

Maths w.b. 18.05.20 – Multiplication and division

In addition to the maths set on Class Dojo this week, we will be holding a TT Rock Stars 'Battle' between the Rabbits and Woodpeckers. The battle will last from 8 am Monday morning until 3 pm on Friday when we will announce the winner. You can earn points for your class by practising your tables as much as possible. Remember, to access the times tables set by your child's class teacher select 'garage' or 'arena'.

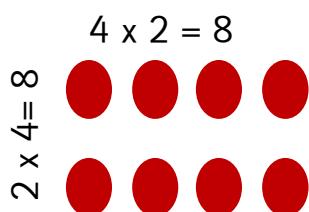
Monday

Play 'Hit the Button' to recap your times table facts. Have a go at practising your 2x, 5x and 10x tables.

<https://www.topmarks.co.uk/maths-games/hit-the-button>

Today you will be using arrays to solve multiplication number sentences. Watch this video to remind you what an array is. <https://www.bbc.co.uk/teach/class-clips-video/maths-ks1-ks2-how-to-use-arrays-to-multiply/zrks382>

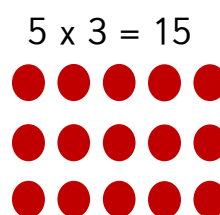
Remember, whichever way you draw your array, you will still have same number of dots in total.



Top tip!

The first number in the number sentence you are trying to solve will be the number of dots in the top row of your array. E.g. To solve 5×3 you would draw this array.

Here, you have groups of five, three times. Or five groups of three.



Have a go at drawing arrays to solve these number sentences:

$$3 \times 5 = \quad 4 \times 7 = \quad 9 \times 3 = \quad 6 \times 2 = \quad 8 \times 4 = \quad 12 \times 3 =$$

Now use your knowledge of arrays to have a go at this challenge:

Find 24 small objects in your house, they could be beads, counters, Lego blocks, marbles etc.

How many different arrays can you make using these 24 objects? You will need to make sure that all the groups in your array are the same size and that you have no objects left over. You could solve this systematically by trying to make groups of 1, then 2, then 3 etc.

Write a multiplication number sentence for each array you make.

Optional hot challenge:

Marcus had less than 30 grapes.

When he put them in groups of 5 he had 1 left over.

When he put them in groups of 2 he had none left over.

How many grapes could Marcus have had?

Show your reasoning.



Tuesday

Watch and join in with Bridget the Lioness to practise your 2x table.

<https://www.bbc.co.uk/teach/super movers/ks1-maths-the-2-times-table-with-bridget-the-lioness/zrrx92p>

Today you will be using your knowledge of times tables and arrays to solve these worded problems. Underline or highlight the important information in the question and write down the number sentence you need to solve. Even if you can solve the number sentence in your head, draw an array to check you are correct. Remember to write your answers in words.

Theo bought 4 packs of balloons. Each pack had 5 balloons in it. How many balloons did he have altogether?

A banana costs 4p. What is the cost of 9 bananas?

Alice wants 6 rides at the fair. Each ride costs 7p. How much will she have to pay?

Tim has twelve 5p coins in his piggy bank. How much does he have altogether?

Danna buys 7 packets of pens, with 3 pens in each. How many pens does she have?

Poppy reads 3 pages of her book every day for 8 days. How many pages does she read altogether?

There were 8 tents with 5 children in each tent. How many children were there altogether?

Now have a go at writing and solving your own multiplication worded problem. Ask one of your family members to solve it. Can you be the teacher and mark their work?

Optional hot challenge

Would you rather have 3 boxes with 10 biscuits in or 5 boxes with 5 biscuits in?
Explain your reasoning.

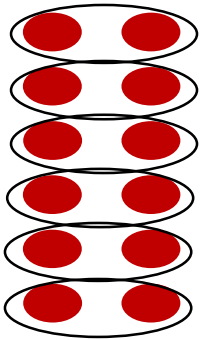
Would you rather have 4 trays with 5 apples in or 2 trays with 10 apples in?
Explain your reasoning.



Wednesday

Start off your maths today by spending 10 minutes practising your multiplication and division facts on TT Rock Stars. Remember, you are trying to earn as many points as you can to help your class win the battle!

Today you are going to be using arrays to solve division number sentences. Watch this video for a quick recap. <https://www.bbc.co.uk/bitesize/topics/zqbg87h/articles/z9pc8mn>



To solve the number sentence $12 \div 2 =$ you will need a **total of 12 dots** in your array. Keep drawing groups of 2 until you have 12 dots altogether. Then count up how many groups of 2 you have by drawing around them. This will give you your answer.

There are six groups of two so $12 \div 2 = 6$

Have a go at using arrays to solve these number sentences:

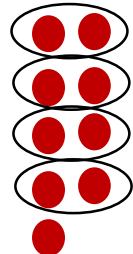
$$20 \div 4 = \quad 14 \div 2 = \quad 28 \div 7 = \quad 18 \div 3 = \quad 24 \div 8 =$$

Sometimes when solving a division number sentence there might be too many dots to fit into equal groups. You would still include this in your array but not include it when circling groups. We call this a remainder and write it using an 'r'. E.g. $9 \div 2 = 4 \text{ r}1$

An array for this question would look like this:

There are four groups of two with one left over.

$$9 \div 2 = 4 \text{ r}1$$



Now have a go at solving these division number sentences:

$$17 \div 5 = \quad 19 \div 2 = \quad 25 \div 3 = \quad 28 \div 5 = \quad 22 \div 4 =$$

Optional hot challenge

My brother and I have £17 each. My grandad gives us an equal amount of money so that we now have £50 altogether! How much money did he give us altogether?

How much did he give each brother?



Thursday

Start off your maths today by playing 'Daily Ten'. Select 'Level 5', 'Division', 'Mixed Tables, \div 2, 5, 10'. Choose how many seconds you would like to solve each question and have a go.

<https://www.topmarks.co.uk/maths-games/daily10>

Today you will be solving division worded problems using your knowledge of arrays from yesterday. Remember to underline or highlight the important information and write down the number sentence you are trying to solve (these questions will have no remainders in their answers). Don't forget to write your answers in words.

Maisie has a piece of ribbon 15cm long. How many 3cm pieces can she cut?

Harry has 45 stickers. He can stick 5 on each page of his book. How many pages will he fill?

Ellie the football coach has 28 players. She sorts them into teams of 4. How many teams does she have?

Joe wants 27 pens. They are sold in packets of 3. How many packs should he buy?

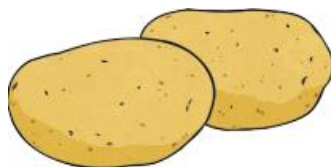
Tilly shared 32 cherries between 4 bowls. How many cherries were in each bowl?

Oliver is having a party. He needs 24 cup cakes. They are sold in boxes of 6. How many boxes should he buy?

Now have a go at writing and solving your own division worded problem. Ask one of your family members to solve it. Can you be the teacher and mark their work?

Optional hot challenge

A grocer has 189 baking potatoes. The grocer puts 75 baking potatoes out individually and bags the rest of the potatoes into packs of 6. How many packs of 6 does the grocer make?



Friday

Start your maths by spending 10 minutes playing TT Rock Stars. Remember, today is the last day of the Year 2 Rock Star Battle and your last chance to earn points for your class!

Today you are going to be using your knowledge of addition, subtraction, multiplication, division and fractions to solve a variety of questions. Some of the problems you will be able to solve quickly in your head and others you will need to write down your workings.

Remember:

For addition and subtraction – Use a number line

For multiplication and division – Use an array

For fractions – Use sharing

First have a go at answering the questions by yourself. Can you earn an independence bear dojo?

Then ask your grown-up to help you with any questions you found tricky.

1. $2 + 7 =$	2. $37 + 5 =$	3. $10 + 20 =$	4. $18 - 8 =$	5. $88 - 4 =$
6. $3 \times 10 =$	7. $\frac{1}{2}$ of 6 =	8. $3 + 30 + 3 =$	9. $6 \times 10 =$	10. $100 - 10 =$
11. $4 + 81 =$	12. $7 \times 2 =$	13. $___ + 8 = 20$	14. $54 + 22 =$	15. $8 \div 2 =$
16. $63 - 4 =$	17. $54 - 20 =$	18. $99 + 10 =$	19. $67 + 33 =$	20. $59 - 15 =$
21. $17 + 48 =$	22. $\frac{1}{4}$ of 24 =	23. $98 - ___ = 28$	24. $120 \div 10 =$	25. $74 - 47 =$

Optional hot challenge

Use your knowledge of addition, subtraction, multiplication and division to solve these number sentences. They get increasingly more challenging as you go down the triangle. How many can you solve?

