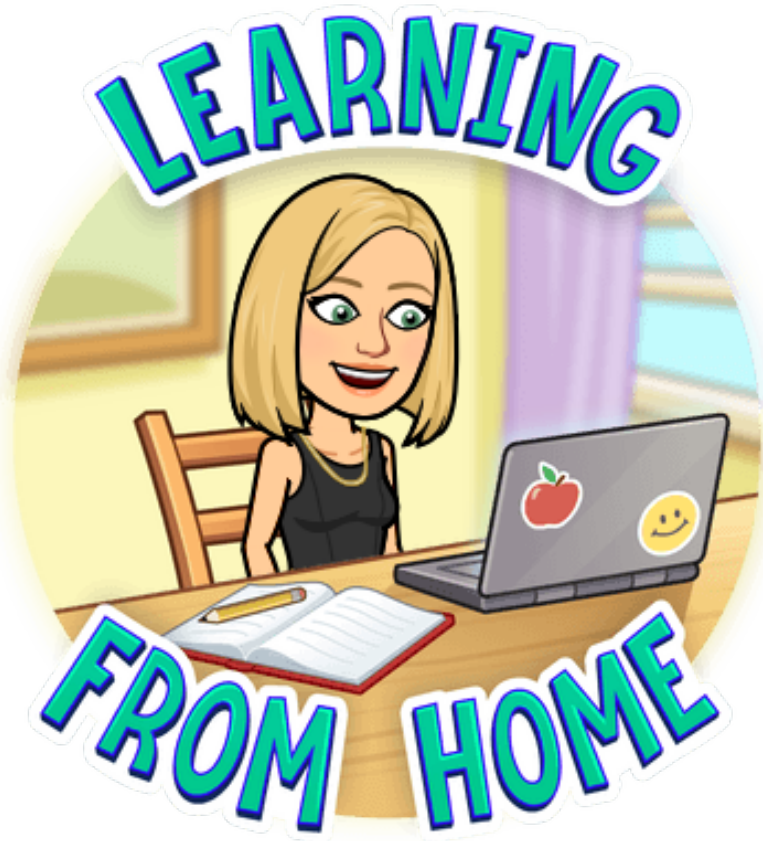


Year 2 Multiplication from Pictures

Tuesday 02.02.21

Today we are going to build on our work from yesterday to create multiplication sentences from pictures.



Fluency Revision

Complete these calculations; Show how you worked them out:

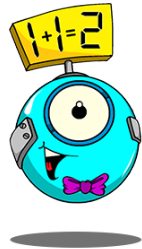
$$32 - 19 =$$

$$41 - 16 =$$

$$65 + 17 =$$

$$98 - 53 =$$

$$51 + 28 =$$



Choose 2 calculations and create a fact family.

Mrs Riley has £1. She buys a pen for 26p and a notebook for 53p. How much change does she have?

Vocabulary

Multiplication Year 2

Equal Groups



There are 5 groups with the same amount in each group.
They are equal groups.

www.hackmath.co.uk

Multiplication Year 2

Repeated Addition


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

Adding the same number again and again.

www.hackmath.co.uk

Multiplication Year 2

Equal Groups


$$5 \times 3 = 15$$

There are 5 groups with the same amount in each group.
They are equal groups.

www.hackmath.co.uk

Multiplication Year 2

Multiplication Symbol



We use this symbol to show we are **multiplying**
(adding equal groups of numbers).

www.hackmath.co.uk

Multiplication Year 2

Repeated Addition


$$3 + 3 + 3 + 3 + 3$$

Adding the same number again and again.

www.hackmath.co.uk

Multiplication Year 2

Multiply

To add equal groups of numbers.


$$5 \times 3 = 15$$

There are 5 lots of 3s.

www.hackmath.co.uk

Recap

Equal Groups

Each group has equal number of objects.



5 groups with 2 in each group.

$$2 + 2 + 2 + 2 + 2 = 10$$

$$5 \times 2 = 10$$

Yesterday we learned how to describe our equal groups using the multiplication symbol.

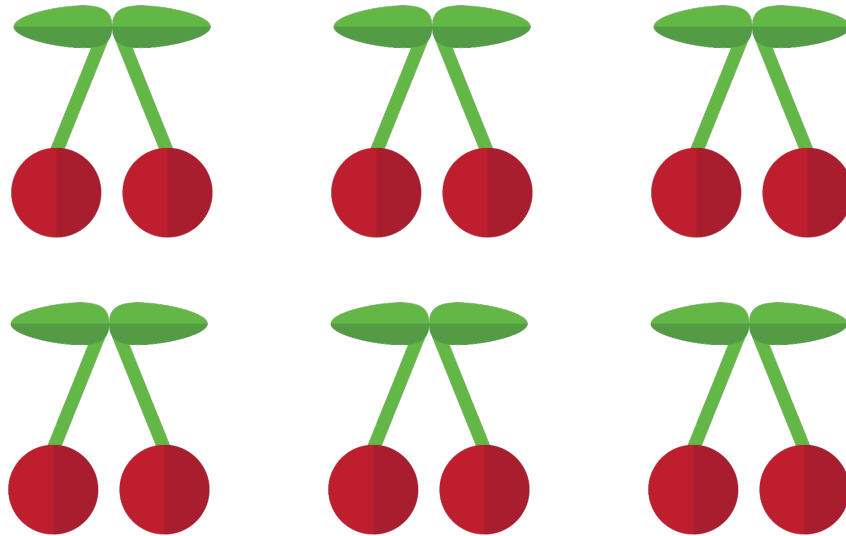
Recap

+

x

=

Use these symbols to write 2 number sentences about this picture.

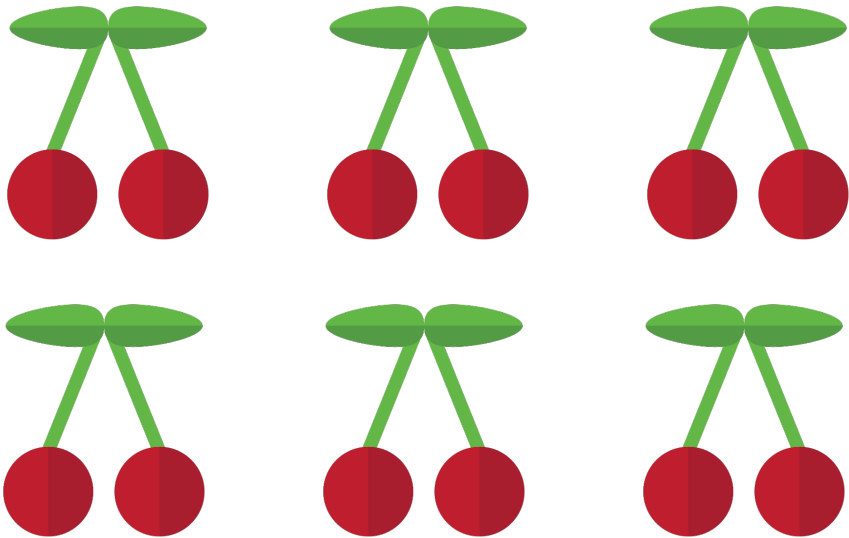


Review

+

x

=

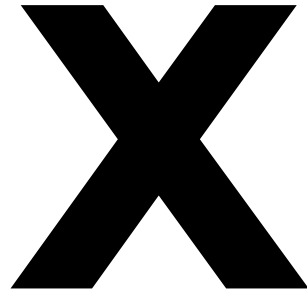


$$2 + 2 + 2 + 2 + 2 + 2 = 12$$

$$6 \times 2 = 12$$

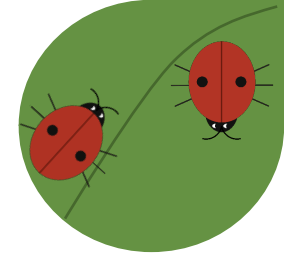
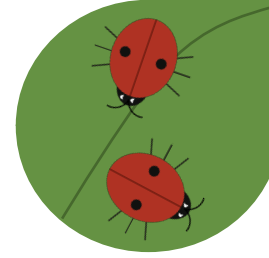
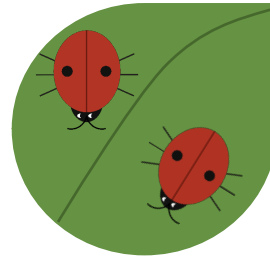
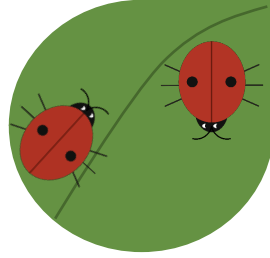
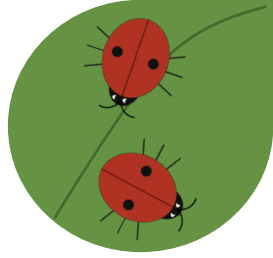
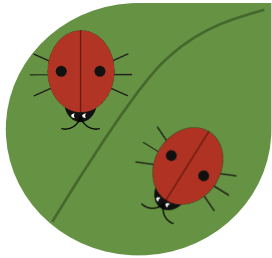
Recap

What does this symbol mean?
Talk to your grown up.



Explore

What multiplication number sentence can you write about the ladybirds?



$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

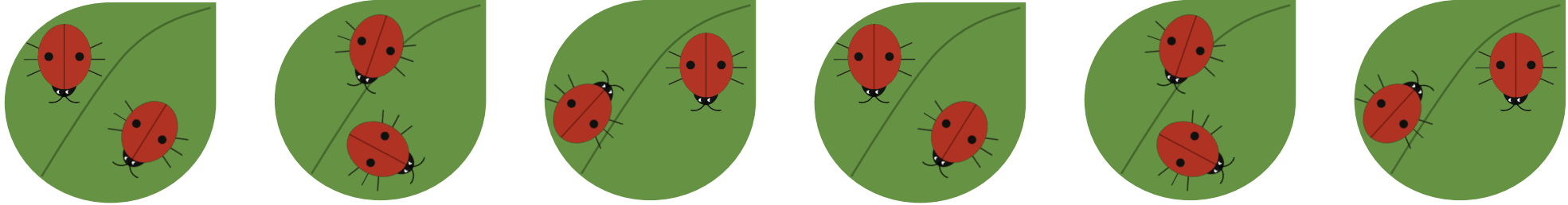
 is how many groups there are.

 is how many are in each group.

Watch our
lesson video
to see Mrs
Riley's
explanation.

Explore

What multiplication number sentence can you write about the ladybirds?



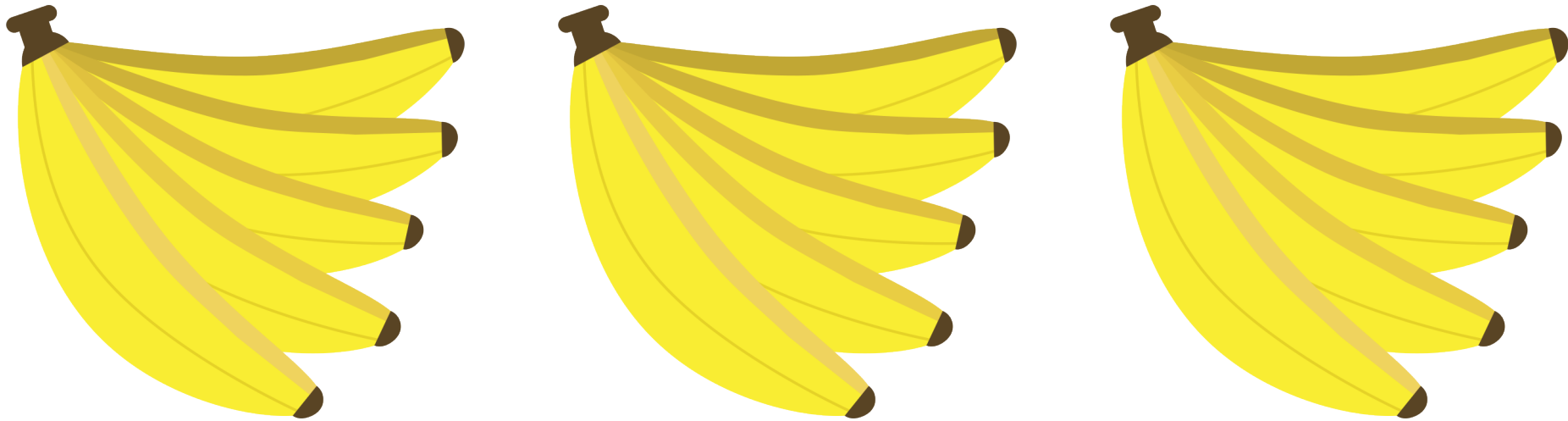
$$6 \times 2 = 12$$

6 is how many groups there are.

2 is how many are in each group.

Explore

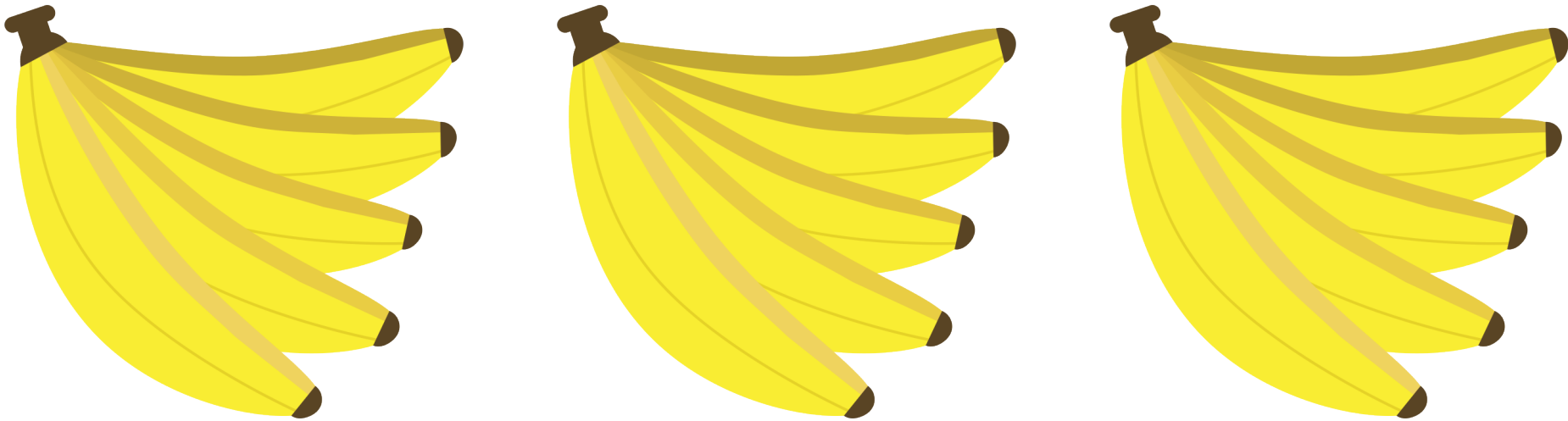
What does the **5** represent in this multiplication?



$$3 \times \mathbf{5} = 15$$

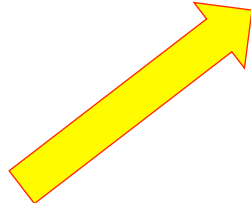
Explore

What does the **5** represent in this multiplication?



The 5 is the number in each group.

$$3 \times \mathbf{5} = 15$$



There are 3 groups with 5 in each group.

Guided Practice...

How could we describe this picture using the multiplication symbol?



Watch our lesson video to watch Mrs Riley's explanation.

_____ lots of 3 = _____

_____ multiplied by _____ =

_____ x _____ = _____

Guided Practice

How could we describe this picture using the multiplication symbol?



$$\underline{\quad 3 \quad} \text{ lots of } 3 = \underline{\quad 9 \quad}$$

$$\underline{\quad 3 \quad} \text{ multiplied by } \underline{\quad 3 \quad} = 9$$

$$\underline{\quad 3 \quad} \times \underline{\quad 3 \quad} = \underline{\quad 9 \quad}$$

Guided Practice

Millie is counting her cakes.
She has 4 boxes each with 3 cakes in.
How many cakes does she have?

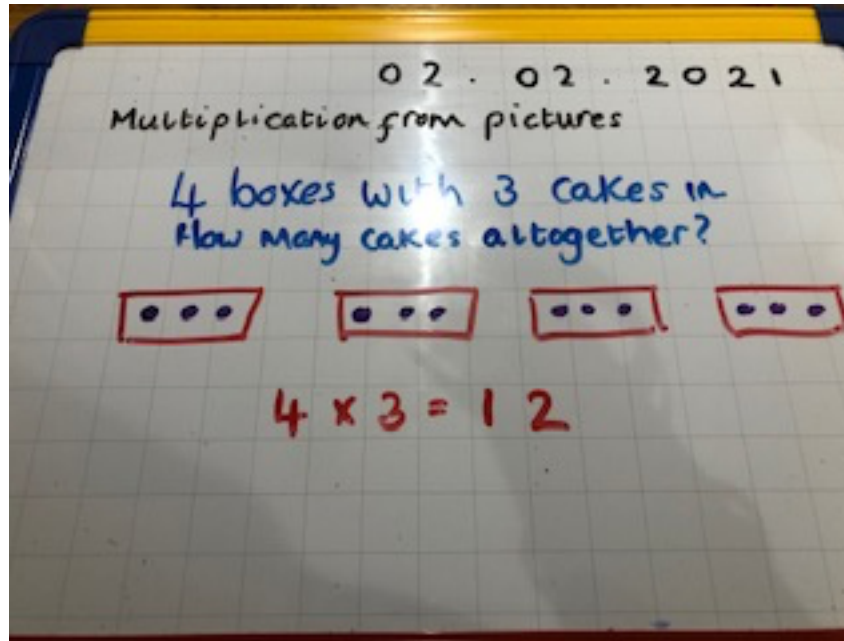
Watch our
lesson video
to watch Mrs
Riley's
explanation.

Draw a picture for
this word problem
and use it to write a
multiplication
sentence.



Review

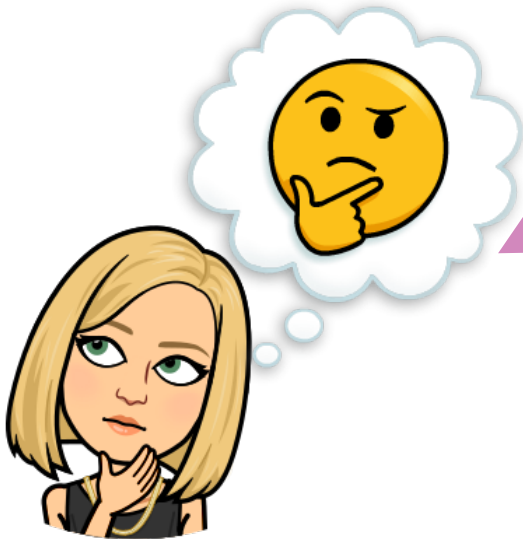
Millie is counting her cakes.
She has 4 boxes each with 3 cakes in.
How many cakes does she have?



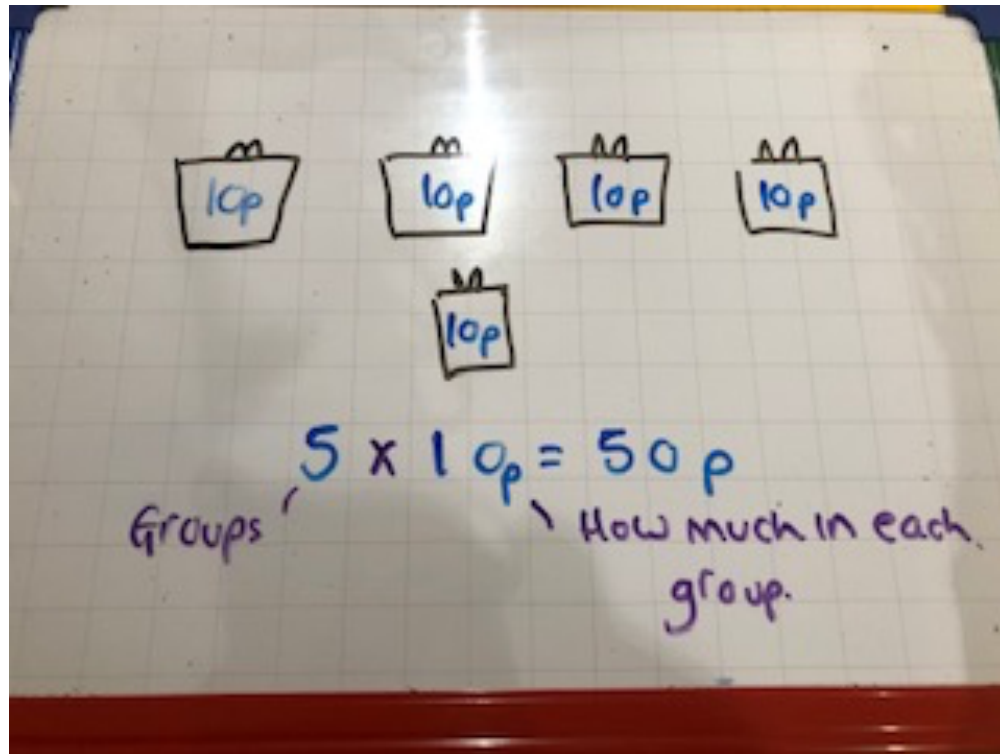
Your Turn

There are five purses and each one has 10p in it.
How much money is there altogether?

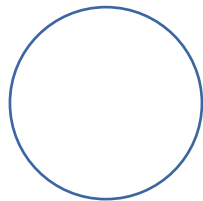
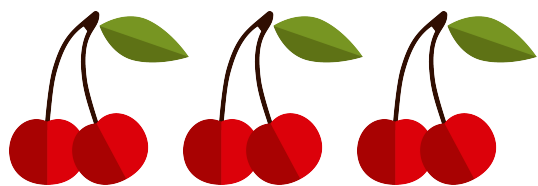
Draw a picture for this word problem. Use your picture to create a multiplication sentence to help you solve the problem.



Review

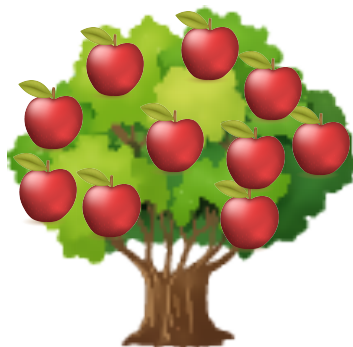
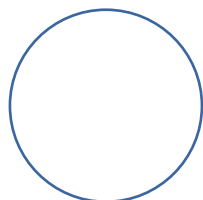


Guided Practice



Complete
using $<$, $>$ or
 $=$.

4 lots of 3



=

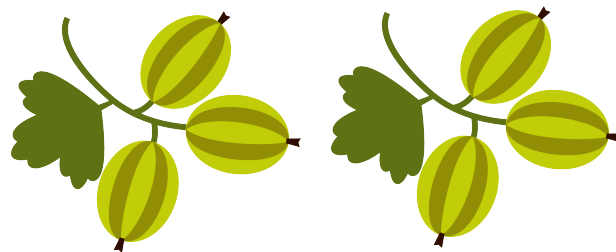
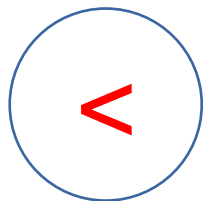
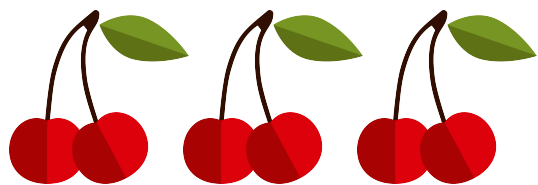


1 x _____

Watch our
lesson video
before
completing
this task.

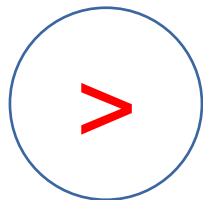
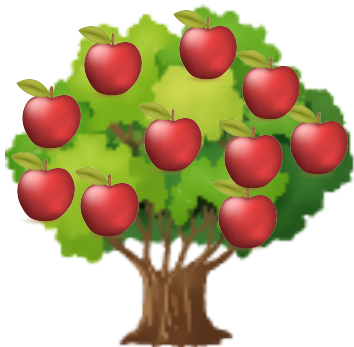
What does the 3 represent?

Guided Practice



Complete
using $<$, $>$ or
 $=$.

4 lots of 3



=

1 x 10

What does the 3
represent? The 3 is
the amount in
each group.

Reasoning

5 x 3 is the same as 5 lots of 3.

True

☐

False

☐

Explain your answer.



Watch our
lesson video
to watch Mrs
Riley's
explanation.

Reasoning Response

5 x 3 is the same as 5 lots of 3.

True



False

☐

Explain your answer.

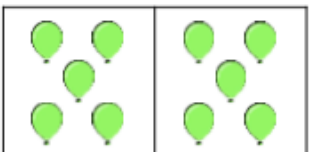
True.

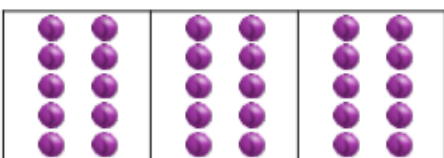
5 x 3 is the same as 5 lots of 3 or three 5s.

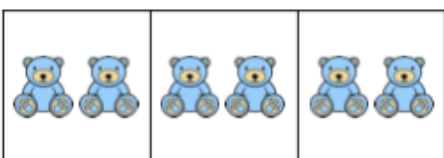
5 x 3 = 15 and 5 lots of 3 = 15

Independent Practice

1 Complete:

a  _____ x _____ = 10
 _____ lots of 5 = _____
 _____ multiplied by _____ = 10

b  _____ x _____ = 30
 _____ lots of 10 = _____
 _____ multiplied by _____ = 30

c  _____ x _____ = 6
 _____ lots of 2 = _____
 _____ multiplied by _____ = 6

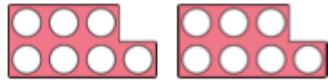
d  _____ x _____ = 20
 _____ lots of 5 = _____
 _____ multiplied by _____ = 20

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

a  

b  

1 Complete the table below.

Picture	Multiplication	Sentence
	3 x _____	_____ lots of _____ is equal to 30.
	_____ x _____	_____ lots of _____ is equal to 14.
	_____ x _____	_____ lots of _____ is equal to 10.
	_____ x _____	_____ lots of _____ is equal to 15.

2 There are 5 apples in each fruit bowl. There are 3 bowls.
 How many apples are there altogether? Complete the calculation to show this.

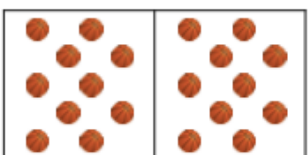
_____ x _____ = _____

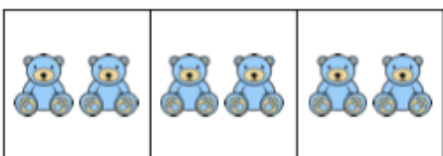
Draw a picture to represent this.

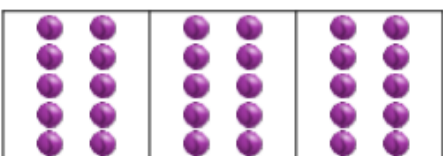
If you're finding things tricky...

1 Complete:

a  _____ x _____ = 6
 _____ lots of 3 = _____
 _____ multiplied by _____ = 6

b  _____ x _____ = 20
 _____ lots of 10 = _____
 _____ multiplied by _____ = 20

c  _____ x _____ = 6
 _____ lots of 2 = _____
 _____ multiplied by _____ = 6

d  _____ x _____ = 30
 _____ lots of 10 = _____
 _____ multiplied by _____ = 30

2 Draw groups to show 10 lots of 2:

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

a  

b  

c  5 lots of 2

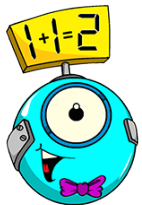
2 Complete the table below.

Picture	Multiplication	Sentence
	2 x 10	_____ lots of _____ is equal to 20.
	_____ x _____	_____ lots of _____ is equal to 16.

3 Two lots of seven is equal to 7 + 2.

True ☐ Explain your answer.

False ☐ _____



If you want a challenge

These statements represent this picture. Which ones are true and which are false?



5×4

$5 + 5 + 5 + 5$

four 5s

four groups with five in each group

$4 + 4 + 4$

5 multiplied by 4

3×5

Draw a picture to match each problem and find the answer.

There are four plates with two biscuits on each plate. How many biscuits are there in total?

There are ten sweets in a bag. There are three bags. How many sweets are there altogether?

A purse has five 5p coins in it. How much money is there in total?

Write a story and draw a picture for each calculation.

10×2

2×8

5×6

ANSWERS



Fluency Revision

Complete these calculations; Show how you worked them out:

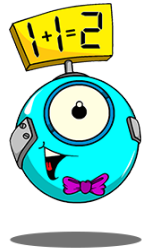
$$32 - 19 = 13$$

$$41 - 16 = 25$$

$$65 + 17 = 82$$

$$98 - 53 = 45$$

$$51 + 28 = 79$$

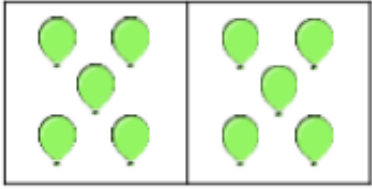


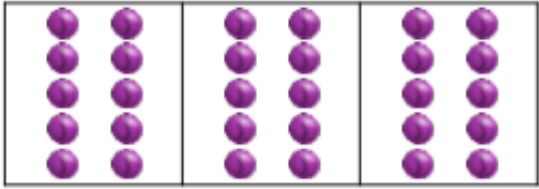
Mrs Riley has £1. She buys a pen for 26p and a notebook for 53p. How much change does she have?

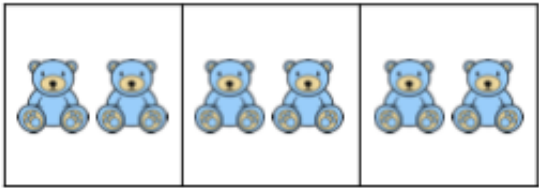
$$26p + 53p = 79p$$

$$£1 - 79p = 21p$$

1 Complete:

a  $\underline{2} \times \underline{5} = 10$
 $\underline{2}$ lots of 5 = $\underline{10}$
 $\underline{2}$ multiplied by $\underline{5} = 10$

b  $\underline{3} \times \underline{10} = 30$
 $\underline{3}$ lots of 10 = $\underline{30}$
 $\underline{3}$ multiplied by $\underline{10} = 30$

c  $\underline{3} \times \underline{2} = 6$
 $\underline{3}$ lots of 2 = $\underline{6}$
 $\underline{3}$ multiplied by $\underline{2} = 6$

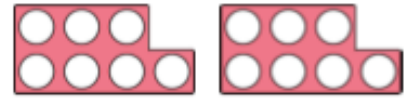
d  $\underline{4} \times \underline{5} = 20$
 $\underline{4}$ lots of 5 = $\underline{20}$
 $\underline{4}$ multiplied by $\underline{5} = 20$

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

a  $>$ 

b  $=$ 

1 Complete the table below.

Picture	Multiplication	Sentence
	$3 \times \underline{10}$	$\underline{3}$ lots of $\underline{10}$ is equal to 30.
	$\underline{2} \times \underline{7}$	$\underline{2}$ lots of $\underline{7}$ is equal to 14.
	$\underline{5} \times \underline{2}$	$\underline{5}$ lots of $\underline{2}$ is equal to 10.
	$\underline{3} \times \underline{5}$	$\underline{3}$ lots of $\underline{5}$ is equal to 15.

2 There are 5 apples in each fruit bowl. There are 3 bowls. How many apples are there altogether? Complete the calculation to show this.

$$\underline{3} \times \underline{5} = \underline{15}$$

Draw a picture to represent this.

Any picture to show 3 equal groups with 5 in each group.

1 Complete:

a

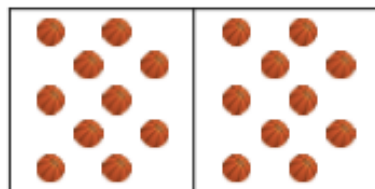


2 x 3 = 6

2 lots of 3 = 6

2 multiplied by 3 = 6

b

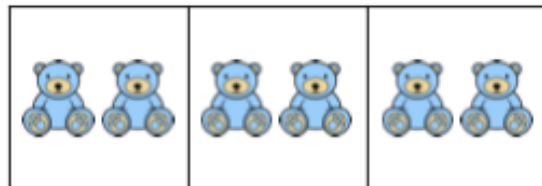


2 x 10 = 20

2 lots of 10 = 20

2 multiplied by 10 = 20

c

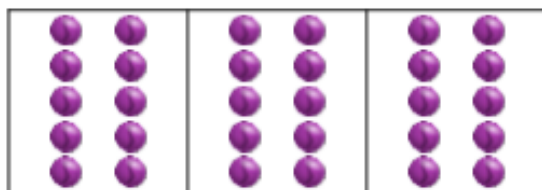


3 x 2 = 6

3 lots of 2 = 6

3 multiplied by 2 = 6

d



3 x 10 = 30

3 lots of 10 = 30

3 multiplied by 10 = 30

2 Draw groups to show 10 lots of 2:

Any picture to show 10 equal groups with 2 in each group.

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

a



b



c



5 lots of 2

2 Complete the table below.

Picture	Multiplication	Sentence
	2 x 10	<u>2</u> lots of <u>10</u> is equal to 20.
	<u>2</u> x <u>8</u>	<u>2</u> lots of <u>8</u> is equal to 16.

3 Two lots of seven is equal to 7 + 2.

True



Explain your answer.

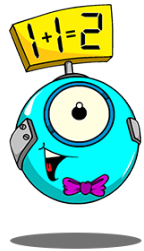
Two lots of seven is equal to 14.

False



7 + 2 = 9

Therefore, the answer is false.



$$5 \times 4 \text{ (true)}$$

$$5 + 5 + 5 + 5 \text{ (true)}$$

four 5s (true)

four groups with five in each group (true)

$$4 + 4 + 4 \text{ (false)}$$

5 multiplied by 4 (true)

$$3 \times 5 \text{ (false)}$$



Children should draw an appropriate picture to match each problem.

$$2 \times 4 = 8$$

$$10 \times 3 = 30$$

$$5 \times 5 = 25 \text{ (or } 5 \times 5p = 25p)$$

Children draw a picture and write a story to represent each calculation.

$$10 \times 2 = 20$$

$$2 \times 8 = 16$$

$$5 \times 6 = 30$$

