

Numeracy lesson.

Friday 24<sup>th</sup> April

# Mental Maths

*Recommended time 15 mins*

Practise your multiplication and division using this fun game!

<https://www.topmarks.co.uk/number-facts/number-fact-families>

## Number Fact Families

+ and -      × and ÷

### Multiplication & Division

|                      |                      |
|----------------------|----------------------|
| 2 to 5 Times Tables  | 2 to 5 Times Tables  |
| 6 to 12 Times Tables | 6 to 12 Times Tables |
| 2 to 12 Times Tables | 2 to 12 Times Tables |

Find the number facts family

|    |   |   |   |    |
|----|---|---|---|----|
| 8  | × | 7 | = | 56 |
| 7  | × | 8 | = | 56 |
| 56 | ÷ | 8 | = | 8  |
| 56 | ÷ | 7 | = | 8  |

# L.I. To apply my understanding of multiplication and division

## Steps to success

- I understand how multiplication and division are linked.
- I know that multiplication and division are the inverse (opposite) of one another.
- I can apply this knowledge to solve problem solving questions.



# All these words mean multiply!

## Multiplication

multiply  
times  
groups of  
lots of  
repeated addition  
product  
multiplied by  
array



multiply  
times  
groups of  
lots of  
repeated addition  
product

# All these words mean divide!

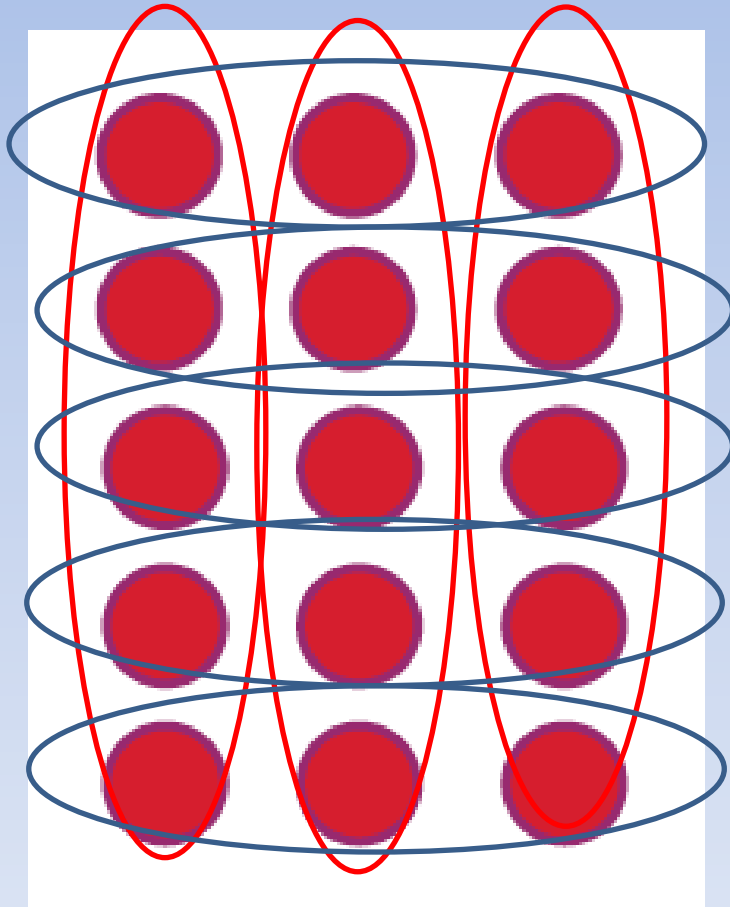
## Division

divided by  
share  
divisible by  
share equally  
divide  
group  
divide into

divided by  
share  
divisible by  
share equally  
divide

Today you will be applying what you've learnt about multiplication and division to solve problem solving questions.

# Remember this!



So, from this one array we can see that...

$$5 \times 3 = 15$$

$$3 \times 5 = 15$$

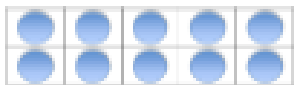

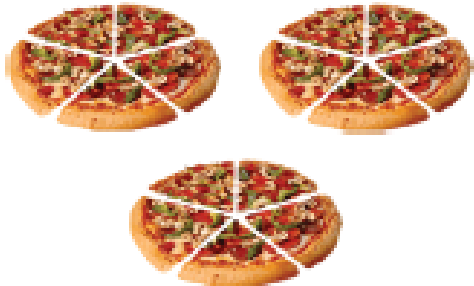
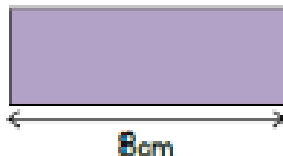
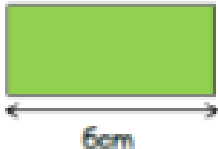

$$15 \div 3 = 5$$

$$15 \div 5 = 3$$

Have you noticed that all the calculations have a 3, 5 and 15 in them? We have made a number family!

That is because multiplication and division are linked to each other- they are the OPPOSITE (inverse).

# Your turn! You choose what level of problem solving you would can to do!

| Mild   | Spicy  | Hot   |
|--|--|---|
| <p style="text-align: center;"><b>Fluency</b></p> <ul style="list-style-type: none"> <li>• <math>5 \times 3 = 15</math><br/>Write a division sentence using the same numbers.</li> <li>• Write these addition sentences as multiplication sentences.<br/><br/>One has been done for you.<br/><br/><math>5 + 5 + 5 + 5 = 5 \times 4</math><br/><math>2 + 2 + 2 =</math><br/><math>10 + 10 =</math></li> <li>• Can you write 4 number sentences to describe the array?</li> </ul>  | <p style="text-align: center;"><b>Reasoning</b></p> <ul style="list-style-type: none"> <li>• Use the number cards to make multiplication and division sentences.<br/>How many numbers up to 20 can you make?</li> </ul>  <p>eg <math>1 \times 1 = 1</math></p> <ul style="list-style-type: none"> <li>• Use the picture below to think of multiplication and division sentences using <math>\times</math>, <math>\div</math> and <math>=</math></li> </ul>  | <p style="text-align: center;"><b>Problem Solving</b></p> <ul style="list-style-type: none"> <li>• Each purple block is 8cm long.</li> </ul>  <p>Each green block is 6cm long.</p>  <p>How long is a blue block?</p>  <p>Can you write a multiplication or division sentence for each step of working out you do?</p> |



# Let's reflect on our learning!

## Do you/ can you now...

...understand how multiplication and division are linked?

...know that multiplication and division are the inverse (opposite) of one another?

...apply this knowledge to solve problem solving questions?

Not achieved the learning intention- I've answered 'no' to all of the above.  
Go through the slides again.

Partly achieved the learning intention- I've answered 'yes' to some of the above  
Goo job! We'll keep practising.

Achieved the learning intention- I've answered 'yes' to all of the above.  
Well done!

