















# Number and Place Value: Tens and Ones

<p><b>Aim:</b> Recognise the place value of each digit in a two-digit number (tens, ones).</p> <p>DFE Ready-to-Progress Criteria: Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and non-standard partitioning. (2NVP-1)</p> <p>To say what each digit in a two-digit number represents.</p>	<p><b>Success Criteria:</b> I can identify the place value of each digit in a two-digit number. I can say what each digit represents in a two-digit number. I can read two-digit numbers.</p>	<p><b>Resources:</b> Base ten blocks Whiteboards and pens - class set Place value counters and coins (10p and 1p)</p>
	<p><b>Key/New Words:</b> Numbers 0-100, up, back, zero, teen, two-digit, represent, partition, tens, ones, groups of ten.</p>	<p>- 1 per child - as required - as required</p>

**Prior Learning:** Year 1 conceptual prerequisite: It will be helpful if children know that multiples of 10 are made up from a number of tens, for example, 50 is 5 Tens. Use the lesson to support this.

## Learning Sequence

	<p><b>Remember It:</b> Show the ten frames representations on the . Ask the children to discuss what number is represented using the understanding that 10 ones equal 1 ten.</p>	
	<p><b>Place Value:</b> Read through the slides on the to revisit the concepts of 'place' and 'value'. Can the children identify the place value of each digit in a number? Explain that when you have 10 ones, you exchange them for 1 ten. Work as a class to identify the 'place' and the 'value' of each digit in the numbers shown (starting with one-digit numbers and moving onto two-digit). Each number will also be shown alongside a picture representation. Can the children say what a digit represents in a two-digit number?</p>	
	<p><b>Tens and Ones Activities:</b> Children complete the differentiated , identifying the value of each digit in a two-digit number.</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="231 1299 550 1568">  <p>Children complete the drawing the representation to show the value of each digit.</p> </div> <div data-bbox="558 1299 949 1568">  <p>Children complete the , they write the value of the tens digit and the ones digit as well as representing the number in a part-whole model.</p> </div> <div data-bbox="957 1299 1356 1568">  <p>Children complete the , they write the value of the tens digit and the ones digit as well as representing the number in a part-whole model.</p> </div> </div>	
	<p><b>Diving into Mastery:</b> Schools using a mastery approach may prefer to use the following as an alternative activity. These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.</p> <ul style="list-style-type: none"> <li data-bbox="231 1724 1356 1803">  <p>Children work out which numbers are represented on the place value charts and make numbers using equipment.</p> </li> <li data-bbox="231 1825 1356 1904">  <p>Children use their understanding of place value to explain whether representations are correct or incorrect.</p> </li> <li data-bbox="231 1926 1356 2004">  <p>Children use their understanding of place value and odd and even numbers to find all the possibilities of what a number could have been.</p> </li> </ul>	



Aim: To say what each digit in a two-digit number represents.				Date:					
				Delivered By:			Support:		
Success Criteria	Me	Friend	Teacher	T	PPA	S	I	AL	GP
I can identify the place value of each digit in a two-digit number.				Notes/Evidence					
I can say what each digit represents in a two-digit number.									
I can read two-digit numbers.									
Next Steps									
) _____									
) _____									

<b>T</b>	Teacher	<b>I</b>	Independent
<b>PPA</b>	Planning, Preparation and Assessment	<b>AL</b>	Adult Led
<b>S</b>	Supply	<b>GP</b>	Guided Practice

Aim: To say what each digit in a two-digit number represents.				Date:					
				Delivered By:			Support:		
Success Criteria	Me	Friend	Teacher	T	PPA	S	I	AL	GP
I can identify the place value of each digit in a two-digit number.				Notes/Evidence					
I can say what each digit represents in a two-digit number.									
I can read two-digit numbers.									
Next Steps									
) _____									
) _____									

<b>T</b>	Teacher	<b>I</b>	Independent
<b>PPA</b>	Planning, Preparation and Assessment	<b>AL</b>	Adult Led
<b>S</b>	Supply	<b>GP</b>	Guided Practice



# Maths

## Number and Place Value

# Need a coherently planned sequence of lessons to complement this resource?

**Lesson Breakdown**

Below is our suggestion for the most coherent and progressive sequence to teach this area of Year 1 Maths, steps on the White Rose Maths scheme of learning although we have not aimed to mirror the exact order in which it is presented.

**Read and Write Numbers (1): Reading and Writing Numbers to 50**

The lesson begins by children guessing what number word or numeral to Children count on from different points and interpret numbers from base ten representing game. Children learn to count objects to 50 and read and write

**NC Statement:** Read and write numbers to at least 100 in numerals and words.

**Lesson Aim:** To read and write numbers to 50 in numerals and words.

**Read and Write Numbers (2): Reading and Writing Numbers to 100**

Children begin with a fun game using pairs of the body to represent number Recognise number words. Children interpret numbers from different representations. Children learn to count objects for 100 and read and write number

**NC Statement:** Read and write numbers to at least 100 in numerals and words.

**Lesson Aim:** To read and write numbers to 100 in numerals and words.

**Recognise Place Value (1): Tens and Ones**

Children explore the value of the digits in a two digit number. They work great to representations and numerals, exploring what happens when there are

**NC Statement:** Recognise the place value of each digit in a two digit number.

**Lesson Aim:** To say what each digit in a two digit number represents.

**Introduction**

This set of resources is designed to support the understanding of number and place value in children, beginning with the reading, writing and interpretation of the number concepts to learning. Children will carefully and represent the number in different ways and will begin to estimate number to a standard. If they will develop their skills in counting in steps and learn to read a number number up to 100 in numerals and words. Children will have the opportunity to practise their reasoning skills in a variety of different contexts, including through problems and puzzles. These resources include: A range of different contexts, including through problems and puzzles. These resources include: A range of different contexts, including through problems and puzzles. These resources include: A range of different contexts, including through problems and puzzles.

**Resources**

In addition to your other maths resources you will need: A range of different contexts, including through problems and puzzles. These resources include: A range of different contexts, including through problems and puzzles.

**Challenge cards**

**Assessment Statements**

By the end of this unit:

Children working towards the expected level will be able to:

- Count forwards and backwards in tens, five, a tens up to 100.
- Identify and represent numbers up to 100 in some different ways.
- Say one more or one less than a given number up to 100.
- Compare numbers using the symbols more than, less than, and equal to.
- Read and write numbers to 100 in numerals.
- Partition two digit numbers into tens and ones.
- Read and write numbers to 100 in numerals.
- Read and write numbers to at least 100 in numerals.

Children working at the expected level will be able to:

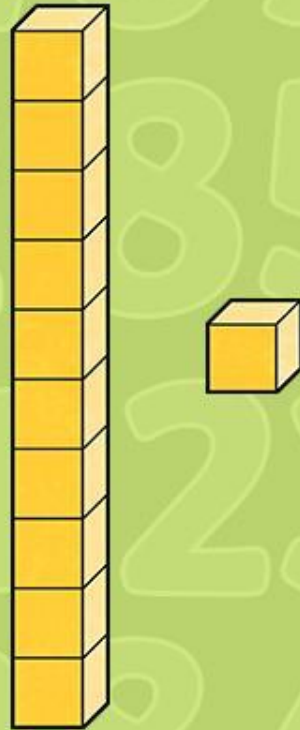
- Count forwards and backwards in steps of 1 and 10 from any number.
- Count forwards and backwards in tens of any number.
- Know the value of the tens and ones in a two digit number.
- Partition two digit numbers into tens and ones.
- Identify, interpret and estimate the length using standard measurement.
- Compare numbers using  $>$ ,  $<$ , and  $=$  symbols.
- Read and write numbers to at least 100 in numerals.

**Yearly Overview**

The aim of this overview is to support teachers using PlanIt Maths to show the most coherent and progressive sequence to teach each area of maths. We also want to fully support teachers who use the White Rose Maths scheme of learning to make full use of the resources available within PlanIt Maths. Wherever possible, lesson packs have been matched to each of the small steps on the White Rose Maths scheme of learning.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value							Number: Addition and Subtraction				
Spring	Number: Multiplication and Division		Statistics		Geometry: Properties of Shape				Number: Fractions		Measurement: Length and Weight	Number: Multiplication and Division
Summer	Position and Direction			Problem Solving and Efficient Methods		Measurement: Time		Measurement: Mass, Capacity and Temperature				Investigations

# Tens and Ones



## **Aim**

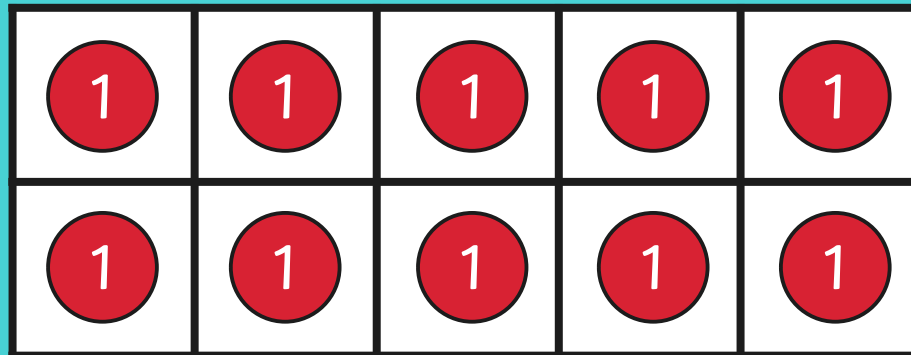
- To say what each digit in a two-digit number represents.

## **Success Criteria**

- I can identify the place value of each digit in a two-digit number.
- I can say what each digit represents in a two-digit number.
- I can read two-digit numbers.

# Remember It

Using the understanding that 10 ones equal 1 ten,  
what number is shown below?



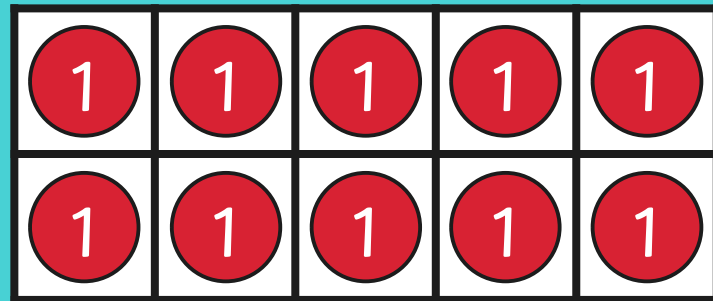
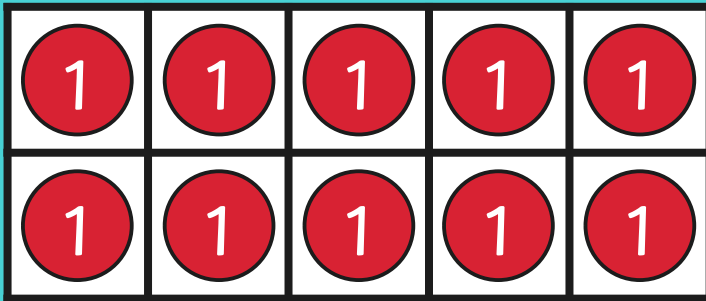
10

10 ones is equal to 1 ten.



# Remember It

Using the understanding that 10 ones equal 1 ten,  
what number is shown below?

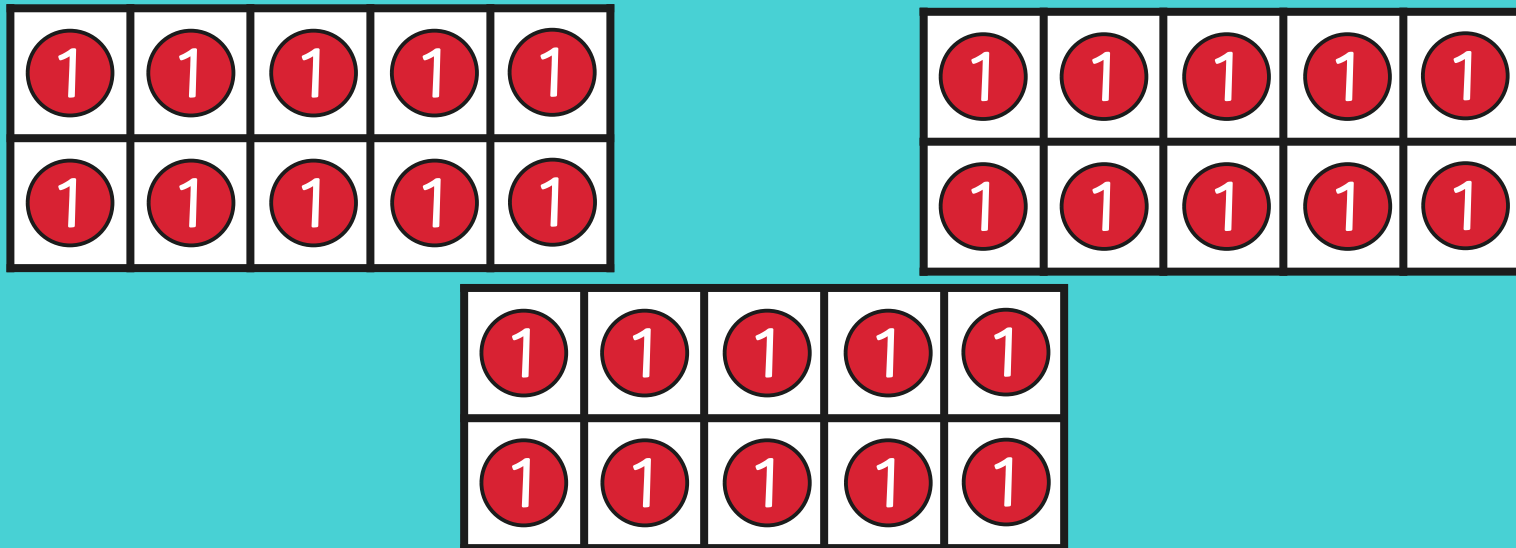


20

10 ones is equal to 1 ten.  
2 groups of ten equal 20.

# Remember It

Using the understanding that 10 ones equal 1 ten,  
what number is shown below?

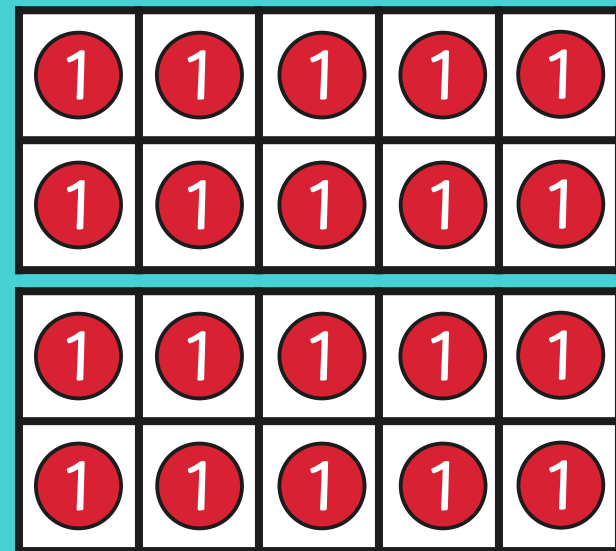
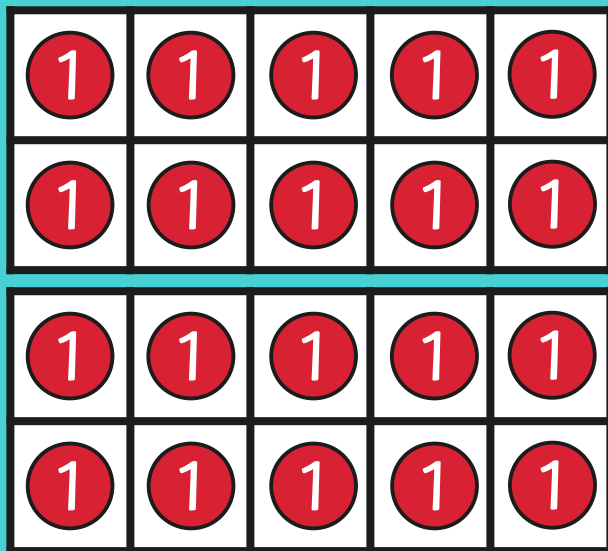


30

10 ones is equal to 1 ten.  
3 groups of ten equal 30.

# Remember It

Using the understanding that 10 ones equal 1 ten,  
what number is shown below?




40

10 ones is equal to 1 ten.  
4 groups of ten equal 40.

# Place Value



What do you know about this number?

Tens	Ones
	2
	

- This is the number 2.
- It is a one-digit number.
- There are 2 ones in the ones column.




# Place Value



What do you know about this number?

Tens	Ones
	9



- This is the number 9.
- It is a one-digit number.
- There are 9 ones in the ones column.

What number comes next?  
What happens to the ones column then?

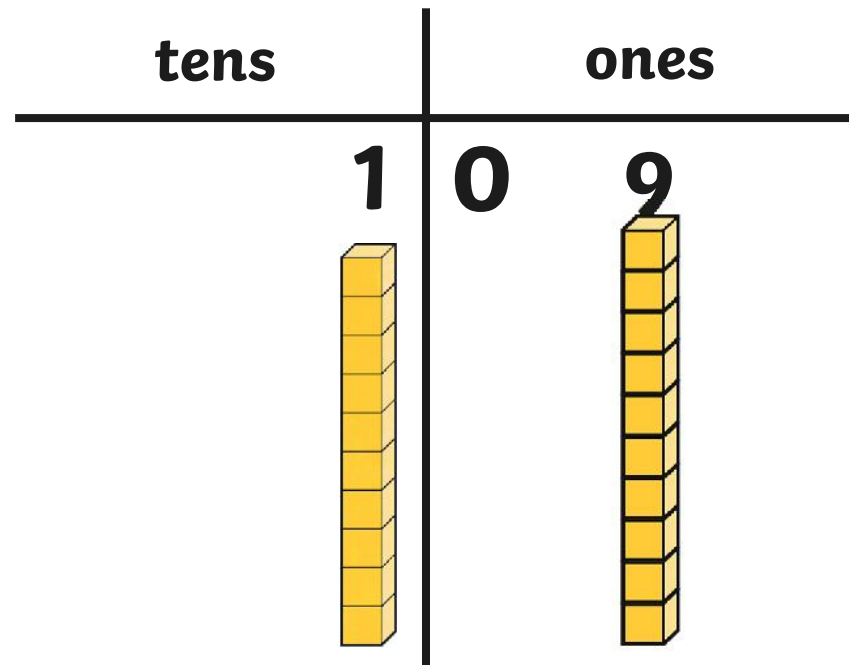


# Place Value



10 comes next. You can only fit 9 ones in the ones column.

Now that we have 10 ones, we must exchange them for 1 ten.

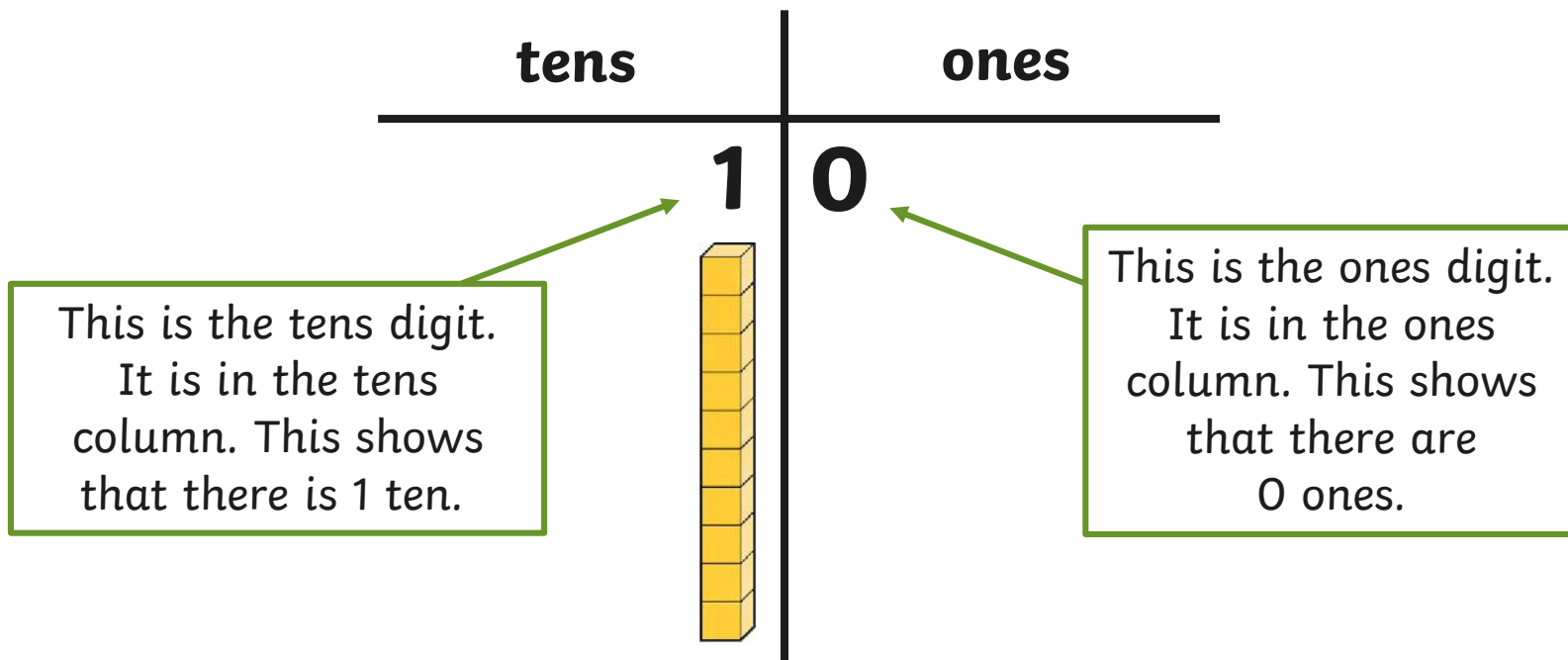


# Place Value



What do you know about this number?

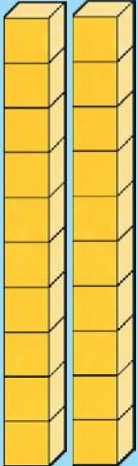

This is the number 10. It is a two-digit number.  
Each of the digits has a different value.



# Place Value



What happens as we count from 1 to 20?

Tens	Ones
2	0
	

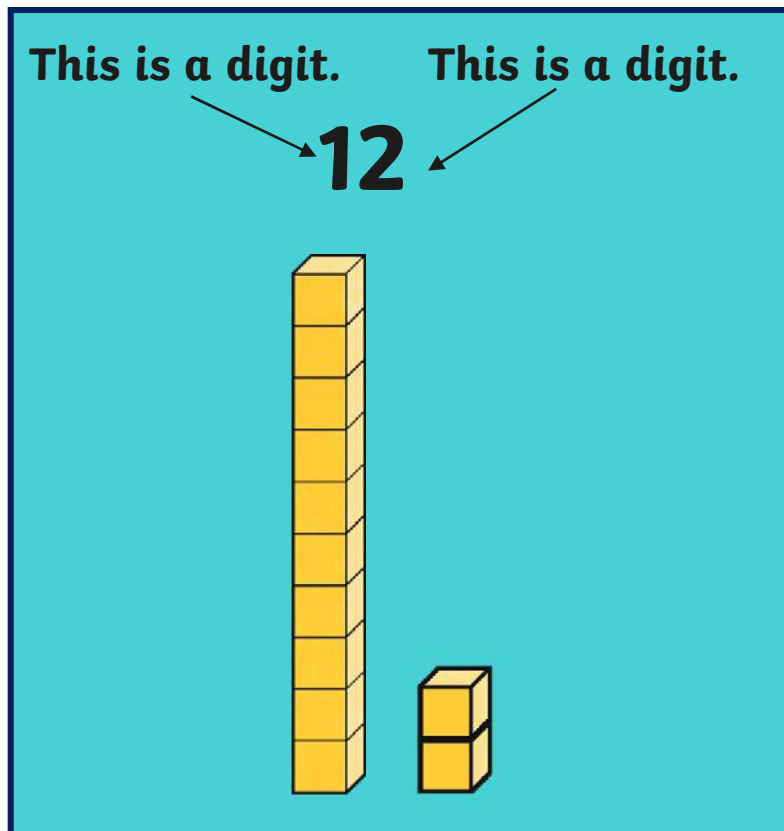
Can you see a pattern? Explain it to your partner.



# Place Value



What do you know about this number?

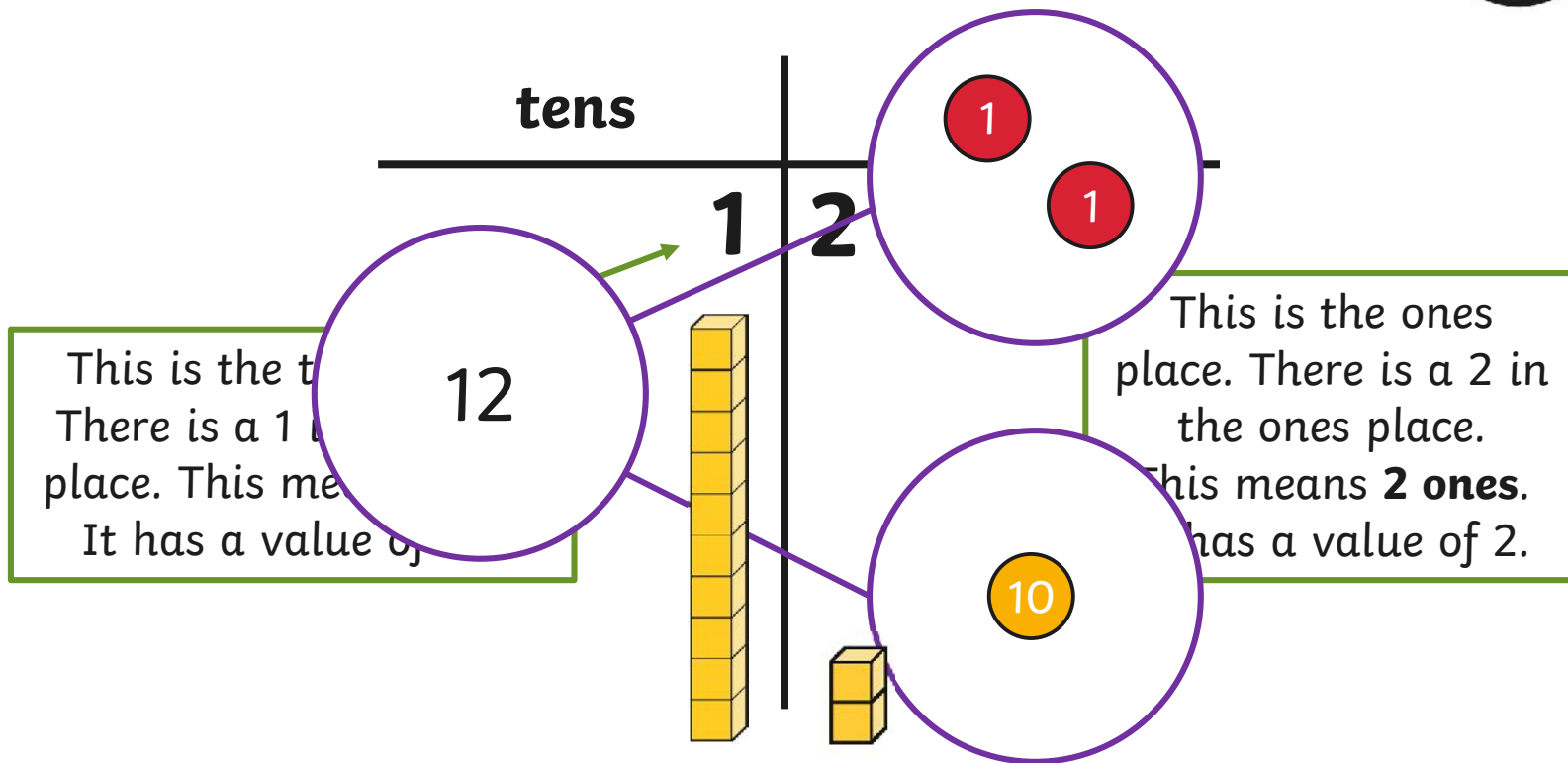


- This is the number 12.
- It is a two-digit number.
- Each of the digits has a different value.





# Place Value

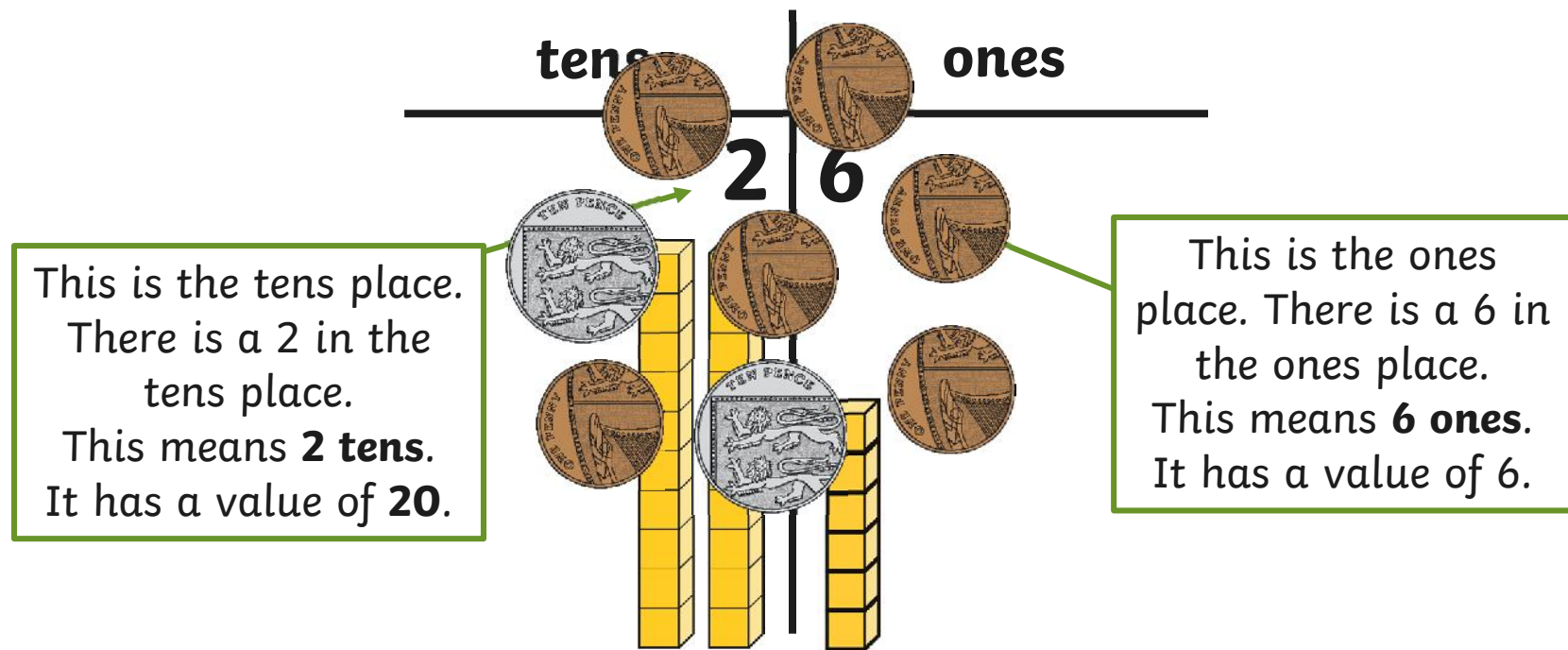


This is the number 12. The 1 shows we have 1 group of ten. The 2 shows we have 2 extra ones.



# Place Value

What do you know about this number?



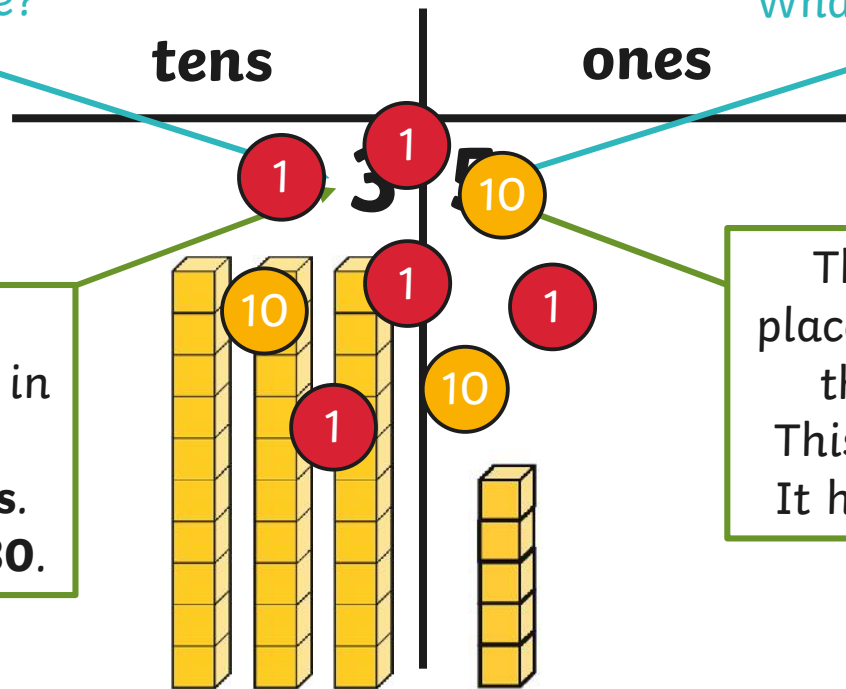
This is the number 26. The 2 shows we have 2 groups of ten. The 6 shows we have 2 extra ones.

# Place Value



What is the place?  
What is the value?

What is the place?  
What is the value?



This is the tens place. There is a 3 in the tens place. This means **3 tens**. It has a value of **30**.

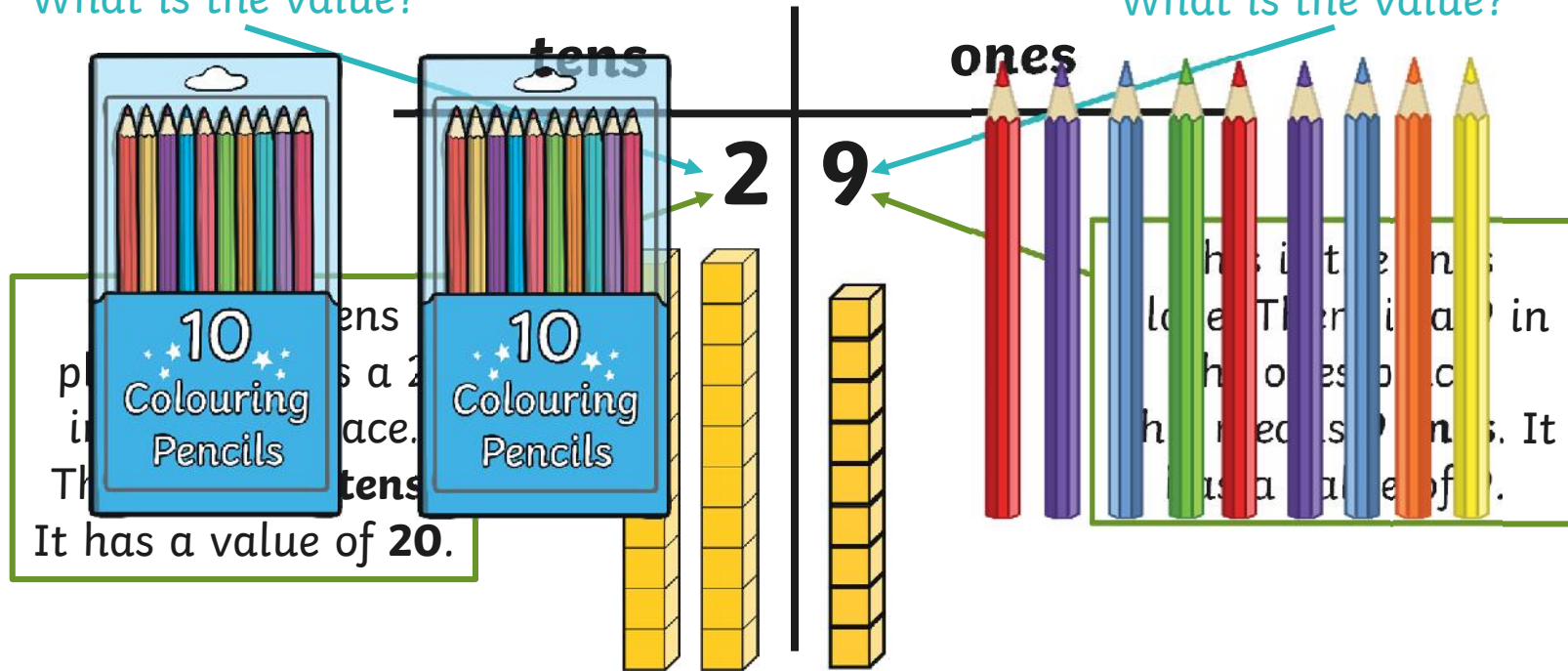
This is the ones place. There is a 5 in the ones place. This means **5 ones**. It has a value of 5.

This is the number 35. The 3 shows we have 3 groups of ten. The 5 shows we have 2 extra ones.

# Place Value



What is the place?  
What is the value?



This is the number 29. The 2 shows we have 2 groups of ten.  
The 9 shows we have 9 extra ones.

# Place Value



What is the place?  
What is the value?

What is the place?  
What is the value?

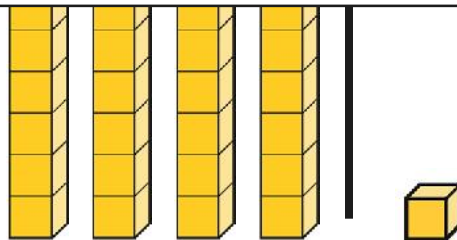
41

40

1 in

The  
place  
in t

This means **4 tens**.  
It has a value  
of **40**.



It has a value of 1.

This is the number 41. The 4 shows we have 4 groups of ten.  
The 1 shows we have 1 extra one.



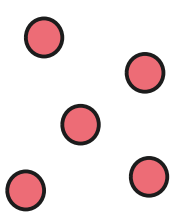

# Place Value



Can you make these numbers with your equipment?

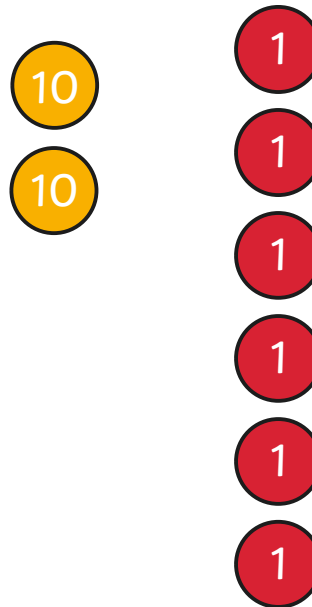
Which number has a 5 in the tens place and a 3 in the ones place?

53

Tens	Ones
	

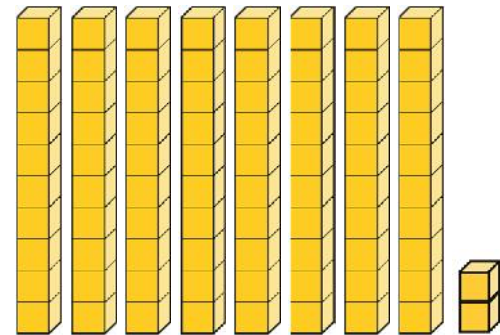
Which number has a 2 in the tens place and a 6 in the ones place?

26



Which number has an 8 in the tens place and a 2 in the ones place?

82



# Tens and Ones Activities



## Tens and Ones

To say what each digit in a two-digit number represents...

Complete the table. Use resources to help you.

Number	Value of Tens	Value of Ones	Part-Whole Model
56	50	6	
	20	7	
61			
	70		
33			

## Tens and Ones

...it each digit in a two-digit number represents...

...resources to help you.

Value of Tens	Value of Ones	Part-Whole Model
50	6	

## Tens and Ones

...it each digit in a two-digit number represents...

...resources to help you.

Value of Tens	Value of Ones



## Diving into Mastery

Dive in by completing your own activity!



**Tens and Ones**

What numbers are represented on the place value grids?

a

Tens	Ones

b

Tens	Ones
1	9

c

Tens	Ones

Can you make these numbers using equipment?

33 15 72 66 90 28

# Show Me



Show me a number that has...

a 9 in the ones place

four tens and two ones

a 6 in the tens place

two digits

a 3 in the tens place

one digit

seven tens and five ones

Can you explain your answer? Is there more than one way to make these numbers? Explain why.

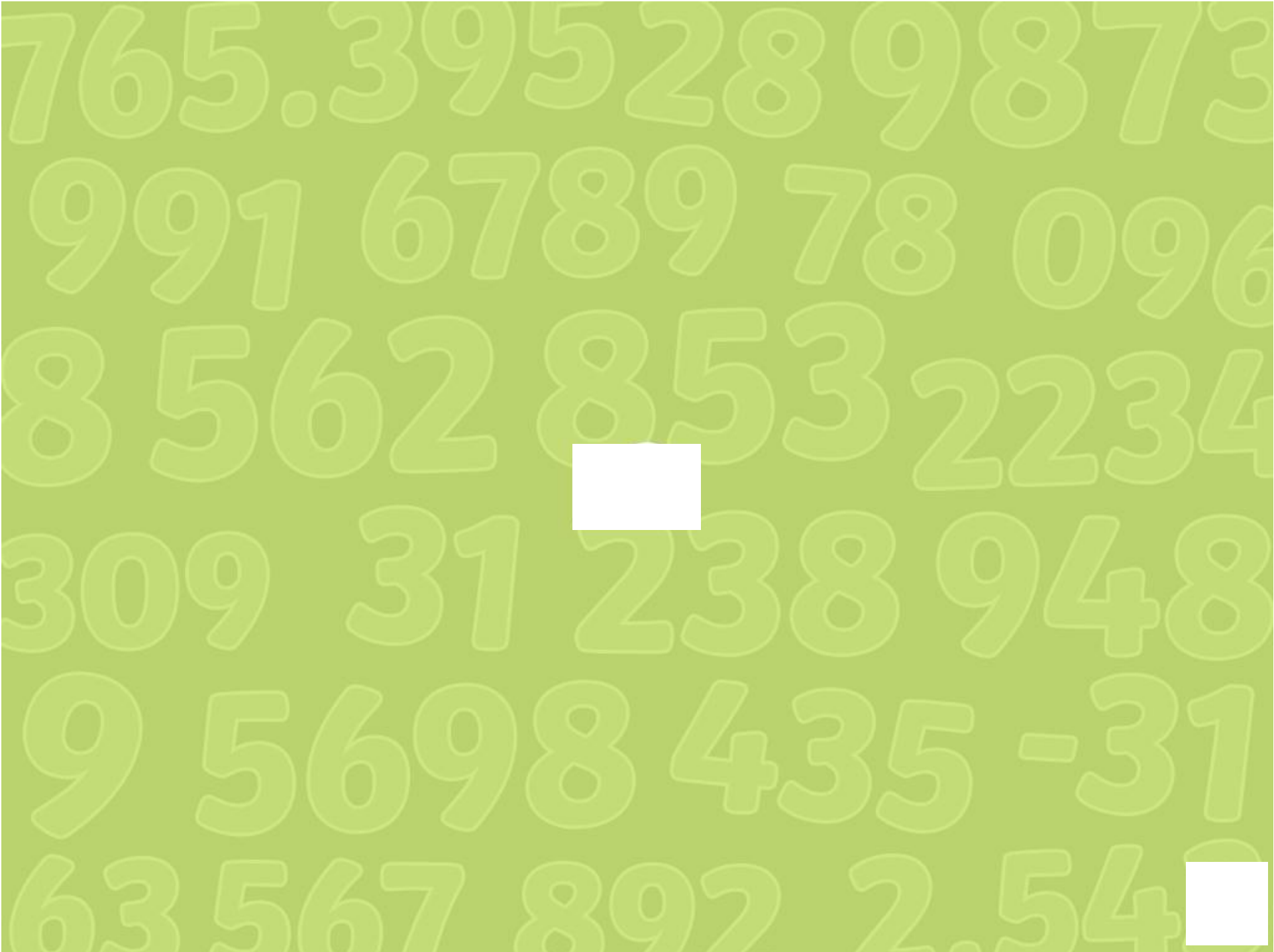
## Aim



- To say what each digit in a two-digit number represents.

## Success Criteria

- I can identify the place value of each digit in a two-digit number.
- I can say what each digit represents in a two-digit number.
- I can read two-digit numbers.



## Tens and Ones

### Adult Guidance with Question Prompts



Children learn to recognise the place value of each digit in a two-digit number. In this activity, children identify the numbers represented and use base ten blocks to represent different numbers.

Which place value grid shows the most/fewest tens?

Which place value grid shows the most/fewest ones?

Which number has six tens?

Which number has one ten?

Which number has seven tens?

Which number has five ones?

Which number has nine ones?

Which number uses zero as a place holder?

Which is the largest number? Can you explain how you know?

Which column in the place value grid did you look at first?

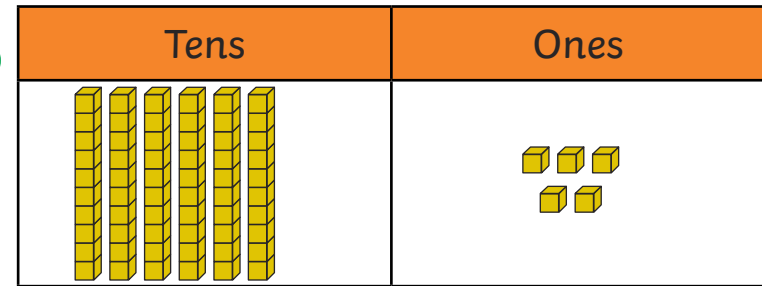
Which is the smallest number? Which column in the place value grid did you look at first this time?

## Tens and Ones

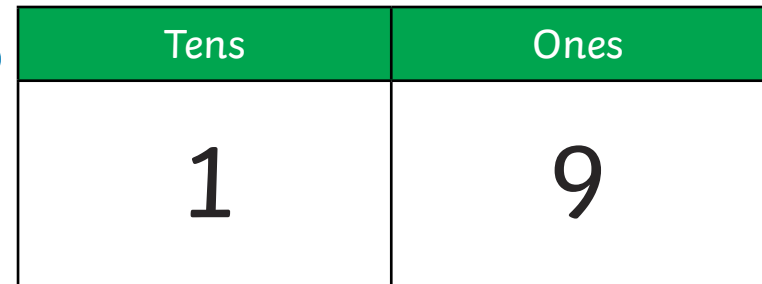


What numbers are represented on the place value grids?

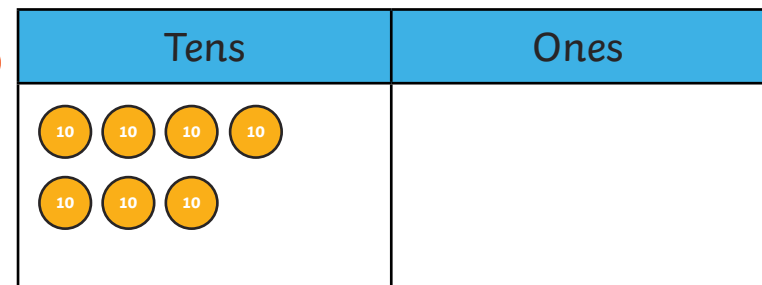
a



b



c



Can you make these numbers using equipment?

33

15

72

66

90

28

## Tens and Ones

### Adult Guidance with Question Prompts



Children learn to recognise the place value of each digit in a two-digit number. In this activity, children use their understanding of place value to explain whether representations are correct or incorrect. It would be useful for children to have access to base ten blocks and place value counters.

**What is the biggest digit that can be in the ones column?**

**What have the children forgotten?**

**How might each of the children change their answers?**

**How do you exchanges ones for a ten?**

**Is it easy to understand these place value grids?**

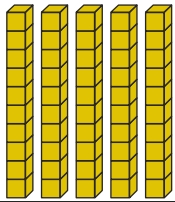
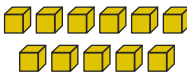
**Why not?**

**Use equipment to show a different way of making the children's numbers.**

## Tens and Ones



Simon is trying to make the number 61.  
Is he right? Can you explain your answer?

Tens	Ones
	


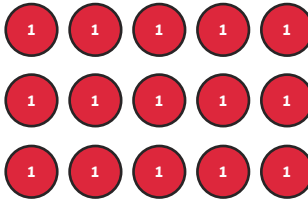


Grace is trying to make the number 39.  
Is she right? Can you explain your answer?

Tens	Ones
2	19



Maurice is trying to make the number 55.  
Is he right? Can you explain your answer?

Tens	Ones
	



Can you use a place value grid to show how we should make the numbers 61, 39 and 55?

## Tens and Ones

### Adult Guidance with Question Prompts



Children learn to recognise the place value of each digit in a two-digit number. In this activity, children use their understanding of place value to reason and find all the possibilities of what a number could have been. It would be useful for children to have access to base ten blocks for this activity.

**How many tens can you see?**

**Which numbers are even numbers?**

**What is the highest number Jane might have made?**

**What is the lowest number it could have been?**

**How many even numbers are between 30 and the next tens number?**

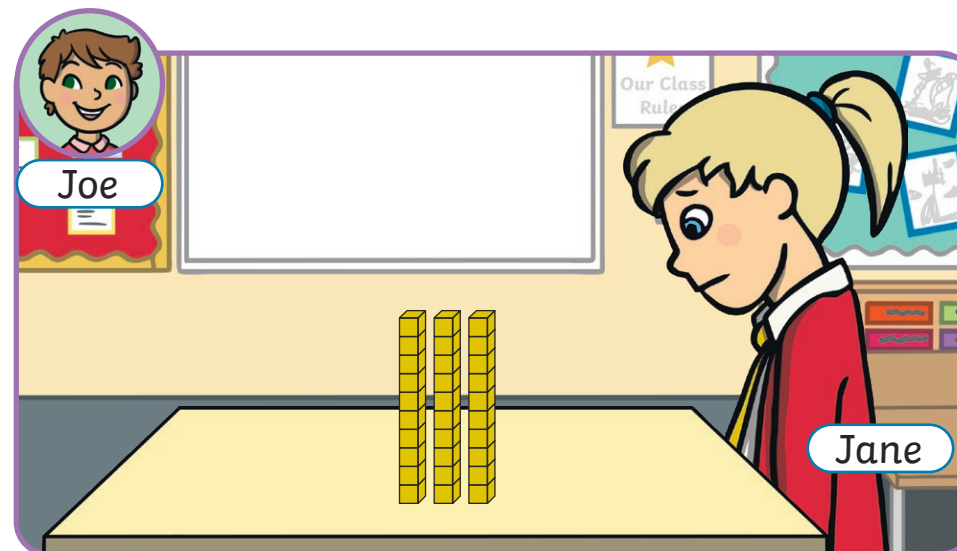
**How many odd numbers are between 30 and the next tens number?**

**Use equipment to show all the possibilities.**

## Tens and Ones



Jane made a number using base ten equipment but Joe knocked the ones onto the floor.



Jane's number was an even number.

What numbers could it have been?

How do you know you have found them all?

What numbers couldn't it have been?

Explain how you know and show your answers on a place value grid.



a) 65

b) 19

c) 70



**Children should use the correct number of tens and ones to represent each number.**

**Simon and Grace have made the correct numbers but Maurice has missed out one ten. However, we normally only have up to nine ones in the ones column. All the children have forgotten that ten ones should be exchanged for one ten.**



**Jane's number could not have been 31, 33, 35, 37 or 39 as these are all odd numbers. Her number must have been 32, 34, 36 or 38.**





**0**

**1**

**2**

**3**

**4**

**5**

**6**

**7**

**8**

**9**

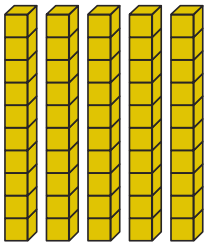
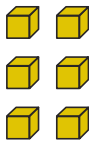
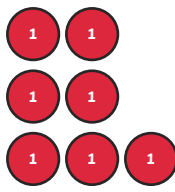

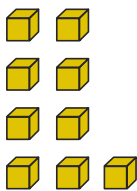
**10**

# Tens and Ones

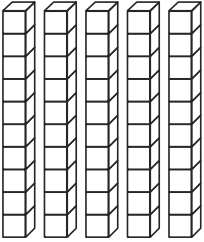
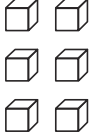
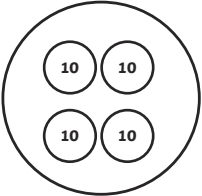
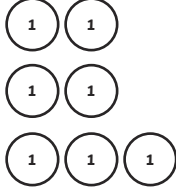

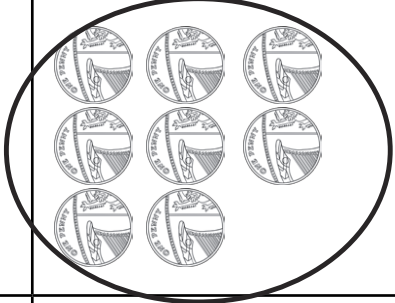
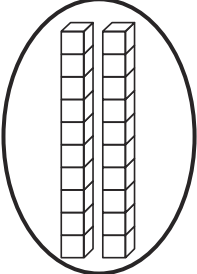
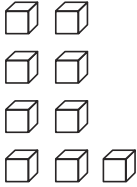
To say what each digit in a two-digit number represents.



Complete the table. Use resources to help you.

Number	Value of Tens	Value of Ones
56		
47		
38		
29		
16		

# Tens and Ones Answers

Number	Value of Tens	Value of Ones
56		
47		
38		
29		
16	<p><b>Any representations that shows 10 (1 ten)</b></p>	<p><b>Any representations that shows 6 (6 ones)</b></p>

# Tens and Ones

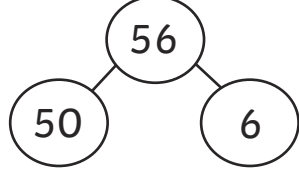
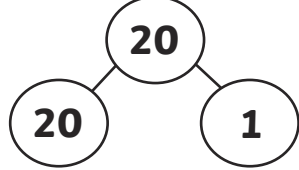
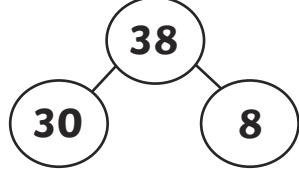
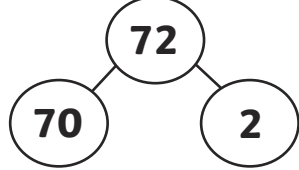
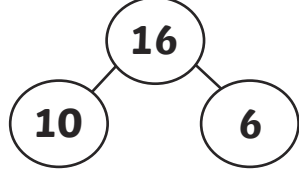
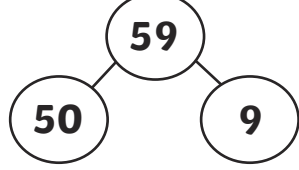
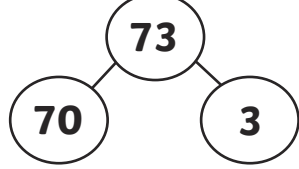
To say what each digit in a two-digit number represents.



Complete the table. Use resources to help you.

Number	Value of Tens	Value of Ones	Part-Whole Model
56	50	6	
21			
38			
72			
16			
59			
73			

# Tens and Ones **Answers**

<b>Number</b>	<b>Value of Tens</b>	<b>Value of Ones</b>	<b>Part-Whole Model</b>
56	50	6	
21	20	1	
38	30	8	
72	70	2	
16	10	6	
59	50	9	
73	70	3	

# Tens and Ones

To say what each digit in a two-digit number represents.



Complete the table. Use resources to help you.

Number	Value of Tens	Value of Ones	Part-Whole Model
56	50	6	
	20	7	
61			
	70		
33			



# Tens and Ones **Answers**

Number	Value of Tens	Value of Ones	Part-Whole Model
56	50	6	
27	20	7	
42	40	2	
61	60	1	
70, 71, 72, 73, 74, 75, 76, 77, 78, 79	70	Ones digit to match their number.	A part-whole model to match their number that includes 70 as a part.
51	50	1	
33	30	3	

Number and Place Value | Tens and Ones

<b>To say what each digit in a two-digit number represents.</b>		
I can identify the place value of each digit in a two-digit number.		
I can say what each digit represents in a two-digit number.		
I can read two-digit numbers.		

Number and Place Value | Tens and Ones

<b>To say what each digit in a two-digit number represents.</b>		
I can identify the place value of each digit in a two-digit number.		
I can say what each digit represents in a two-digit number.		
I can read two-digit numbers.		

Number and Place Value | Tens and Ones

<b>To say what each digit in a two-digit number represents.</b>		
I can identify the place value of each digit in a two-digit number.		
I can say what each digit represents in a two-digit number.		
I can read two-digit numbers.		

Number and Place Value | Tens and Ones

<b>To say what each digit in a two-digit number represents.</b>		
I can identify the place value of each digit in a two-digit number.		
I can say what each digit represents in a two-digit number.		
I can read two-digit numbers.		

Number and Place Value | Tens and Ones

<b>To say what each digit in a two-digit number represents.</b>		
I can identify the place value of each digit in a two-digit number.		
I can say what each digit represents in a two-digit number.		
I can read two-digit numbers.		

Number and Place Value | Tens and Ones

<b>To say what each digit in a two-digit number represents.</b>		
I can identify the place value of each digit in a two-digit number.		
I can say what each digit represents in a two-digit number.		
I can read two-digit numbers.		

Number and Place Value | Tens and Ones

<b>To say what each digit in a two-digit number represents.</b>		
I can identify the place value of each digit in a two-digit number.		
I can say what each digit represents in a two-digit number.		
I can read two-digit numbers.		

Number and Place Value | Tens and Ones

<b>To say what each digit in a two-digit number represents.</b>		
I can identify the place value of each digit in a two-digit number.		
I can say what each digit represents in a two-digit number.		
I can read two-digit numbers.		