

Number & Place Value: Read, write and represent numbers to 100

Learning focus

Read numbers 1 to 100 in numerals, using number tracks, number lines and number squares to identify where they lie, individually or in blocks, e.g., Identify the 'fifties' on a 100-square.

Greater Depth Challenge:

31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46		48	49	50

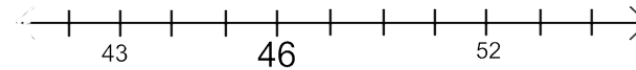
Sally says the missing number is 74.

Ben says it's 47.

Who is right?

Explain using: tens digit, ones digit, more, less.

Greater Depth Challenge:

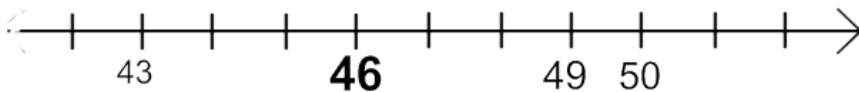


Tilly has completed an empty number line.

Has she completed it correctly? How do you know?

Explain how to correct it.

Greater Depth Challenge:



Some children estimated the number of marbles in a jar.
Sally estimated 43, Mark estimated 50 and Anna estimated 50.
Who was the closest to 46?

Greater Depth Challenge:

27	28	29	13	31	32	33	34	35	36
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Sam made a mistake filling in the numbers. Find the mistake and explain why this happened.

Learning focus

Refer to materials used, such as tens and ones boards with base 10 apparatus, and talk about what has been done their work, e.g., 'I have 3 tens and 4 ones and that is 34.'

Greater Depth Challenge:

How many different ways are there to show **35**?

You can use Numicon, Dienes, place value counters, coins, arrow cards, pictures etc.

Greater Depth Challenge:

How many different ways are there to show **15 - 4**?

You can use Numicon, Dienes, place value counters, coins, arrow cards, pictures etc.

Greater Depth Challenge:

How many different ways are there to show **15 - 9**?

You can use Numicon, Dienes, place value counters, coins, arrow cards, pictures etc.

Greater Depth Challenge:

How many different ways are there to show **22 + 11**?

You can use Numicon, Dienes, place value counters, coins, arrow cards, pictures etc.

Number & Place Value: Read, write and recognise the place value of each digit in a two-digit number (tens, ones).

Learning focus	Explain why it is necessary to have a 0 in some numbers, e.g., 40. Explain why there is a place keeping zero in the tens numbers, e.g., How is 40 different from 4?
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Greater Depth Challenge:

80	8
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What is the same and different about these numbers?

Explain using pictures, diagrams and number sentences.

Greater Depth Challenge:

Miss Smith asked some children to write down **thirty seven** using digits.

Darcy wrote down **307**.

Mark wrote down **370**

Is either of them correct? Can you explain your answer?

Greater Depth Challenge:

tens	ones	
7	0	=70

Betty

tens	ones	
7	0	=7

George

Who is wrong? Who is right?

How do you know?

Greater Depth Challenge:

David said that **50** is a 1-digit number because there's a 5 and a zero.

Is he right?

Explain your answer

Learning focus

Write numerals for numbers to 100, understanding that numbers from 10 to 99 have 2 digits, and why it is important that the order of the digits is correct, e.g., Be able to explain the difference between 14 and 41.

Greater Depth Challenge:

Sally recorded forty three as:

tens	ones							
40	3	=						

Is she correct? How do you know?
Can you explain your answer?

Greater Depth Challenge:

48	49	50	51	53	54	55	65	57
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What is the mistake?

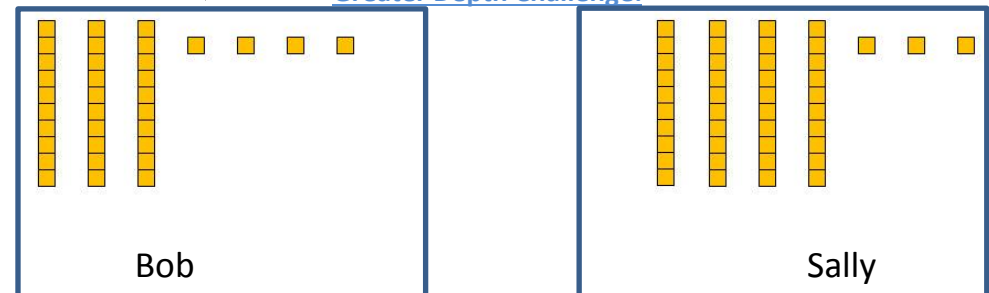
Explain using: tens digit, ones digit, more, less.

Greater Depth Challenge:

14	41
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What is the same about these numbers?
What is different about these numbers?

Greater Depth Challenge:



Children were asked to make 43.
Who was wrong and why?

Learning focus

Partition two-digit numbers in different ways, including into multiples of 10 and 1, with and without concrete apparatus to support subtraction, e.g.,
 $32 = 30 + 2$ and $20 + 12$ so $32 - 12 = 20$ and $32 - 20 = 12$.

Greater Depth Challenge:

My number is 45.

Partition it in different ways to make these statements true.

$$\boxed{40} + \boxed{5} = \boxed{20} + \boxed{}$$

$$\boxed{30} + \boxed{} = \boxed{} + \boxed{}$$

Greater Depth Challenge:

My number is 49.

Partition it in different ways to make these statements true.

$$\boxed{} + \boxed{} = \boxed{} + \boxed{}$$

$$\boxed{} + \boxed{} = \boxed{} + \boxed{}$$

Learning focus

Know what each digit in a two-digit number represents using apparatus to support the explanation, e.g., 'In 23 the 2 has a value of 20.'

Greater Depth Challenge:

How is the value of 3 different in these numbers?

30 and 13

Explain or show using apparatus.

Greater Depth Challenge:

I am thinking of a number.

It has more than 6 tens and less than 4 ones.

What is my number?

How many answers are there? Use apparatus to show them.

Number & Place Value: Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs.

Learning focus

Recognise odd and even numbers in context:

Greater Depth Challenge:

Down one side of the street the house numbers are odd.

If they start at 5, what number is the 4th house?



Greater Depth Challenge:

I am thinking of a number. It is more than 20 and less than 30.

It is even, what numbers can it be?

How can you find all the numbers?



Greater Depth Challenge:

How can you prove that **32** is an even number?

Use pictures, apparatus and sentences.

Greater Depth Challenge:

How can you prove that **51** is an odd number?

Use pictures, apparatus and sentences.

Learning focus

Know that the tens digit in a two-digit number is more significant than the units digit when deciding on size, e.g., position a number in the correct place on an un-numbered number track.
Order a selection of numbers in ascending and descending order, discussing the value of their digits and considering their relative positions on a number line, e.g., 65, 56, 66, 55.

Greater Depth Challenge:

1	2	3	4	5	6	7	8	9
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Pick 2 digit cards and make a 2-digit number.

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Reverse the digits.

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Which number is larger and how do you know?

Greater Depth Challenge:

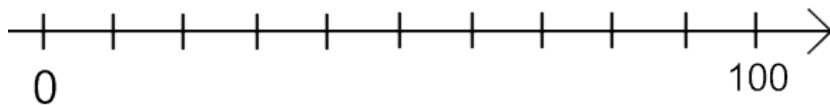
1	2	3	4	5	6	7	8	9
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Make a number where the tens digit is one less than the ones digit.

There are 8 possibilities. Record them below and decide which number is the largest and which is the smallest.



Greater Depth Challenge:



How can you explain where to put 71 and 17 on this number line?
line?

Greater Depth Challenge:

True or false?

One ten and fourteen ones is larger than 2 tens.

Explain how you know.

Learning focus

Compare the size of two numbers using the $<$, $>$ and $=$ symbols correctly to record comparisons.
Explain the relationship between three or more numbers, e.g., 15 is greater than 3 but less than 62.

Greater Depth Challenge:

I am thinking of a number.

It has less than 5 tens and more than 8 ones.

What is my number?

How many answers are there?

How can you be sure you've found them all?

Greater Depth Challenge:

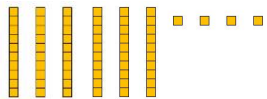
Use these digits to make these true:

2	4	5	7	9
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		$>$		
--	--	-----	--	--

		$<$		
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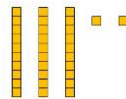
Greater Depth Challenge:



64



38



32

Use these numbers to make this true.

	$>$		$<$	
--	-----	--	-----	--

Use the symbols $<$, $>$, $=$ to make these true:

32 _____ 64 _____ 38

Greater Depth Challenge:

Sam said that **23 > 32**

True or false?

Explain your answer or represent using equipment.

Number & Place Value: Count in steps of 2, 3, and 5 from 0,

Learning focus	Count forwards in multiples of 2 from 0. Count backwards in multiples of 2 from any multiple up to $12\times$. Recognise digit patterns.
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Greater Depth Challenge:

How do you know that 18 is in the 2 times tables?

What numbers between 10-20 are not in the pattern?

Greater Depth Challenge:

If I start at 0 and count in 2s, will I say any of these numbers: 27,
11,16?

Explain how you know.

Greater Depth Challenge:

Sam counts backwards in 2s. He says:

“20, 18, 15, 14, 12...”

What is the problem?

Explain how you know.

Learning focus

Count in multiples of 5
Count forwards in multiples of 5 from 0.
Count backwards in multiples of 5 from any multiple up to $12\times$.
Recognise digit patterns.

Greater Depth Challenge:

If I start at 0 and count in 5s,
will I say any of these numbers: **17, 30, 45**?
Explain how you know.

Greater Depth Challenge:

How do you know that 25 is in the 5 times tables?
What numbers between 30-50 are in the pattern?

Learning focus

Count confidently forwards and backwards in multiples of 10 from any number and use to solve problems, e.g., 'How much change is needed from £1 if you spend 45p?' (count on in 10s from 45p)
Recognise patterns when counting in tens, forwards or backwards, from any start number, e.g., when counting backwards or forwards in 10s from 16 the numbers always end in 6.

Greater Depth Challenge:

Ben counts back in 10s from 84.

Will he say 53?

Explain how you know.

Greater Depth Challenge:

Count on in 10s from 3.

Will you say number 43?

How do you know without actually counting?