p = 30p$

Mum: $25p = 5 \times 5p$

Dad: $30p = 6 \times 5p$

Grandma: $10p = 2 \times 5p$

Children choose a number of toppings and write a corresponding calculation to work out the total cost.

Day 4	**Objective:** To be secure with the 10 times-table

Starter: https://youtu.be/cg3JIcNRD58

Use **Activity 8** worksheet alongside the today's video. Like yesterday, the video may be worthwhile watching, but if your child is confident with their 10 times-table they may not need the learning video. They can go straight ahead to use **Activity 8** and **Activity 9** worksheets which provide opportunities to rehearse the 10 times-table in different ways.

Learning video: https://vimeo.com/490421912

Activities for stretching further:

True or false?

a)	2 × 10	>	5 × 10
b)	10 × 3	=	10 + 10 + 10
c)	10 + 10	=	10 × 1
d)	100	<	10 × 10
e)	10 × 0	<	10 × 8

Choose from the numbers 1 to 9 to make these statements correct.

f)	10 × _____	>	10 × _____
g)	10 × _____	=	10 + 10
h)	10 × _____	<	10 × 9
i)	10 × 7	=	_____ × 10

Answers:
a) *false*
b) *true*
c) *false*
d) *false*
e) *true*

f) *Children choose any digits that make the statements correct.*
g) **2**
h) *Children choose any digits that make the statements correct.*
i) **7**

Solve these problems.

a) There are 10 sweets in a packet. I buy 8 packets. How many sweets do I have?

b) Football cards come in packs of 10. Luisa collected 5 packs. James collected 8 packs. Who had the most cards? How many cards did they have?

c) Pavel had 10 children at his birthday party. He wanted to put 6 toys in each party bag. How many toys did he have to buy?

d) Lucas and Moses have 30 marbles altogether. They can put 10 in a pot. How many pots will they need?

Answers:

a) $10 \times 8 = 80$ sweets

b) Luisa: $10 \times 5 = 50$ cards. James: $10 \times 8 = 80$ cards. James has the most.

c) $10 \times 6 = 60$ toys

d) $30 = 10 \times 3$. They will need 3 pots.

Day 5	**Objective:** To apply my multiplication knowledge
	Starter: https://youtu.be/sdcK_Kz5sLA
	We really hope your child has been able to master multiplication over these past two weeks. Today is really for applying all they've learnt and showing what they can do using **Activity 10**. Today's activity is a range of questions which have been covered in some form this week already. This should give you a good gauge of how secure your child is with multiplication formally and mentally. We are really interested to know how the children have got on. Please email us this assessment to y2@elystjohns.cambs.sch.uk If there is also another piece of Maths learning they are particularity proud of, we'd love to see that too!

If your child is wanting a little extra, keep scrolling…!

Number Detective

Calling all year 2 detectives! EJ needs you! You will need to think creatively, use your reasoning skills and your problem solving strategies to find the mystery number from the list below.

- The number has two digits.

- Both of the digits are even.

- The digit in the tens place is greater that the digit in the ones place.

- The ones digit is not in the three times table.

- The tens digit is not double the ones digit.

- The sum of the two digits is a multiple of five.

18	86
120	42
46	64
80	8
22	83

If your child is unsure how to begin, try these prompts:

Which clue will you use first?
Is there some way you could sort the numbers that would help?

Solution reasoning:

8 and 120 are not the number because 8 is one digit and 120 has 3 digits.

It can't be 18 or 83 because they have odd digits

46 and 22 don't have a tens number greater than the ones number, so it can't be them

86 is not it because it has 6 in it (the 3x) and the rest are not

It isn't 42 because the tens digit is double the ones digit

There are now only 2 possible answers left: 64 and 80

64 is the answer because 6 + 4 = 10 and 10 is in the 5 times table (a multiple of 5).