## **Year 2 The Multiplication Symbol**

Today we will learn all about the multiplication symbol



# **Fluency Revision**

Complete these calculations; Show how you worked them out:

48 + 22 =

53 - 39 =

45 + 28 =

56 - 24 = 44 + 44 =



Write a number story for 2 of the calculations.

Mrs Riley had 5 baskets of cats. There were 2 cats in each basket. Write a repeated addition to show how many cats she had altogether.



## Vocabulary



#### Recap

### There are 4 equal groups There are 5 bananas in each group.

#### 5 + 5 + 5 + 5 = 20



Do you rembember how we learned to describe equal groups last week? We count the groups and then how many are in each group. We can then turn this into a repeated addition.

## Your turn

#### Work out the total of each group of pictures.



Add the equal groups using repeated addition.



#### This is the multiplication symbol



#### It means 'lots of', 'groups of', multiplied by and times!

Let's see how this works. Look at this picture. There are 4 lots of 2.

2 + 2 + 2 + 2 = 8



We can swap the words 'lot's of' for the multiplication symbol and say

 $4 \times 2 = 8$ 

# **Explore**

#### Look at these groups. How could you describe them?



#### There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.

There are two \_\_\_\_\_s.

# **Explore**

### Look at these groups. How could you describe them?



3 + 3 = 6

### There are 2 equal groups with 3 in each group.

There are two 3s.

We could use the multiplication symbol to say this in a more efficient way.

# **Explore**

Look at these groups. How could you describe them?



There are 2 equal groups.  $2 \times 3 = 6$ 

There are two 3s.

There are 3 in each group.

3 + 3 = 6

Look at these groups. How could you describe them?



How many groups? How many are in this group? Write it as a repeated addition.

Re write the addition using the multiplication symbol

Look at these groups. How could you describe them?



There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.

There are two \_\_\_\_\_s.

Look at these groups. How could you describe them?



There are 2 equal groups with 10 in each group.

There are two 10s.

10 + 10 = 20  $2 \times 10 = 20$ 

# Your Turn

Can you match the multiplication to the picture?



### **Answers**

Can you match the multiplication to the picture?



Let's look at this table. Watch the lesson video to watch Mrs Riley's explanation.

| Addition          | Multiplication | Story                                       |
|-------------------|----------------|---|
| 6 + 6 + 6         | 3 x 6          | There are 3 equal groups with 6 each        |
| 5 + 5 + 5 + 5 +5  | 5 x 5          | There are 5 equal groups with 5 each        |
| 10 + 10 + 10 + 10 | 4 x 10         | There are 4 equal<br>groups with 10<br>each |

Can you complete this table? You could draw pictures to help you.

| Addition  | Multiplication |
|-----------|----------------|
| 2 + 2     |                |
|           | 2 x 3          |
| 3 + 3 + 3 |                |
|           | 3 x 4          |
| 5 + 5 + 5 |                |

Can you complete this table? You could draw pictures to help you.

| Addition  | Multiplication |
|-----------|----------------|
| 2 + 2     | 2 x2           |
| 3+3       | 2 x 3          |
| 3 + 3 + 3 | 3 x3           |
| 4+4+4     | 3 x 4          |
| 5 + 5 + 5 | 3x5            |

## **Independent Practice**

Cut out the cards and match the picture to its addition and multiplication number sentences.

![](_page_18_Figure_2.jpeg)

## **Problem Solving**

Look at the chocolate chips on the cookies.

Can you write the repeated addition and multiplication?

![](_page_19_Picture_3.jpeg)

## **Problem Solving**

Look at the chocolate chips on the cookies.

![](_page_20_Picture_2.jpeg)

## **Problem Solving**

![](_page_21_Picture_1.jpeg)

What's the greatest amount? Talk to your grown up about how to work this out.

![](_page_21_Picture_3.jpeg)

![](_page_21_Picture_4.jpeg)

![](_page_21_Picture_5.jpeg)

![](_page_21_Picture_6.jpeg)

![](_page_22_Picture_1.jpeg)

To find the greatest amount, we need to work out how much is in each group.

![](_page_22_Picture_3.jpeg)

![](_page_22_Picture_4.jpeg)

 $10+10=20\ 2 \times 10=20$ 

$$3 + 3 + 3 + 3 + 3 = 15$$
  $5 \times 3 = 15$ 

 $6+6 = 12 \ 2 \times 6 = 12$ 

5+5+5+5=20 4 x 5 = 20

![](_page_23_Picture_0.jpeg)

Am I correct? Explain how you know.

## Reasoning

![](_page_24_Picture_1.jpeg)

Am I correct? Explain how you know.

I am correct as: 3 x 4 = 12 4 + 4 + 4 = 12

# **Independent Practice 1**

![](_page_25_Figure_1.jpeg)

#### 2 Complete the table below.

| Addition               | Multiplication |
|------------------------|----------------|
| 5 + 5 + 5 + 5          |                |
|                        | 3 x 2          |
| 10 + 10 + 10 + 10 + 10 |                |
|                        | 6 x 5          |

1 Complete the table below.

| Story   | Draw it | Addition | Multiplication |
|---|---------|----------|----------------|
| There are four<br>equal groups<br>with 2 in each<br>group.  |         |          |                |
| There are three<br>equal groups<br>with 5 in each<br>group. |         |          |                |

![](_page_25_Picture_6.jpeg)

Is Tam correct? Explain how you know.

#### If you want a challenge... Use <, > or = to make the statements correct. a 4 x 3 3 + 3 + 3 + 3 b 5 x 5 5 + 5 + 5 Find the odd one out. 4 + 4 + 4 + 4 d 3 x 2 c 5 x 4 3 + 3 + 3 Find 3 possible solutions to each of 5 + 5 + 5 + 5these calculations. two 10s Complete the statement below to make it correct. 3 + 3 + 3 + 3 > x ten 2s x = 10 10 × 2 The total is 20, what could the addition and multiplication number sentences be? 3 List your answers below Addition Multiplication: 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 10 + 10 + 10 x 4 + 4 + 45 × 4 Complete the story for the multiplication: 4 x 5. 4 < 2 + 2 + 2 + 2 × Draw a picture to show this. 2 × 10 10 + 10four 5s

# If you're finding things tricky....

Complete the sentences to describe the equal groups.

![](_page_27_Figure_2.jpeg)

Complete the table below. The first one has been completed for you.

| Addition              | Multiplication |
|-----------------------|----------------|
| 3 + 3                 | 2 x 3          |
|                       | 4 x 2          |
|                       | 5 x 10         |
| 10 + 10 + 10          |                |
| 2 + 2 + 2 + 2 + 2 + 2 |                |

![](_page_27_Figure_5.jpeg)

There are three \_\_\_\_\_s.

# Exit task – Dong Nao Jin

Who has the most bananas?

![](_page_28_Figure_2.jpeg)

![](_page_29_Picture_0.jpeg)

## **Fluency Answers**

Complete these calculations; Show how you worked them out:

48 + 22 = 70 53 - 39 = 14 45 + 28 = 73 56 - 24 = 32 44 + 44 = 88

Mrs Riley had 5 baskets of cats. There were 2 cats in each basket. Write a repeated addition to show how many cats she had altogether. 2+2+2+2=10

![](_page_30_Figure_4.jpeg)

![](_page_31_Figure_0.jpeg)

$$3 \times 4 = 4 + 4 + 4$$

| am correct as:  $3 \times 4 = 12$ 4 + 4 + 4 = 12

![](_page_31_Figure_3.jpeg)

#### Complete the table below.

| Addition               | Multiplication |
|------------------------|----------------|
| 5 + 5 + 5 + 5          | 4 x 5          |
| 2 + 2 + 2              | 3 x 2          |
| 10 + 10 + 10 + 10 + 10 | 5 x 10         |
| 5 + 5 + 5 + 5 + 5 + 5  | 6 x 5          |

1 Complete the table below.

| Story   | Draw it  | Addition      | Multiplication |
|---|--|---------------|----------------|
| There are four<br>equal groups<br>with 2 in each<br>group.  | Any drawing to show four<br>groups with 2 in each<br>group.  | 2 + 2 + 2 + 2 | 4 x 2          |
| There are three<br>equal groups<br>with 5 in each<br>group. | Any drawing to show three<br>groups with 5 in each<br>group. | 5 + 5 + 5     | 3 x 5          |

![](_page_32_Picture_2.jpeg)

Is Tam correct? Explain your answer.

Feng is correct as 5 + 5 + 5 + 5 + = 25 and  $5 \times 5 = 25$ .

1 Complete the sentences to describe the equal groups.

![](_page_33_Figure_1.jpeg)

1 Complete the table below. The first one has been completed for you.

| Addition               | Multiplication |
|------------------------|----------------|
| 3 + 3                  | 2 x 3          |
| 2 + 2 + 2 + 2          | 4 x 2          |
| 10 + 10 + 10 + 10 + 10 | 5 x 10         |
| 10 + 10 + 10           | 3 x 10         |
| 2 + 2 + 2 + 2 + 2 + 2  | 6 x 2          |

c 10 + 10 = 202 x 10 = 20There are 2 equal groups with 10 in each group. There are two 10 s.

![](_page_33_Figure_5.jpeg)

There are three <u>3</u>s.

Use <, > or = to make the statements correct.

a
 
$$4 \times 3$$
 =
  $3 + 3 + 3 + 3$ 
 b
  $5 \times 5$ 
 >
  $5 + 5 + 5$ 

 c
  $5 \times 4$ 
 >
  $4 + 4 + 4 + 4$ 
 d
  $3 \times 2$ 
 <
 $3 + 3 + 3$ 

Complete the statement below to make it correct.

3 + 3 + 3 + 3 > \_\_\_\_ x \_\_\_\_ Any multiplication calculation that provides an answer of less than 12

3 The total is 20, what could the addition and multiplication number sentences be? List your answers below.

![](_page_34_Picture_5.jpeg)

4 Complete the story for the multiplication: **4 x 5**. Draw a picture to show this.

![](_page_34_Picture_7.jpeg)

![](_page_34_Picture_8.jpeg)

All the statements have the answer 20 except 4 + 4 + 4 so that is the odd one out.

![](_page_34_Picture_10.jpeg)

| Possible answers    | third calculation                    |
|---------------------|--------------------------------------|
| first calculation:  | 1 × 2                                |
| 1 × 10 = 10         | 2 x 2                                |
| 2 × 5 = 10          | 2 x 3                                |
| 5 × 2 = 10          | 2 x I                                |
| 10 × 1 = 10         | The multiplication tables children   |
| second calculation: | are starting to learn (two, five and |
| 1 x 30              | those numbers written first in the   |
| 5 × 6               | calculations.                        |
| 10 x 3              |                                      |

#### **Answers**

#### Who has the most bananas?

![](_page_35_Figure_2.jpeg)