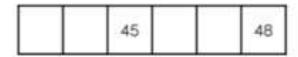
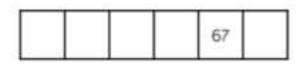
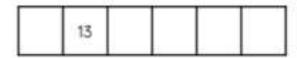
Task Sheet 1

Continue the number tracks below.









True or False?

These four calculations have the same answer.

$$4 + 2 + 1$$

$$2 + 4 + 1$$

These four calculations have the same answer.

$$3 - 2 - 7$$

Challenge Questions:

- 1) Explain which ones are wrong
- 2) How did you work out the answers to these calculations? E.g. did they add two biggest numbers together or did the add/subtract 1 from the biggest number and then add or subtract the other number? Why did they use this method?

Task Sheet 2

Explore adding and subtracting 10 from a number.

12 + 10	
13 + 10	
14 + 10	
15 + 10	

12 – 10	
13 – 10	
14 – 10	
15 – 10	

You can use one or more of these resources to help you:

- Hundred square
- Dienes
- Number line

(See printable files for these).

What happens when you add 10 to a number? What happens when you subtract 10?

Solve the problem:

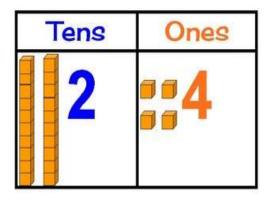


How many crayons do they have left?

Explain your reasoning.

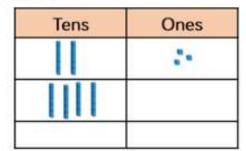
Task Sheet 3

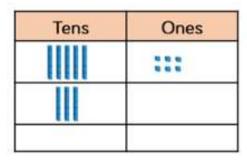
This is a place value chart. We can use it to show a two-digit number as made up of tens and ones. The tens go in the 'tens' column, and the ones go in the 'ones' column. E.g. '24' is shown as 2 tens and 4 ones.



We can also use a place value chart to add two 2-digit numbers together. When we add using a place value chart, we add the ones first and then the tens.

Use the place value charts and concrete materials to complete the calculations.





Print out 'Place Value Chart' file and 'Dienes' file if needed.

Challenge Question: Huan has 6 stickers.

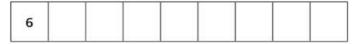




He gets 10 new stickers every day for 8 days.

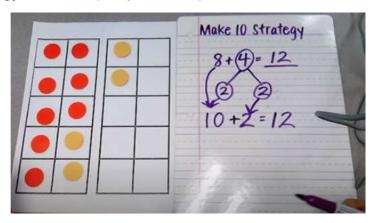
How many stickers will Huan have after 8 days?

Use the number track to help you.



Task Sheet 4

When we add two numbers that together equal more than 10, we can partition the smaller number to make 10 first before adding the rest. This means we can use our knowledge of number bonds to 10 to make it easier to add the numbers. This method is called the 'Make 10 strategy'. Watch the video which explains how the 'Make 10 Strategy' works: https://youtu.be/q9h4skGoWJ8



Use number bonds to complete the additions.

The first one has been done for you.

a) 8 + 7

10 + 5 = 15

b) 5 + 8

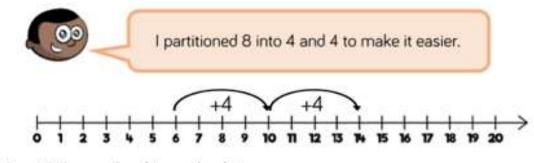
c) 6 + 9

+ =

Task Sheet 5

We can also use a number line to show the 'Make 10 Strategy' for adding numbers. Find the largest number first, then partition the smaller number to jump to 10. Now, add the rest of the smaller number onto the 10 to find the whole.

Mo has used a number line to calculate 6 + 8



Use Mo's method to calculate:

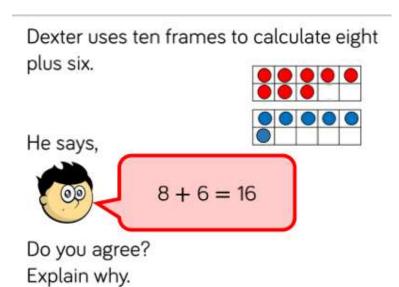
Use a number line to help you (see 'Number Line' file).

Task Sheet 6

Re-cap the 'Make 10' method and practise using it to solve these equations:

- 4 + 7 =
- 7 + 9 =
- 5 + 7 =
- 4 + 8 =

Problem solving question:



Diving into Mastery - Diving

Adult Guidance with Question Prompts

Children recognise how number bonds to ten help them to add numbers with a total greater than ten and up to 20. Provide children with number lines and ten-frames for them to see practically how to bridge ten.

How many do you add to the first number to make ten?

How many more do you need to add after getting to ten?

How can you use number bonds to ten to help add numbers?

How many more do you need to add to the ten-frame to make ten?

How many more do you need to put in the second ten-frame?

Would it change the answer if you changed the numbers around? (For example, 5 + 7 instead of 7 + 5.)

How many do you need to add to one (swap for all other numbers from two to nine) to make ten?



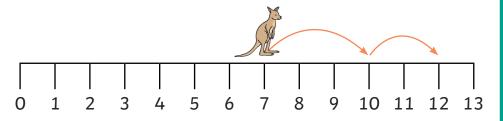


Add by Making 10



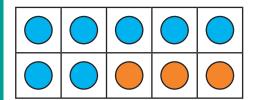
Kangaroo Fred starts on step 7 and wants to jump along 5 more.

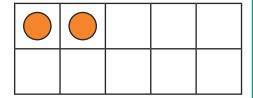
First, he jumps 3 steps to 10. Then, he jumps 2 more steps.



$$7 + 5 = 12$$

He checked if he was correct using ten-frames.





Use both a number track and ten-frame to work out the answers to:

Diving into Mastery - Deeper

Adult Guidance with Question Prompts

Children recognise how number bonds to ten help them to add numbers with a total greater than ten and up to 20. They use a variety of pictorial representations to help them visualise how to bridge ten.

How can you use number bonds to ten to help add numbers?

On the number track, where do you start counting forward from? Why?

How could you use counters in the same way to add numbers where the answer is greater than ten?

Can you use a number line to match the one which doesn't have a partner?

Can you use a part-whole model to match the one which doesn't have a partner?

Would it change the answer if you changed the numbers around? (For example, 9 + 8 instead of 8 + 9.) Why?

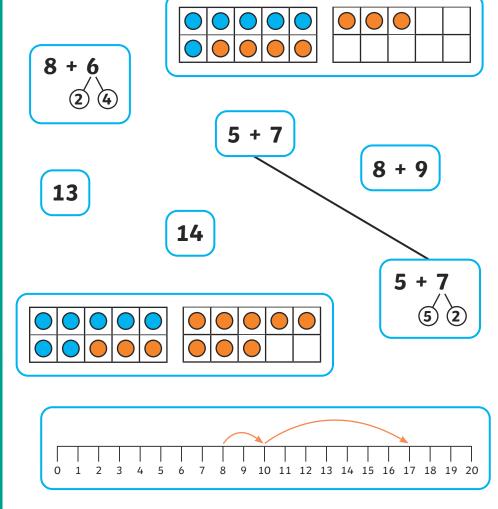




Add by Making 10



Draw lines to match the pairs. One has been done for you. There is one without a partner!



Can you draw a number line or part-whole model to match the one without a partner?

Diving into Mastery - Deepest

Adult Guidance with Question Prompts

Children recognise how number bonds to ten help them to add numbers with a total greater than ten and up to 20. They recognise ways to solve a word problem where the answer bridges ten.

Why doesn't the first ten-frame use number bonds to ten to help solve the problem?

Why doesn't the second number part-whole model use number bonds to ten to help solve the problem?

Would it change the answer if you changed the numbers around? (For example, 8 + 7 instead of 7 + 8.) What do you know about the order of adding numbers?

Which is easier: using counters and placing them altogether and counting or the ways shown on the card? Why?

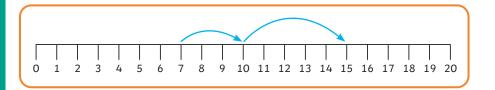
Can you show the answer to your problem using a number line and partitioning?

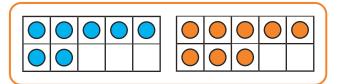
Add by Making 10

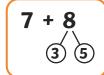


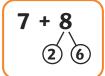
Theo has 7 stickers. His friend gives him 8 more.

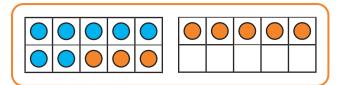
Tick the ways that use making 10 to help him work out how many stickers he has.



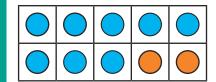


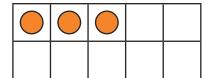






Make your own word problem to go with this ten-frame:

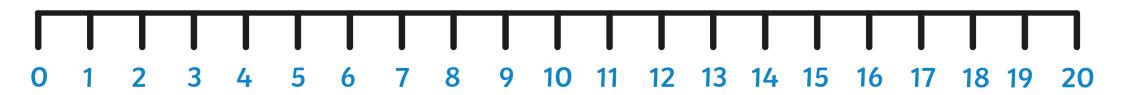




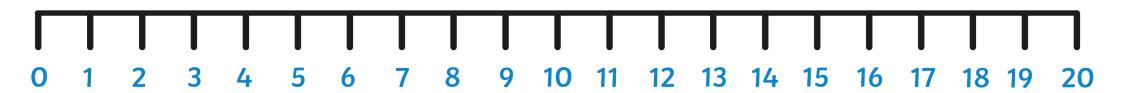


0-20 Number Line









Tens and Ones Place Value Grid



Tens	Ones

