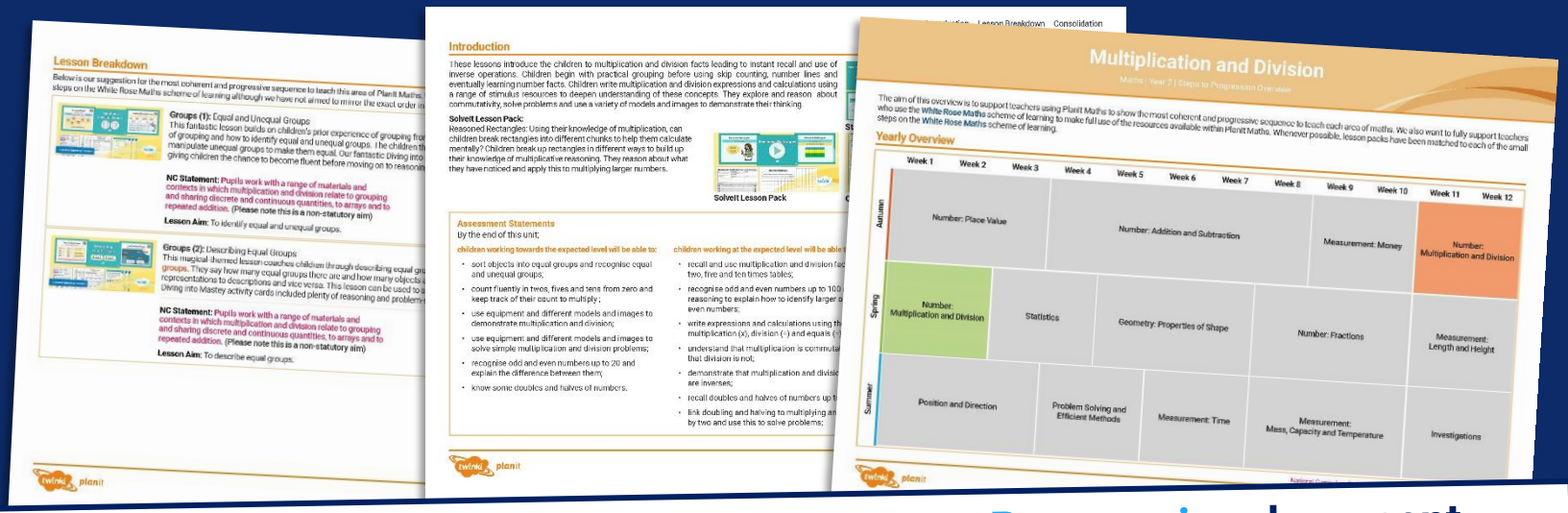
Maths

Multiplication and Division

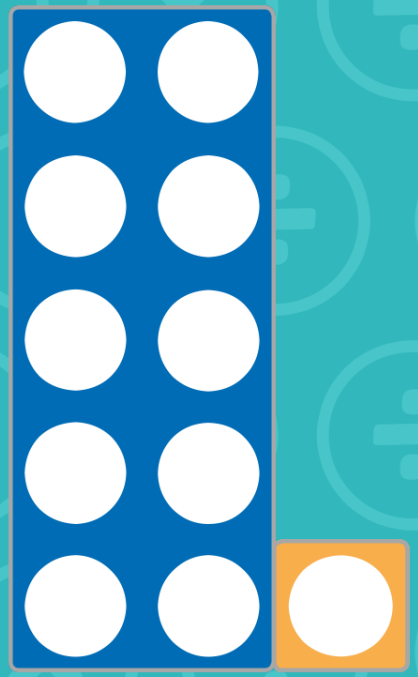
Need a coherently planned sequence of lessons to complement this resource?

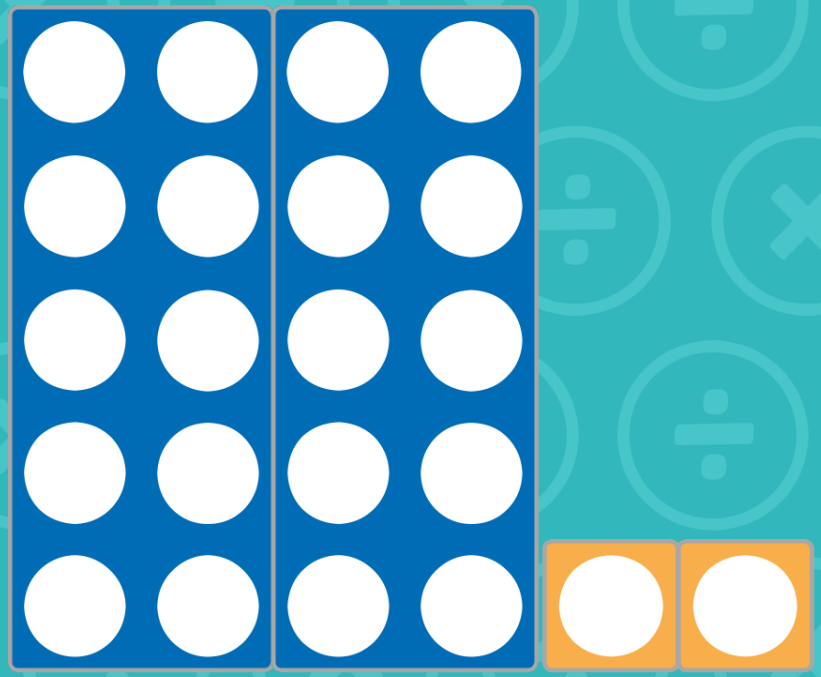


See our Multiplication and Division Steps to Progression document.

Twinkl PlanIt is our award-winning scheme of work with over 4000 resources.

Doubles





Aim

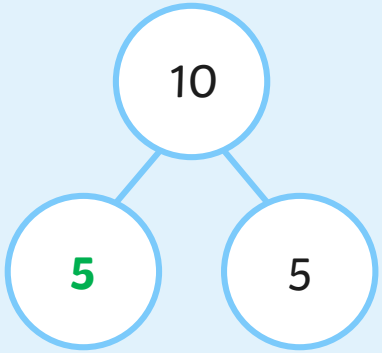
- To recall and use multiplication facts for the 10 times table.

Success Criteria

- I can count in 10s.
- I can spot patterns within multiples of 10.
- I can recall multiplication facts up to 12 × 10.

Remember It

Use known doubles facts to complete the missing numbers.



6 + 6 = 12

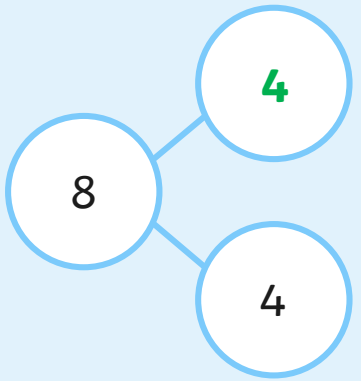
double 9 = 18

16 = 8 + 8

14	
7	7

6	
3	3

2 + 2 = 4



double 1 = 2

20 = 10 + 10

Doubles We Know

In year 1, we learnt these doubles.

double **1** is **2**
double **2** is **4**
double **3** is **6**
double **4** is **8**
double **5** is **10**
double **6** is **12**
double **7** is **14**
double **8** is **16**
double **9** is **18**
double **10** is **20**

What do you notice?

Doubling a whole number always makes an even number.

Why does this happen?

Doubles We Know

We can write doubles as addition calculations.

$1 + 1 = 2$

$2 + 2 = 4$

$3 + 3 = 6$

$4 + 4 = 8$

$5 + 5 = 10$

$6 + 6 = 12$

$7 + 7 = 14$

$8 + 8 = 16$

$9 + 9 = 18$

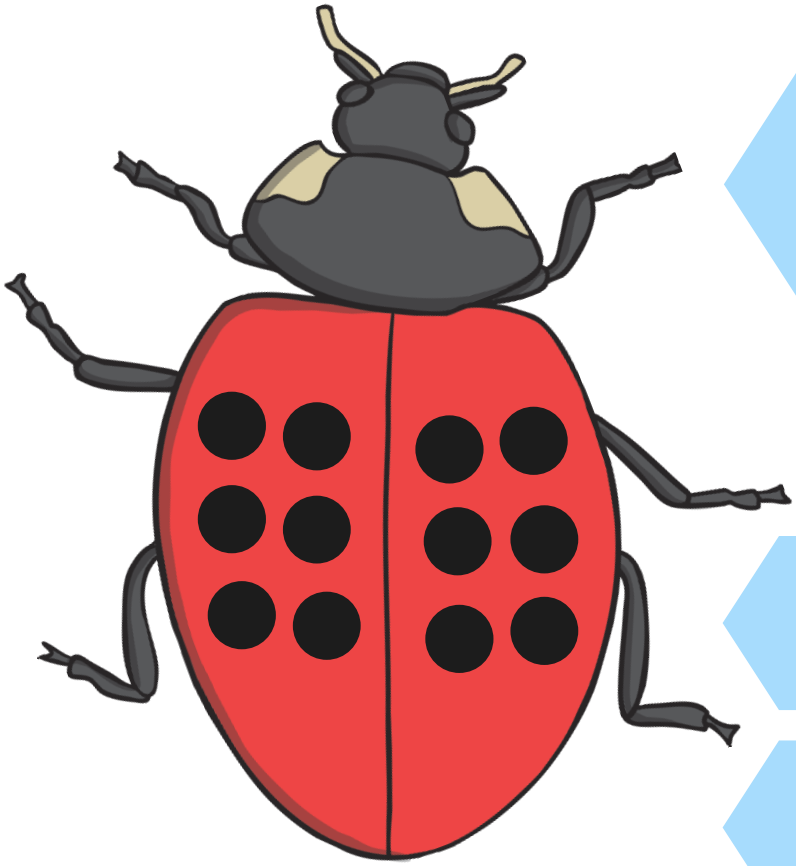
$10 + 10 = 20$

What do you notice?

Both the numbers being added are the same. These are called the **addends**.

Can you give your friend a tip for remembering these facts?

Two Equal Groups



How many groups of dots are there on the ladybird?

Can you write a multiplication calculation to describe the ladybird?

How many dots are in

6 × 2 = 12

There are 2 groups of 6.
There are six, two times.

How many dots are

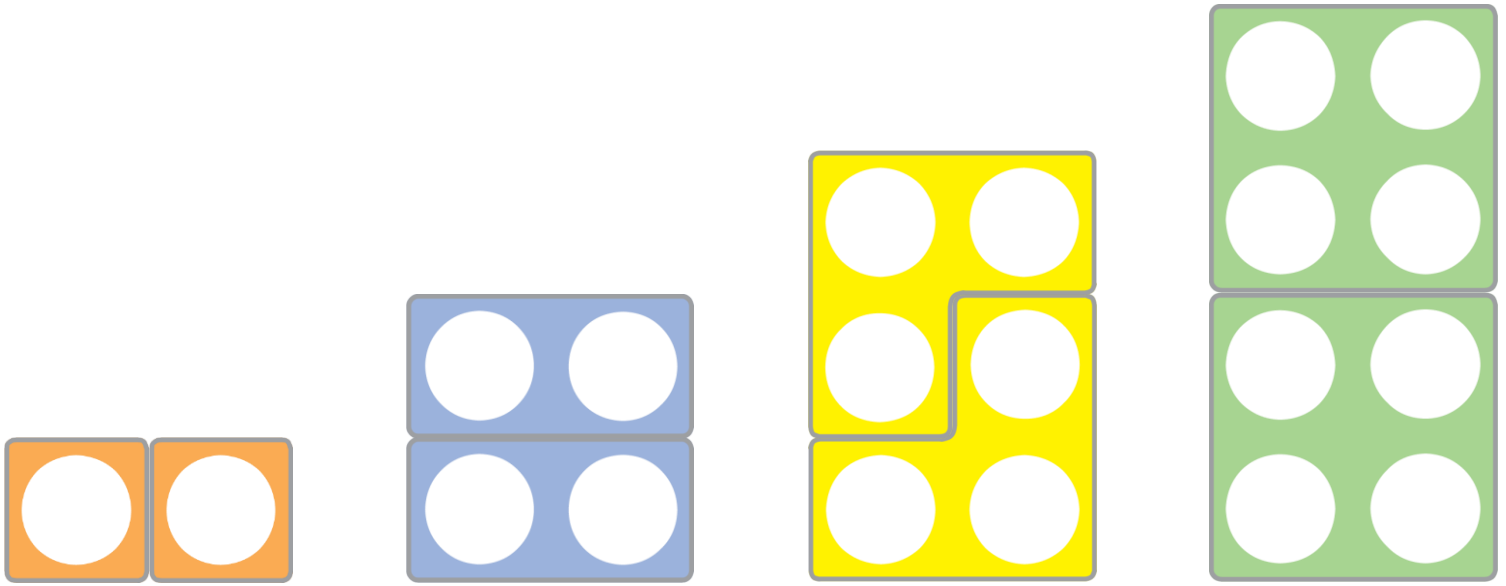
This is the same as double 6.
Double 6 is 12.

There are 12 dots altogether.

6 + 6 = 12

Two Equal Groups

Write a multiplication calculation for each of these doubles.
The calculations are from the 2 times table.



One, two times is the same as **double one.**

Two, two times is the same as **double two.**

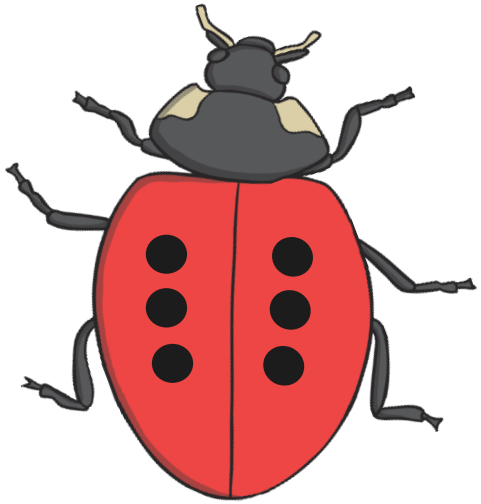
Three, two times is the same as **double three.**

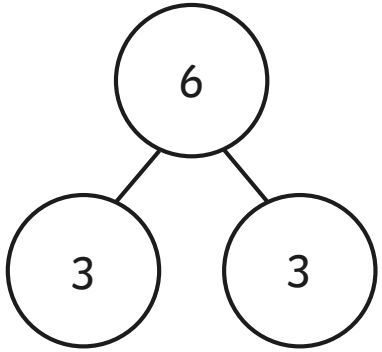
Four, two times is the same as **double four.**

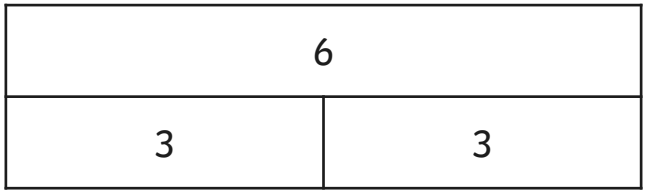
Two Equal Groups

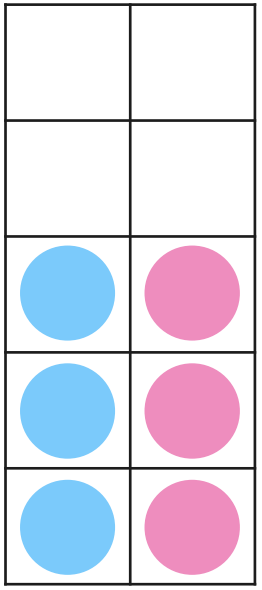
Here are some other ways to represent doubles.

Double 3 = 6





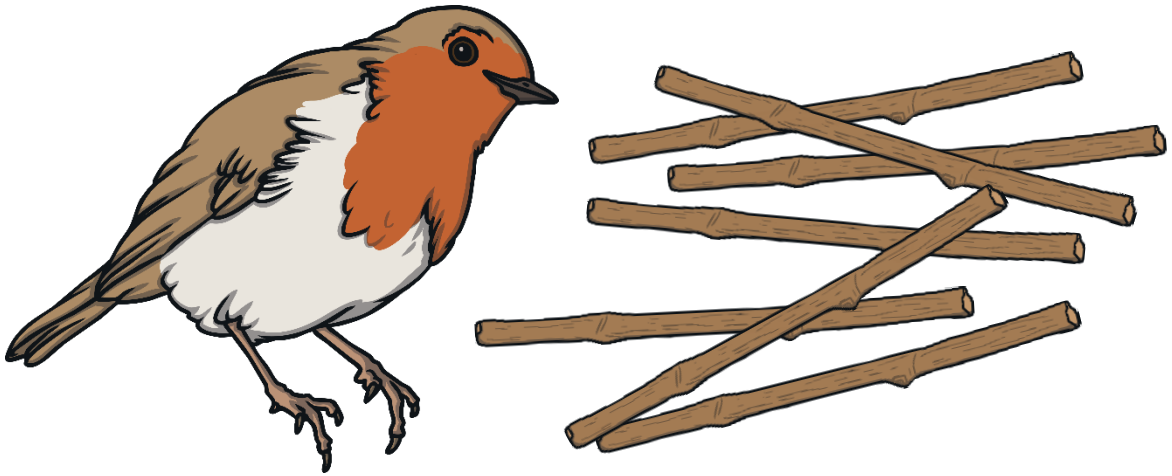




There are two equal parts. The whole is double one of the parts.

Two Equal Groups

The bird is collecting twigs for its nest.



In the morning, it had 7 twigs.

By the evening, it had twice as many.
How many twigs did it have in the evening?

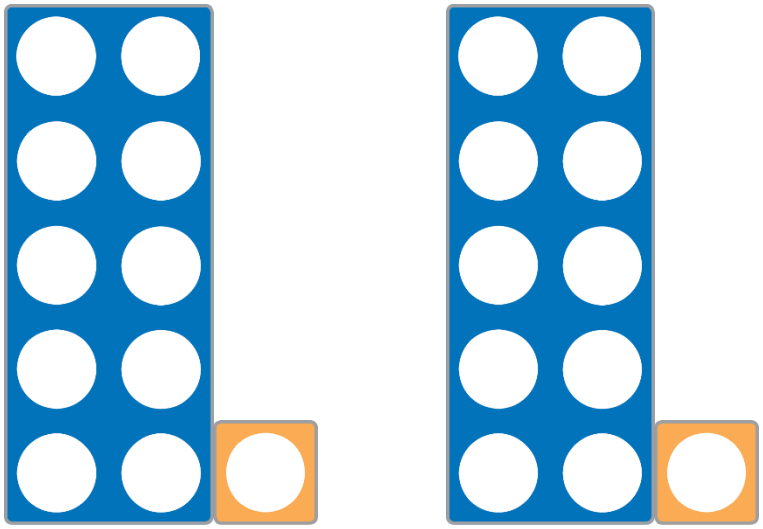
If we need to find **double** or **twice as many,**
we can use facts from the 2 times table.

7 7

The bird has 14 twigs in the evening.

Doubling Larger Numbers

Let's double the numbers 11 to 15 using partitioning.



double 11 = double 10 + double 1

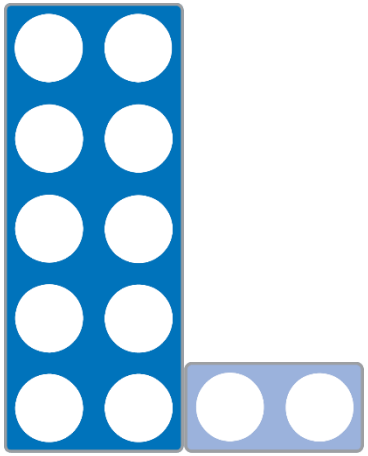
double 10 = 20

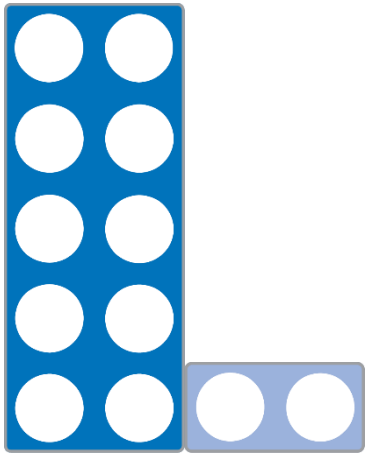
double 1 = 2

20 + 2 = 22 so double 11 is 22

Doubling Larger Numbers

Let's double the numbers 11 to 15 using partitioning.





double 12 = double 10 + double 2

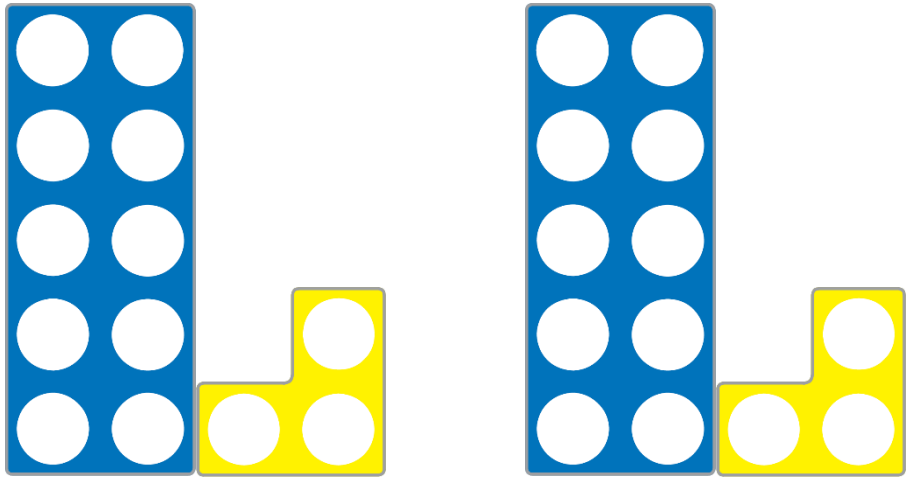
double 10 =

double 2 =

20 + 4 = 24 so double 12 is 24

Doubling Larger Numbers

Let's double the numbers 11 to 15 using partitioning.



double 13 = double 10 + double 3

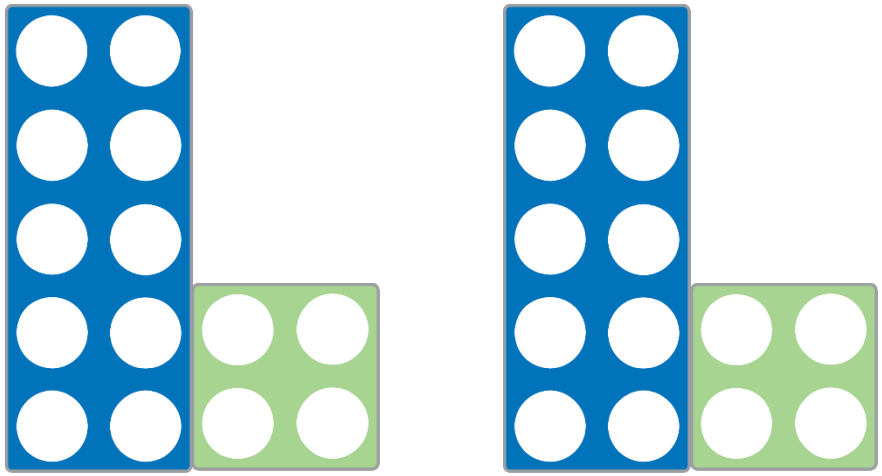
double 10 =

double 3 =

20 + 6 = 26 so double 13 is 26

Doubling Larger Numbers

Let's double the numbers 11 to 15 using partitioning.



double 14 = double 10 + double 4

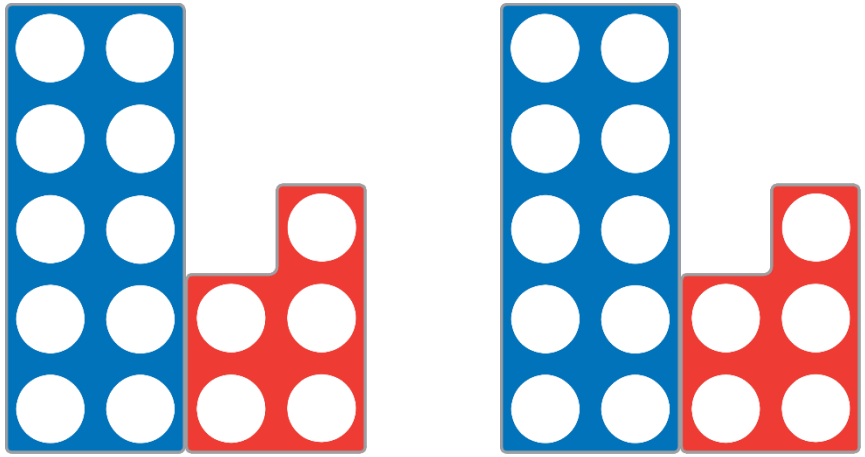
double 10 =

double 4 =

20 + 8 = 28 so double 14 is 28

Doubling Larger Numbers

Let's double the numbers 11 to 15 using partitioning.



double 15 = double 10 + double 5

double 10 =

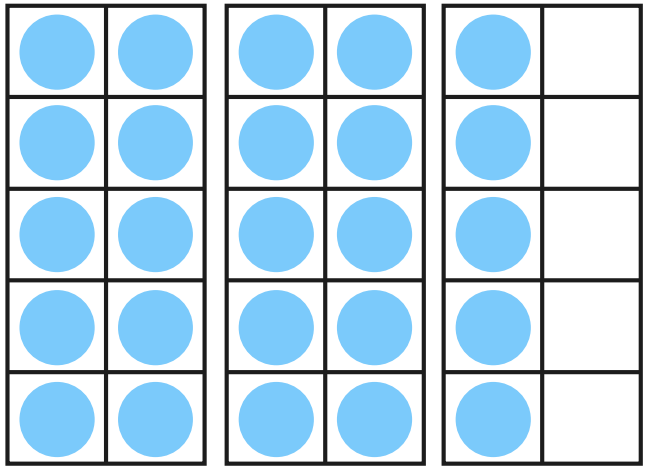
double 5 =

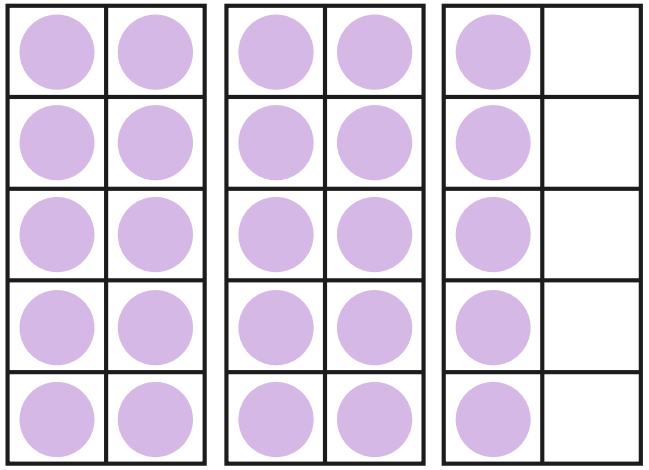
20 + 10 = 30 so double 15 is 30

Doubling Larger Numbers

Let's double numbers with 5 ones using partitioning.

Double 25





Double 20 = 40

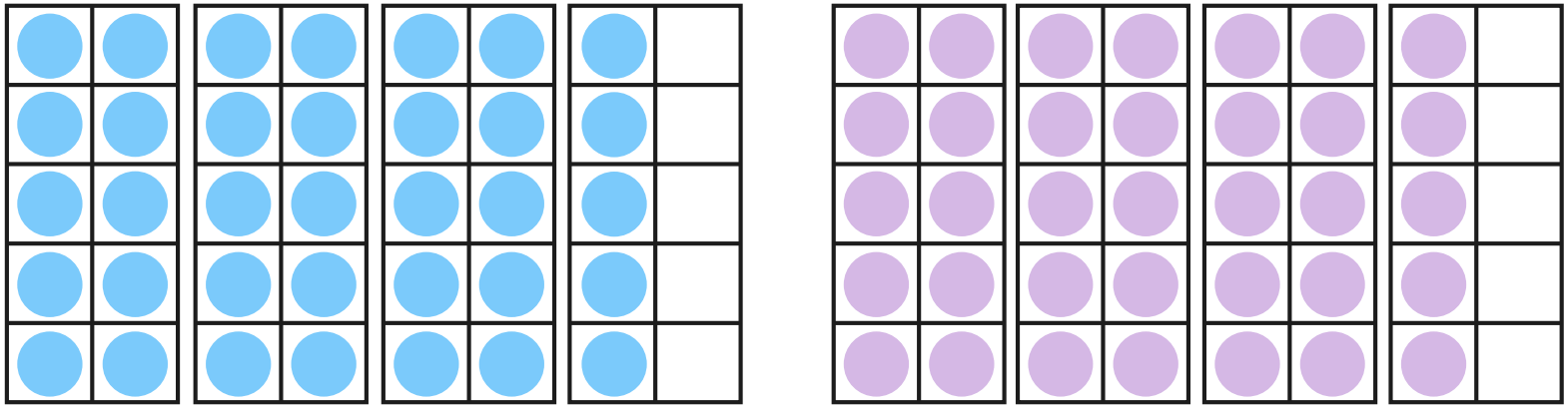
Double 5 = 10

40 + 10 = 50 so double 25 is 50

Doubling Larger Numbers

Let's double numbers with 5 ones using partitioning.

Double 35



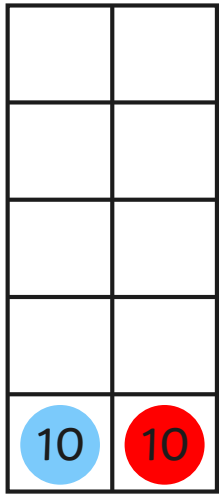
Double 30 = 60

Double 5 = 10

60 + 10 = 70 so double 35 is 70

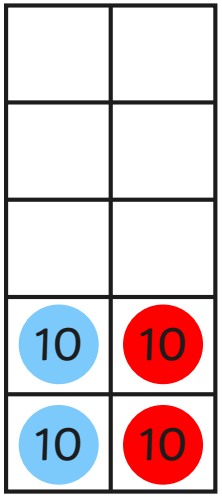
Doubling Larger Numbers

Let's double multiples of 10 using place value counters and ten-frames.



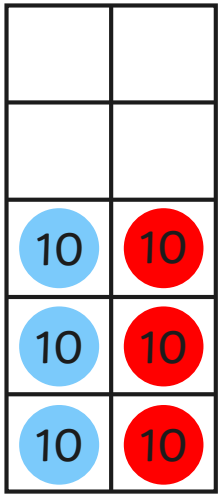
double 1 ten is 2 tens

double 10 = 20



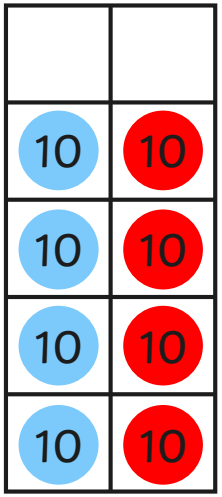
double 2 tens is 4 tens

double 20 = 40



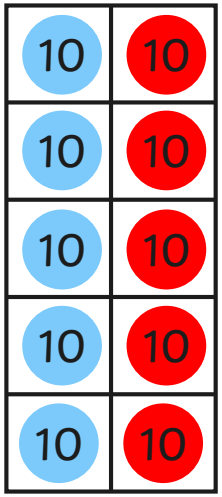
double 3 tens is 6 tens

double 30 = 60



double 4 tens is 8 tens

double 40 = 80



double 5 tens is 10 tens

double 50 = 100

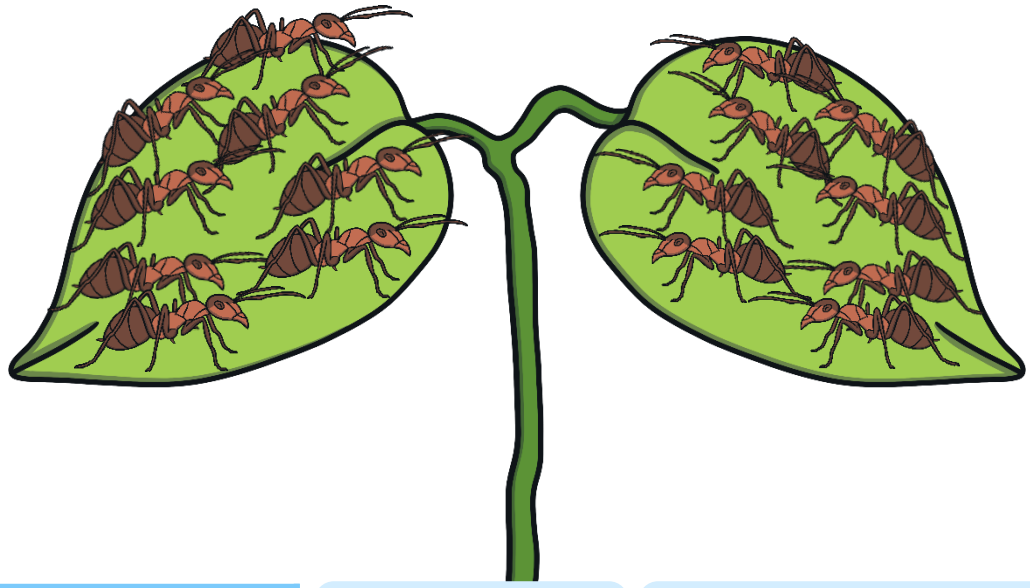
Ant Antics

There are 2 leaves with 8 ants on each leaf.
How many ants altogether?

Draw a bar model.

Write a multiplication calculation with a factor of 2.

Use a known fact to solve the problem.



16	
8	8

$2 \times 8 = 16$

We know double 8 is 16
so 2 groups of 8 is 16.
There are 16 ants in total.

Ant Antics

There are 50 ants in each anthill.
How many ants are there in total?

Draw a bar model.

Write a multiplication calculation with a factor of 2.

Use a known fact to solve the problem.

100

Hint: 50 is 5 tens. You could double 5 tens to help you.

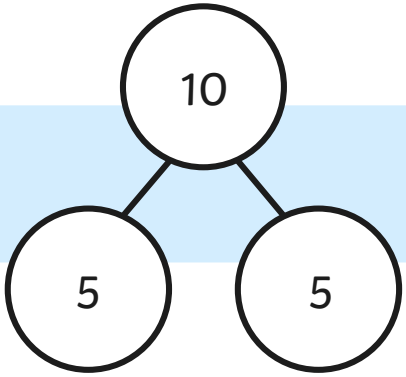
50

50

There are 100 ants altogether.

Reasoning About Doubles

Are these statements true or false? Explain how you know.



This part-whole model represents double 10.

False

2 × 11 represents double 11.

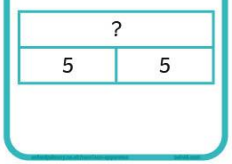
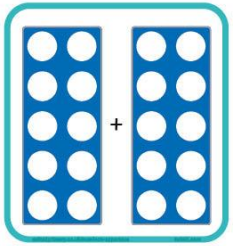
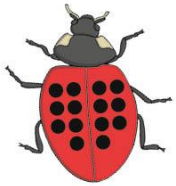
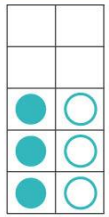
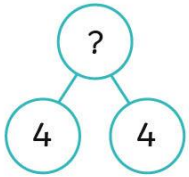
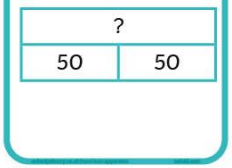
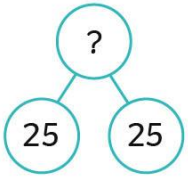
True

If one factor in a multiplication calculation is 2, then the product is double the other factor.

True

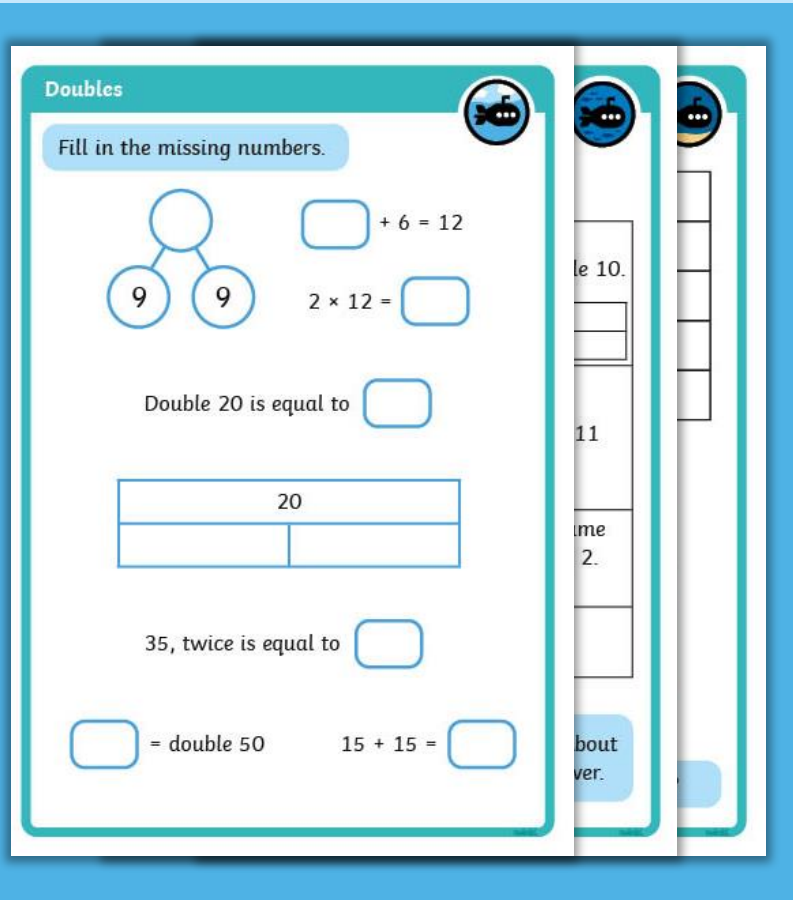
Doubles Matching Game

6	8	2
10	20	14
100	60	80
50	72	90

		
		
	30 + 30	Double 40
	35 + 35	two groups of 45

Diving into Mastery

Dive in by completing your own activity!



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