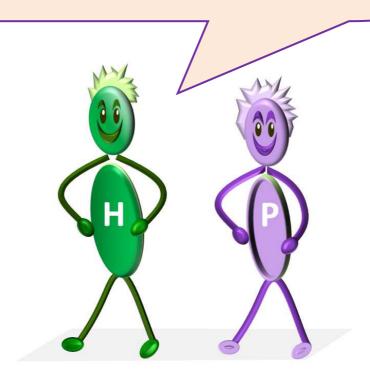
# Henry and Poppy

have fun with Division

# Year 2 maths

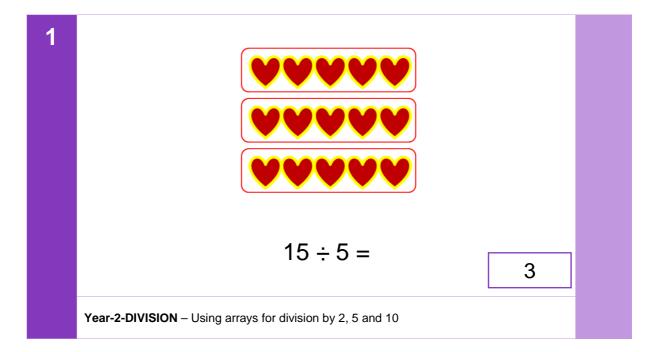
We had fun making these questions for you. Enjoy them.

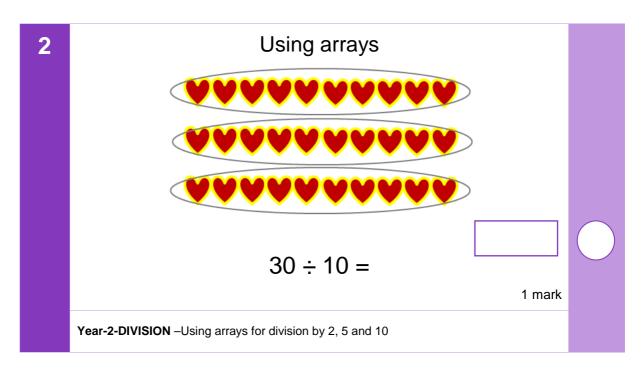


#### CONTENT

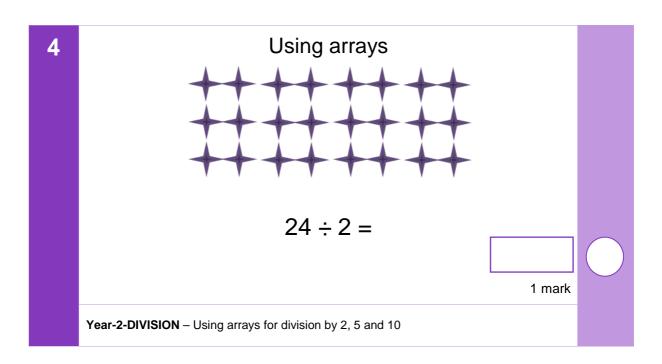
#### Year 2:

- Division by using arrays for division facts 2, 5 and 10
- Counting up or down a number line
- Division by counting down on a number line for division facts 2, 5 and 10
- Division by counting up on a number line for division facts 2, 5 and 10
- Division by counting down on a number line with a remainder for division facts 2, 5 and 10
- Division by counting up on a number line with a remainder for division facts 2, 5 and 10
- Using grouping arrays for division by 2, 5 and 10 with a remainder
- Problem Solving





Year-2-DIVISION - Using arrays for division by 2, 5 and 10



# There are 15 conkers



What is  $15 \div 5 =$ 

\_\_\_\_

1 mark

**Year-2-DIVISION** – Using arrays for division by 2, 5 and 10

6



 $30 \div 5 =$ 

1 mark

**Year-2-DIVISION** – Using arrays for division by 2, 5 and 10



$$30 \div 10 =$$

1 mark

**Year-2-DIVISION** – Using arrays for division by 2, 5 and 10

8



 $30 \div 3 =$ 

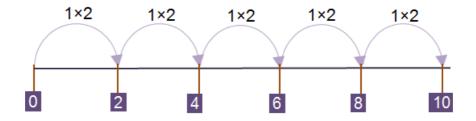
1 mark

Year-2-DIVISION - Using arrays for division by 2, 5 and 10

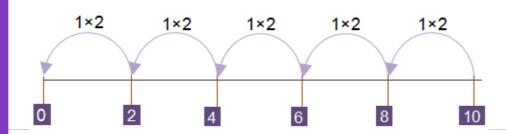
When dividing, should you count **up** a number line or **down** a number line ?

$$10 \div 2 = 5$$

UP: Either start from 0 and step up to the target number



DOWN: Start at your target number and step down to 0.



Year-2-DIVISION - Counting up or down a number line

Adding is easier than subtracting, so counting **UP** a number can be easier then counting **DOWN** 

But if you use counting **UP** a number line to multiply, should you use counting **DOWN** to divide, as they are opposites?

Don't restrict yourself to one or the other approach – multiple strategies improves problem solving skills and creativity which children need to develop.

Try not to get 'addicted' to one particular method if there are others.

Year-2-DIVISION - Counting up or down a number line

# Counting down on a number line

$$10 \div 2 =$$

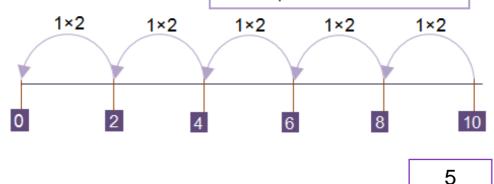
Start at 10.

Then count down the number line in steps of 2's to 0

There are 5 steps so  $10 \div 2 = 5$ 



It's repeated subtraction



Year-2-DIVISION – Counting down on a number line using division by 2, 5 and 10

OR

Counting **up** on a number line

$$10 \div 2 =$$

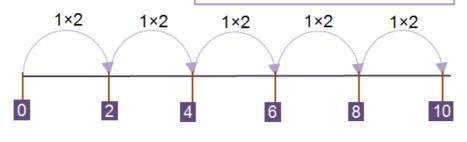
Start at 0.

Then count down the number line in steps of 2's to 10

There are 5 steps so  $10 \div 2 = 5$ 

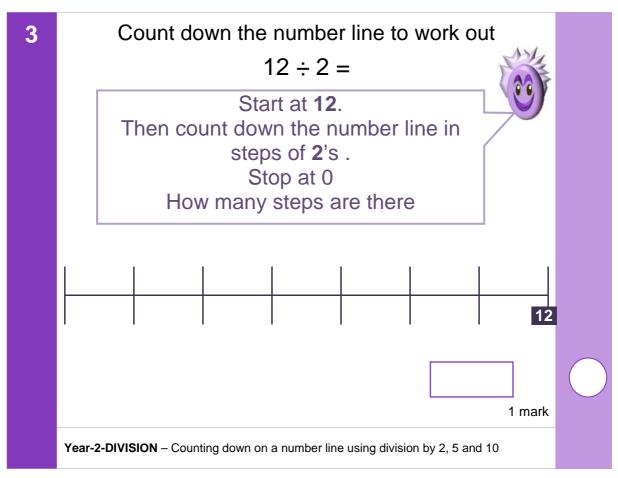


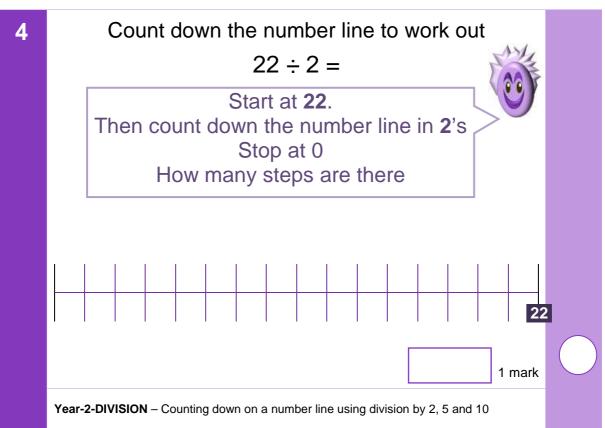
It's repeated addition



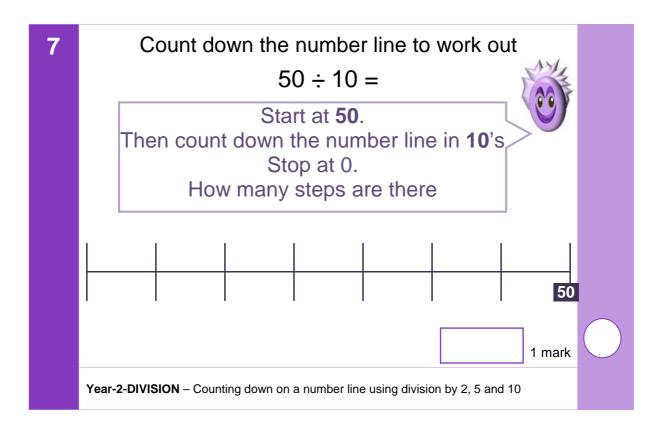
5

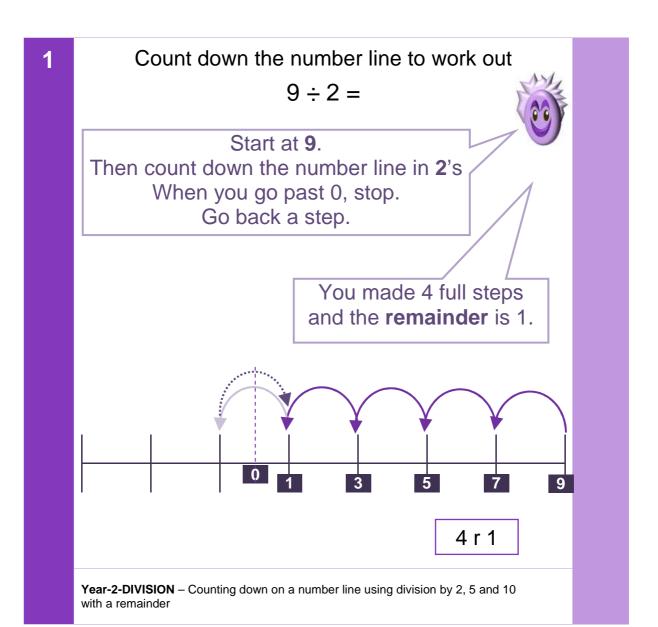
Year-2-DIVISION – Counting down on a number line using division by 2, 5 and 10





| 6 | Count down the number line to work out $35 \div 5 =$   |  |
|---|--|--|
|   | Start at <b>35</b> . Then count down the number line in <b>5</b> 's Stop at 0 How many steps are there |  |
|   | 35   |  |
|   |  |  |
|   | 1 mark  Year-2-DIVISION – Counting down on a number line using division by 2, 5 and 10                 |  |





**Year-2-DIVISION** – Counting down on a number line using division by 2, 5 and 10 with a remainder

**Year-2-DIVISION** – Counting down on a number line using division by 2, 5 and 10 with a remainder

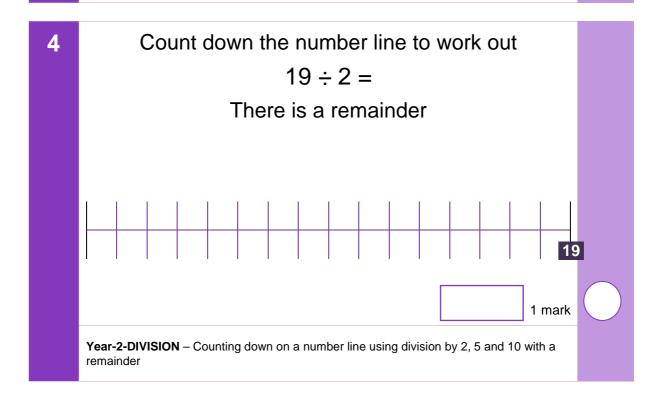
26

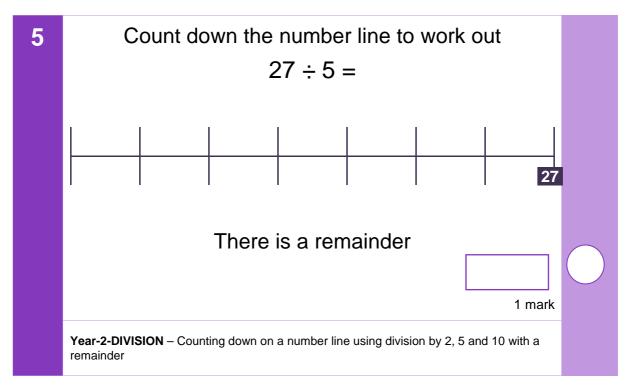
16

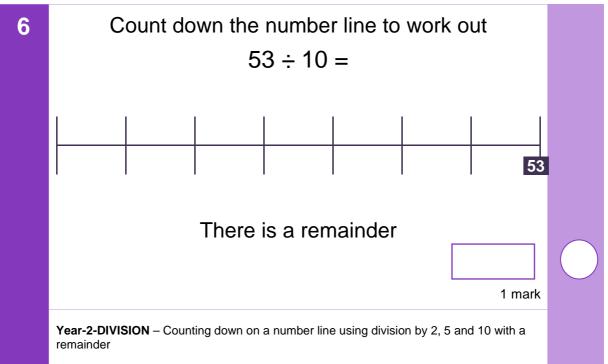
46

36

4 r 6



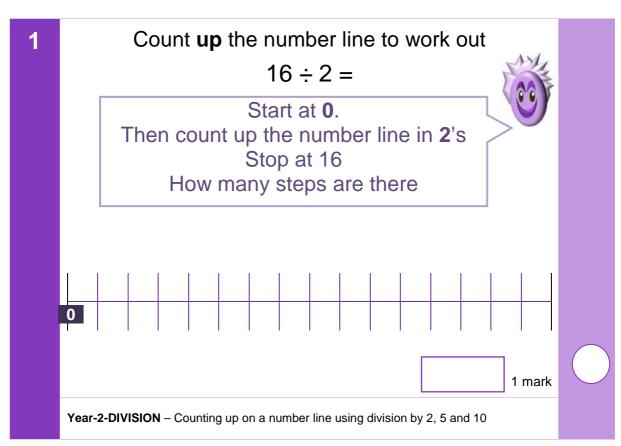


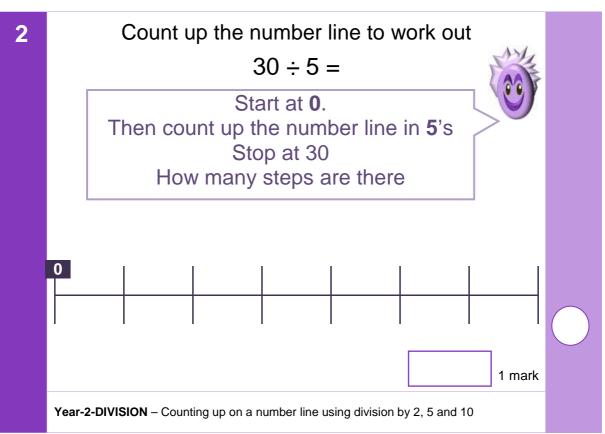


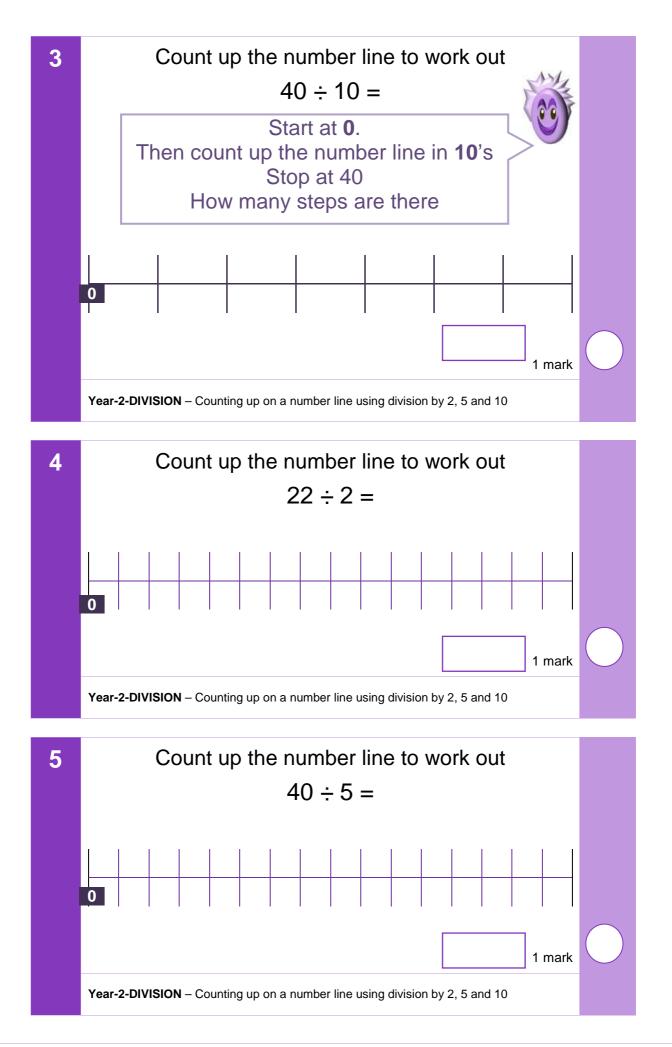
**Note**: It will be more difficult to subtract in steps of 5 from a number that is not divisible by 5 then count up in steps of 5 from one that is. But it is good practise counting down in different steps from any number.

For division with remainders, also use counting up which is repeated addition and less mentally taxing. But thinking through and using two opposing strategies will stimulate problem solving skills.

Remember multiplication and division are opposites.









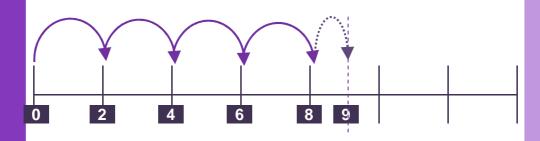
## Count up the number line to work out

$$9 \div 2 =$$



Then count up the number line in 2's
The last step to reach 9 is only 1

You made 4 full steps and the **remainder** is 1.

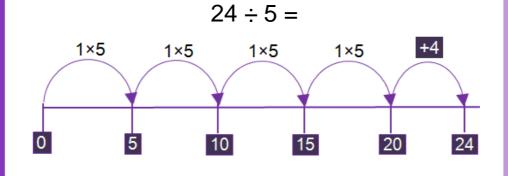


4 r 1

Year-2-DIVISION - Counting up number line using division by 2, 5 and 10 with a remainder

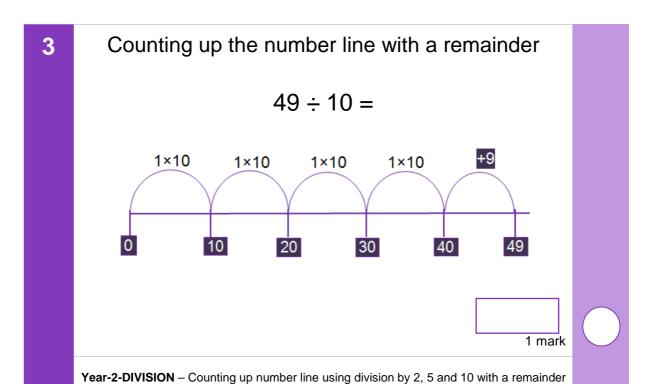
2

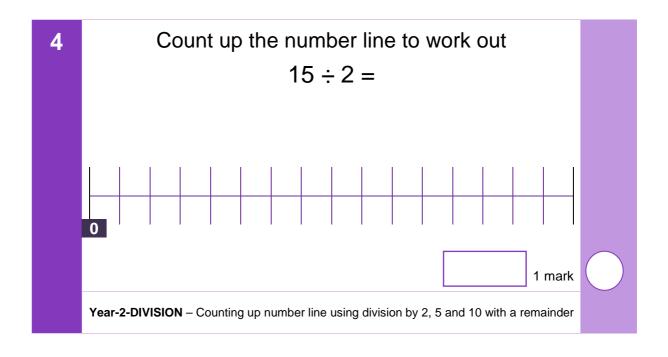
Counting up the number line with a remainder

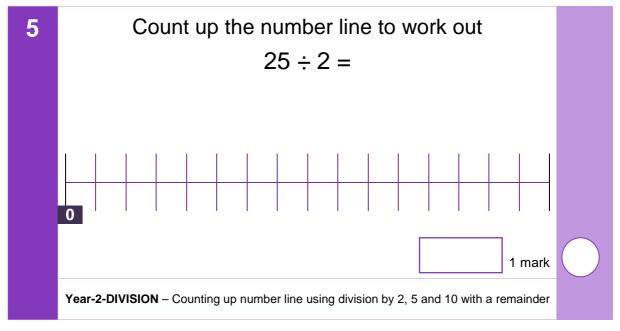


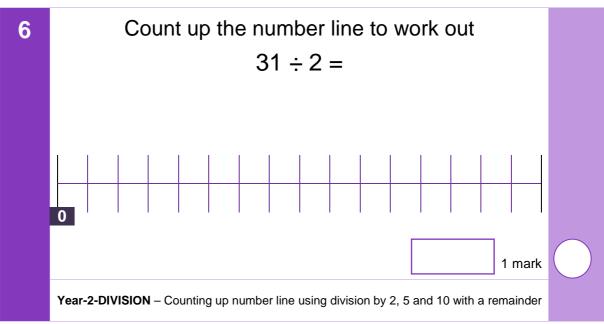
4 r4

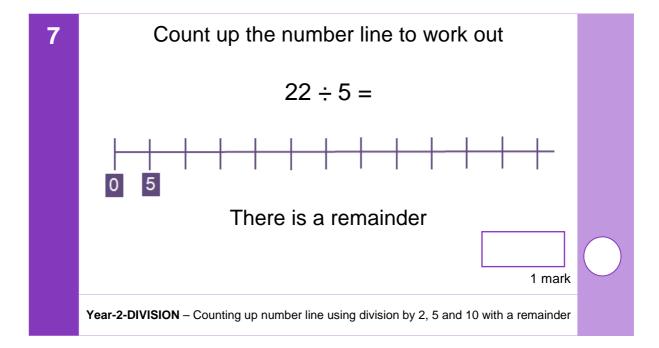
Year-2-DIVISION - Counting up number line using division by 2, 5 and 10 with a remainder

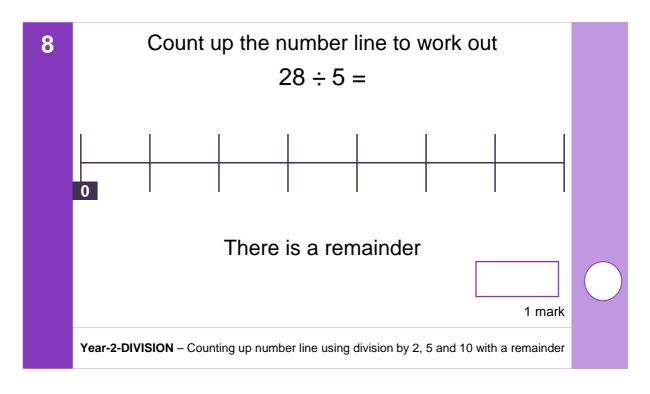


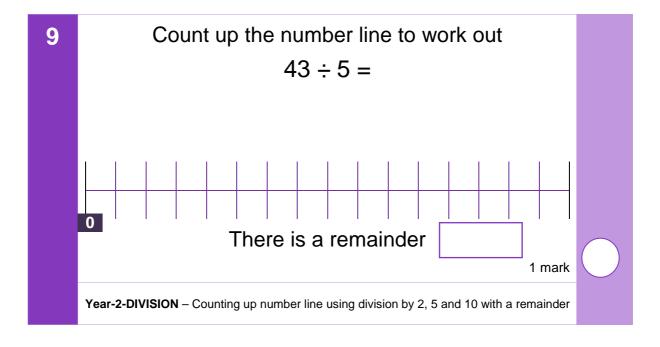


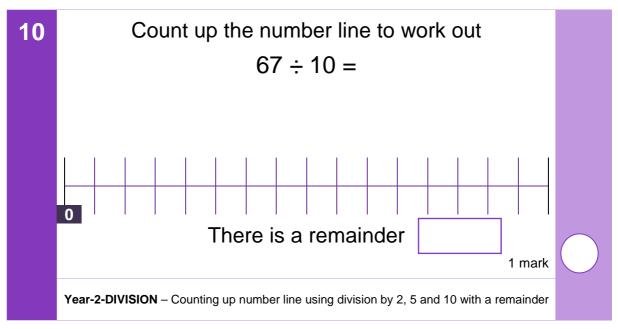


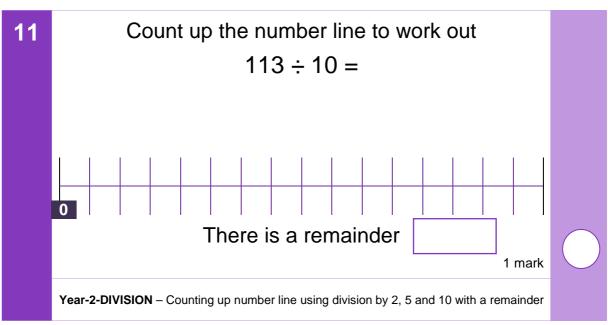












1

Group the conkers to do  $12 \div 5 =$ 



How many conkers are left over (the remainder)

r

1 mark

Year-2-DIVISION - Using grouping arrays for division by 2, 5 and 10 with a remainder

2

Group the conkers to do  $27 \div 2 =$ 



How many conkers are left over (the remainder)

r

1 mark

Year-2-DIVISION - Using arrays for division by 2, 5 and 10 with a remainder

3

Group the conkers to do  $15 \div 10 =$ 



How many conkers are left over (the remainder)

r

1 mark

Year-2-DIVISION - Using arrays for division by 2, 5 and 10 with a remainder

4

Group the conkers to do  $15 \div 2 =$ 



How many conkers are left over (the remainder)

r

1 mark

Year-2-DIVISION - Using arrays for division by 2, 5 and 10 with a remainder

#### Group the conkers to do $27 \div 5 =$



How many conkers are left over (the remainder)

r

1 mark

Year-2-DIVISION – Using arrays for division by 2, 5 and 10 with a remainder

6

### Group the conkers to do $27 \div 10 =$



How many conkers are left over (the remainder)

r

1 mark

Year-2-DIVISION – Using arrays for division by 2, 5 and 10 with a remainder