

# Diving into Mastery - Diving

## Adult Guidance with Question Prompts

Children show an understanding that numbers from 11 up to 19 have one ten plus a number of ones. Give children a range of equipment which allow them to see the place value of the numbers involved: base ten equipment, number shapes or objects sorted into bundles of ten, such as pencils or straws. Children make part-whole models to demonstrate numbers up to 19.

How many ones are there in a ten stick?

If we had one ten, how many ones would we need to count to make fourteen? What about sixteen? Repeat using other numbers.

How many tens are there in (choose a number)?

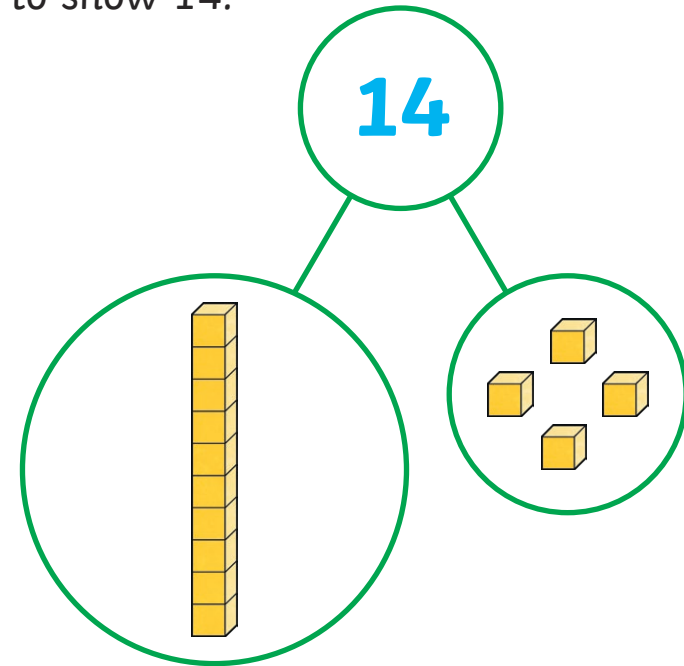
How many ones are there in (choose a number)?

18 has eight tens. Is this true or false?

## Tens and Ones



Bobby has made a part-whole model to show 14.



14 has...

**1** ten and

**4** ones.

Make part-whole models for other numbers from 11 to 19.

# Diving into Mastery - Deeper

## Adult Guidance with Question Prompts

Children show an understanding that numbers from 11 up to 19 have one ten plus a number of ones and ten has one ten and no ones. Twenty has two tens and no ones. Give children a range of equipment which allow them to see the place value of the numbers involved: base ten equipment, number shapes or objects sorted into bundles of ten, such as pencils or straws.

How many tens are there in 16?

How many ones are there in 16?

Which is the odd one out? How do you know?

How could we change it to make it correct?

Can you think of another way to show 16?

What can you tell me about how we show ten? Why is this?

What can you tell me about how we show 20? Why is this?

## Tens and Ones

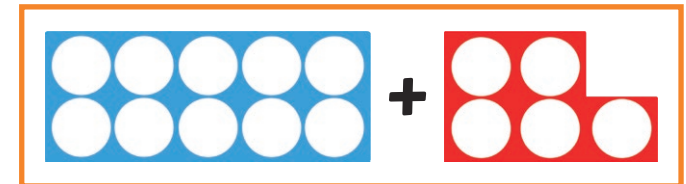
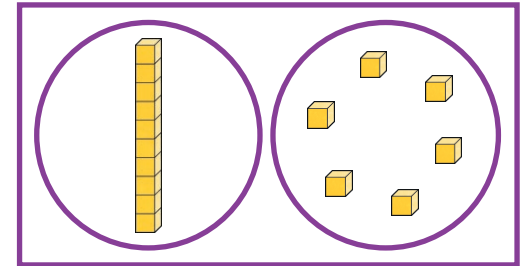


Which is the odd one out?  
Explain how you know.

10 6

sixteen

1 ten and  
6 ones



Choose a number of your own. Show this number in different ways but make one incorrect. Ask your partner to find the odd one out.

# Diving into Mastery - Deepest

## Adult Guidance with Question Prompts

Children show an understanding that numbers from 11 up to 19 have one ten plus a number of ones. Children show an understanding that 10 and 20 are made up of tens and no ones. However, they should also be able to see that a group of ones can be used to make a ten. Children should have base ten equipment to work with.

What numbers have one ten stick?

How many ones could the first number have?

Why?

Could the first person have 13? Why not?

What numbers could have a ten stick and more than five ones?

What do we know about the number if it doesn't have any tens?

How many ways can you make 20 using base ten equipment?

What do you notice about the number 20 when it is made with base ten equipment?

## Tens and Ones



These children use base ten equipment to make numbers. What number could each child have made?

I have a ten stick and less than 3 one blocks.

Ben

I don't have any ten sticks.

Erica

I have a ten stick and more than 5 one blocks.

Anna



Can you make 20 using base ten equipment?