Diving into Mastery – Diving

Adult Guidance with Question Prompts

Children make equal groups from a given total. They use practical equipment and create drawings to support their grouping. They count on using a number line starting at zero to find how many groups can be made.

How many are there in total?

How many will be in each group?

How many groups can we make?

Do they need to be equal groups? Why?

Can you show the grouping on a number line?

Where will you start on the number line?

Can you show the grouping in pictures?

Can you draw your own number line to show the same grouping as the pictures?

How long will your number line need to be?

Make Equal Groups – Grouping

Doughnuts are sold in a box of 10. Two doughnuts are given to each person. How many people can be fed?
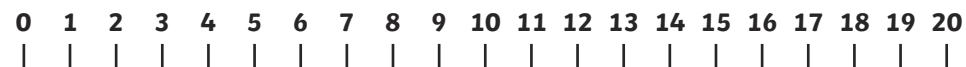
There are _____ doughnuts.

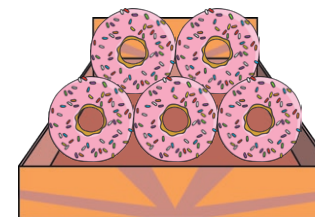There are _____ doughnuts for each person.

The box will feed _____ people.

Use a number line to calculate how many groups of 5 can be made from 20.

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0  1  2  3  4  5  6  7  8  9  10 11 12 13 14 15 16 17 18 19 20
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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Put 15 doughnuts into groups of 5.
Show this grouping on a number line.

Diving into Mastery – Deeper

Adult Guidance with Question Prompts

Children recognise different representations of a calculation, including arrays and pictures of real life objects. They match the calculation to the different representations.

Can you describe these pictures?

How many are in each group?

Are the groups equal?

How many groups are there?
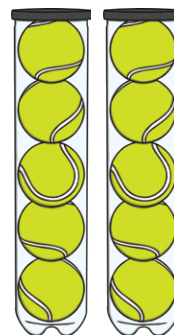
How many in total?

Which of these represent 10 ÷ 5?

Which don't? Why?

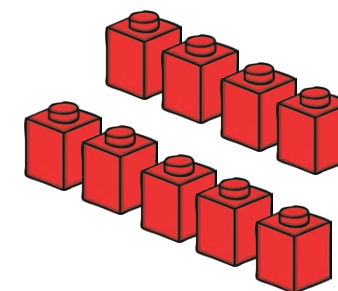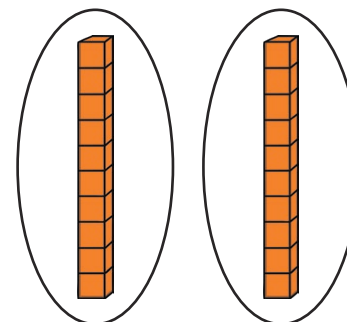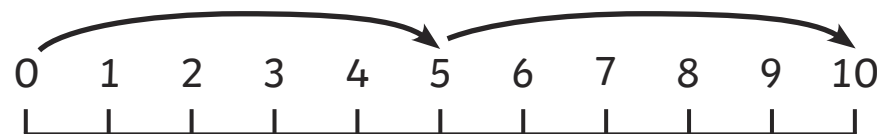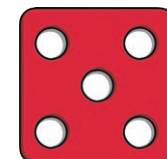Can you represent this calculation with equipment or a drawing?

Which of these pictures match the calculation?

10 ÷ 5

0 1 2 3 4 5 6 7 8 9 10

Can you think of other ways to represent this calculation either with equipment or by drawing?

Diving into Mastery – Deepest

Adult Guidance with Question Prompts

Children relate division to its inverse multiplication and start to use the times tables facts they know to help them solve problems. For the last one they should only focus on the times tables they know: twos, fives and tens. They should use concrete apparatus or drawings as needed.

What division has Derek done?

What happens when 22 is put into groups of two?

How many groups will he make?

Can you show me on a number line?

If Derek puts 30 into groups and makes six groups, how many will be in each group?

Can you show me with cubes?

Which multiplication fact do you know that could help you?

Could Derek make one/two/five/ten groups with four in each group?
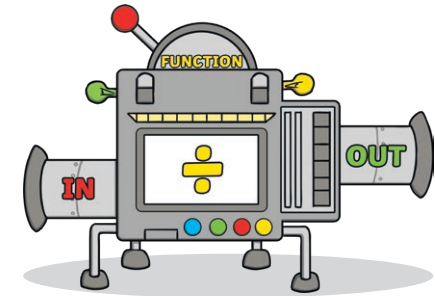
How would we write the calculation?

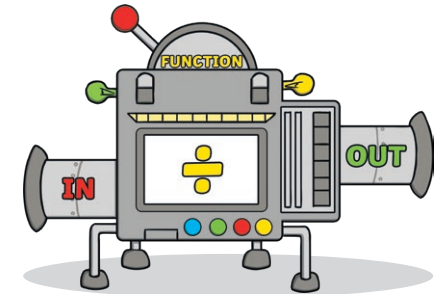Can we use multiplication facts to help us?

Make Equal Groups – Grouping
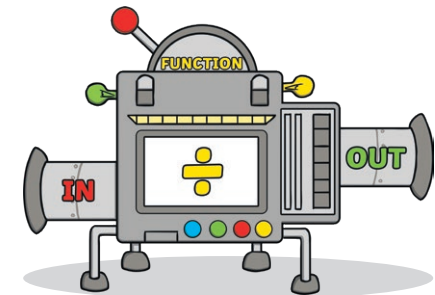
Derek the Divider has done these divisions.

22 ÷ 2   ?

30 ÷ ?   6

? ÷ ?   4