

Today we are learning
to...

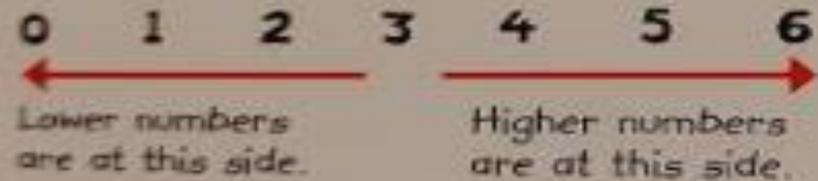
A decorative horizontal line consisting of a series of small, light-colored dots.

ADD BY COUNTING ON, USING ADDITION
STORIES AND A NUMBER LINE.

What is a number line?

Number lines

A number line is a picture of numbers in order. Marks on the line are spaced evenly and each one stands for a number. The numbers go up in size order.



Higher numbers are at this end.



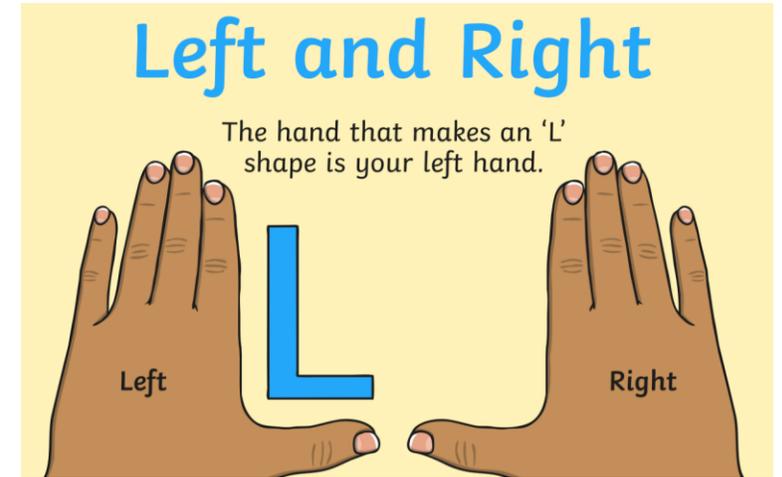
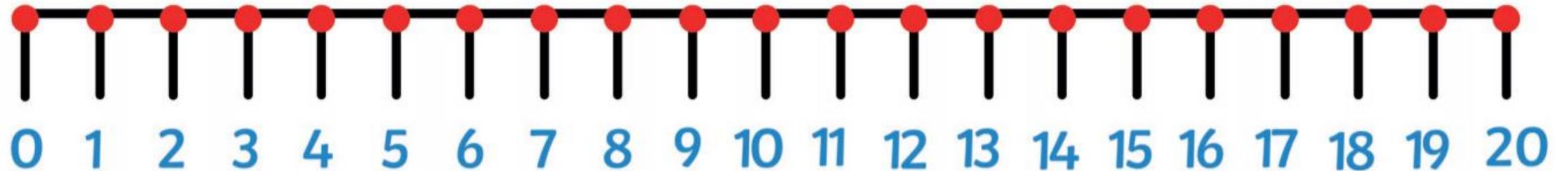
Lower numbers are at this end.

You can draw number lines from side to side or up and down.

We can use a number line to show what we are doing when we count forwards or backwards, add or subtract.

As you count, you can move your finger or pencil from one number to another. We can call this a 'jump'.

Do you remember when we did this using our frogs?!

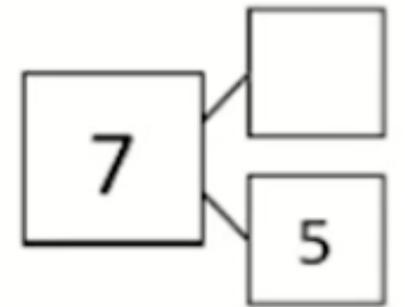
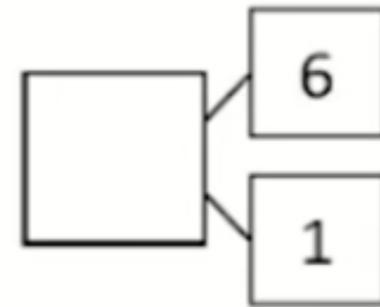
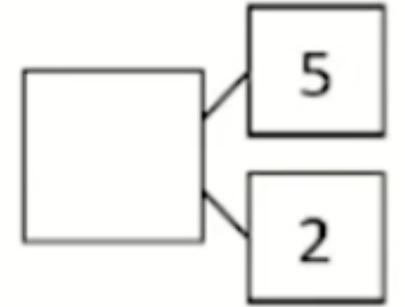
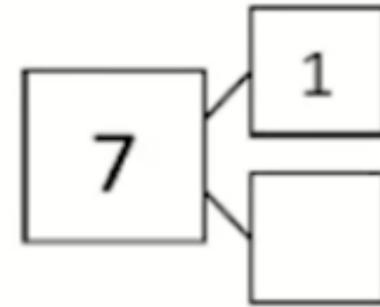
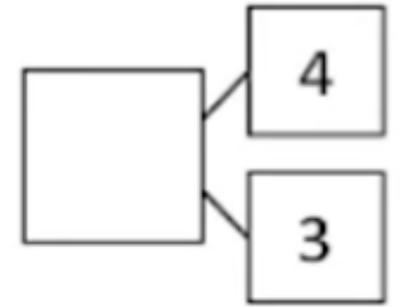
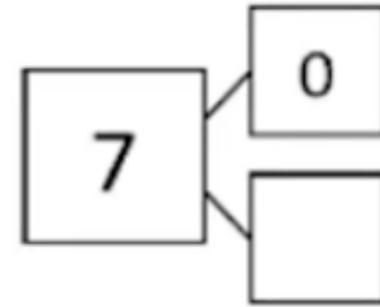


Number bonds!

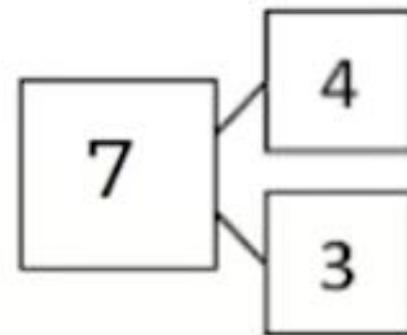
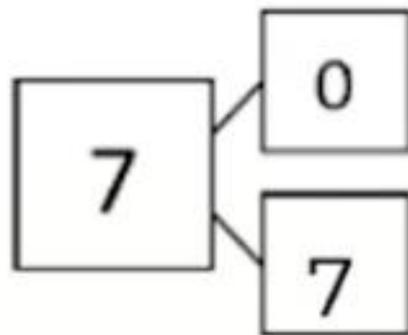
Use your everyday counting objects to solve these number bonds to 7.

What is missing in the part, part, wholes?

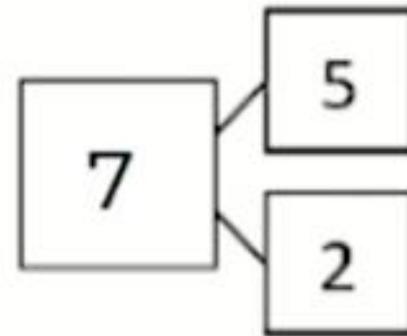
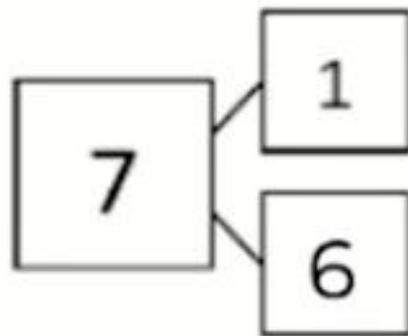
How many ways can you find of making 7?!



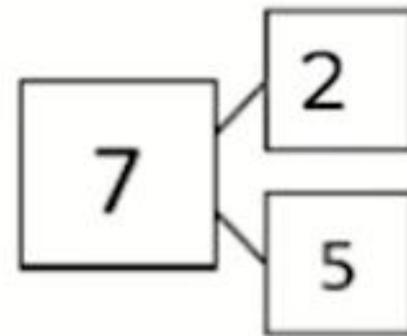
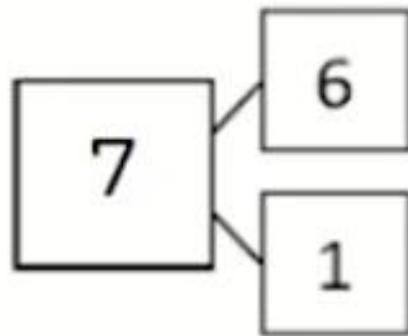
Did you find them all?



Did you discover any other ways of making 7?



Why did 6 + 1 and 5 + 2 repeat?



Let's explore



First there were eleven children sitting on the carpet.

Then two more children came and sat down.
How many children are there **now**?



Let's explore



First there were eleven children sitting on the carpet.

Then two more children came and sat down.
How many children are there **now**?



Let's explore



part



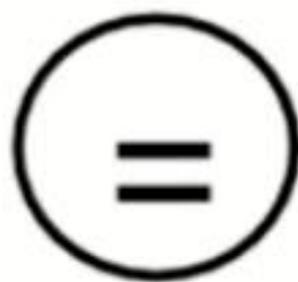
plus



part



is equal
to



whole



Your turn

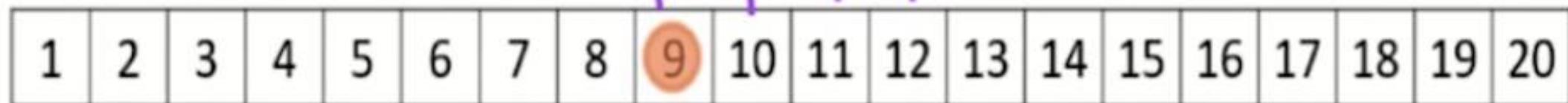


First there were nine pencils in the pot.

Then I put three more in the pot.

How many pencils are in the pot **now**?





part



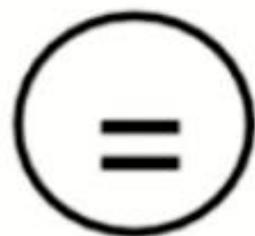
plus



part



is equal to



whole



Let's try with a number line

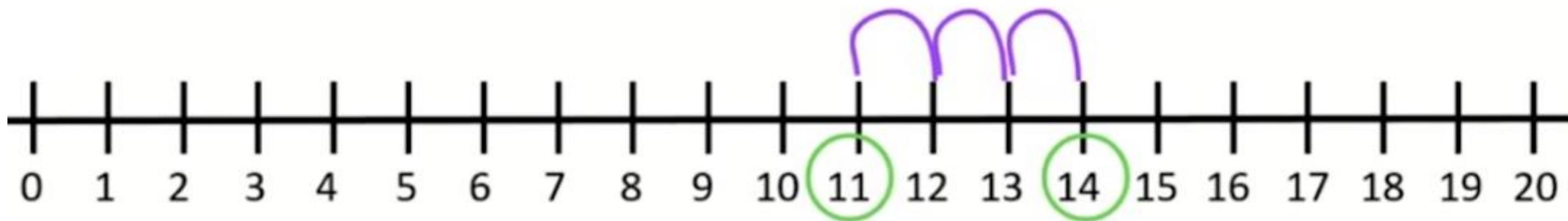
First	Then	Now
	$+$ 	?

First there were 11 acorns on the tree.

Then 3 more acorns grew.

How many acorns are there now?

Let's try with a number line



part plus part is equal to whole

$$\boxed{11} + \boxed{3} = \boxed{14}$$

Task: Using objects and numbers within 20. Make up your own 'first, then and now' addition stories.

1) Choose a 'teen' number.

2) Then choose a 1-digit number to add.

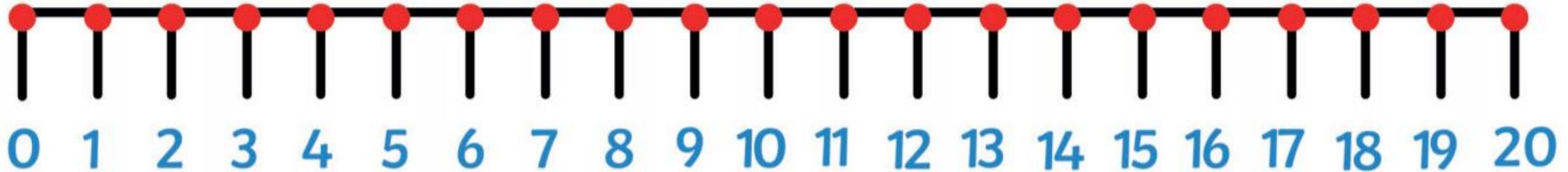
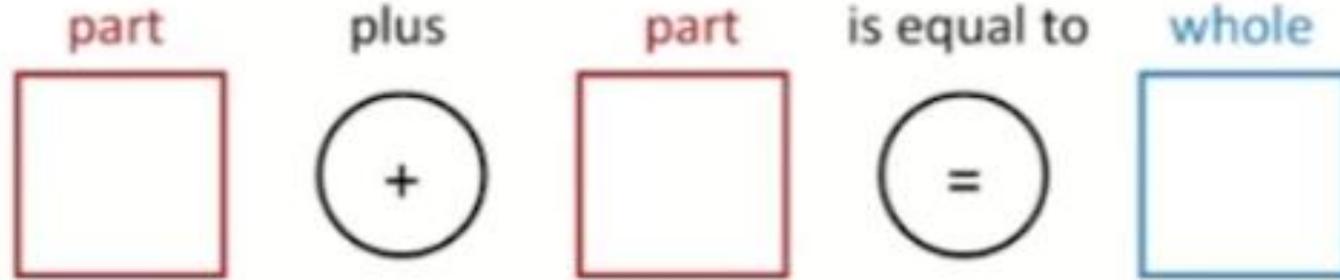
(You might want to use a deck of cards or die to help you choose your numbers).

3) Then use the number line to show how you count on to add your two parts together. Remember to always count on from the bigger number!

Solve and record your addition stories on the number line and as an addition sentence using the + and = symbols.



Resources (optional):



Or for an online numberline, see this link:

<https://apps.mathlearningcenter.org/number-line/>

First	Then	Now

+ =



The next few slides show some Reasoning and Problem Solving extension tasks...

Remember to always explain your thinking! We can write sentences in maths too!

Imagine you are explaining your answer to someone who does not understand. Like Mr.Frog! He always gets a little lost on that number line!

Key questions to ask yourself:

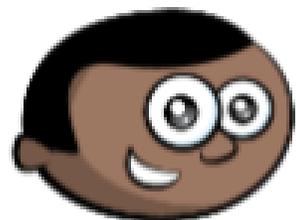
Q) Why?

Q) How do you know?



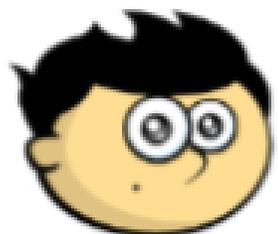
Mo and Jack are working out $11 + 7$

Mo says,



11, 12, 13, 14, 15, 16,
17

Jack says,



12, 13, 14, 15, 16, 17,
18

Use a number line to show who is correct

Ron starts at 9 and adds on 5

Alex starts at 5 and adds on 9

Show their calculations on the number lines.

What do you notice? Does this always happen?

Which method do you like best? Why?

