# Place Value and Number Numbers and quantities 

## Objectives

Day 1
Find one more and one less than any 2-digit number.
Estimate numbers on a landmarked line; write numbers in words.
Day 2
Count on and back in 10s. Find 10 more and 10 less than any 2-digit number.
Say the number 10, 20, 30 more and 10, 20, $\mathbf{3 0}$ less than $\mathbf{2 - d i g i t ~ n u m b e r s . ~}$

# Place Value and Number <br> Numbers and quantities 

Short Mental Workouts
Day 1
Count in 10s from 10
Day 2
Numbers to 100

## Place Value and Number

## Numbers and quantities



Short Mental Workout
Count in 10s from 10

## Place Value and Number

## Numbers and quantities



Short Mental Workout
Numbers to 100

## 1-100 number grid

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
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## 4445

## 44 is one less than 45.



Day 1: Find one more and one less than any 2-digit number. Estimate numbers on a landmarked line; write numbers in words.

Repeat for the numbers 1 more and 1 less than 38.

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Day 1: Find one more and one less than any 2-digit number. Estimate numbers on a landmarked line; write numbers in words.

## Repeat for the numbers <br> 1 more and 1 less than 63.



Day 1: Find one more and one less than any 2-digit number. Estimate numbers on a landmarked line; write numbers in words.


36

Day 1: Find one more and one less than any 2-digit number. Estimate numbers on a landmarked line; write numbers in words.


1-100 grid

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

## Investigation

Use 'That Number Square!' from NRICH: https://nrich.maths.org/8169

Explore 'smart' strategies to put numbers back in the correct place on the 100-grid.

Find one more and one less than the numbers in the middle column.

| One less | Number | One more |
| :---: | :---: | :---: |
|  | 12 |  |
|  | 17 |  |
|  | 13 |  |
|  | 20 |  |
|  | 32 |  |
|  | 38 |  |

Day 1: Estimate numbers on a landmarked line; write numbers in words.


## Forty five

## Day 1: Estimate numbers on a landmarked line; write numbers in words.



## Investigation

Use 'That Number Square!' from NRICH: https://nrich.maths.org/8169

Explore 'smart' strategies to put numbers back in the correct place on the 100-grid.

## Mystery numbers

Ring the number you think is marked on the line.


Write in words which numbers you think the arrows are pointing to.


# Place Value and Number <br> Numbers and quantities 

## Objectives

Day 2
Count on and back in 10 s. Find 10 more and 10 less than any 2-digit number.
Say the number 10, 20, 30 more and 10, 20, 30 less than 2-digit numbers.

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| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 食 0 | 96 | 97 | 98 | 99 | 100 |

Now let's count back again.

Spider is subtracting 10 each time!

Day 2: Count on and back in 10 s. Find 10 more and 10 less than any 2-digit number.
Say the number 10, 20, 30 more and 10, 20, 30 less than $\mathbf{2}$-digit numbers.

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Day 2: Count on and back in 10 s. Find 10 more and 10 less than any 2-digit number.
Say the number 10, 20, 30 more and $\mathbf{1 0}, \mathbf{2 0}, \mathbf{3 0}$ less than 2-digit numbers.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 亿雨 | 99 | 100 | Spider as she counts on in 10s, starting at 8.

Now let's count back again.

Day 2: Count on and back in 10 s. Find 10 more and 10 less than any 2-digit number.
Say the number 10, 20, 30 more and 10, 20, 30 less than 2-digit numbers.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
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| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |



## Ten more/ten less



Challenge
Choose your own numbers for these.


## Challenge

## 20 and 30 more/less

Sheet 3


## Place Value and Number Numbers and quantities

Well Done! You've completed this unit.

## Objectives

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Say the number 10, 20, 30 more and 10, 20, 30 less than 2-digit numbers.

## Problem solving and reasoning questions

## Year 1

What is the number after...
(a) 46?
(b) 59 ?
(c) 80 ?

What is the number before...
(a) $81 ? ~(b) ~ 70 ? ~(c) ~ 39 ? ~$

Mystery number
-- I add 10 to my number and get 75 . What is my number?
--10 less than my number is 42 . What is my number?

Finish the sequences:
$68,58,48, \square, \square, \square, \square$
32, $\square, 52,62, \square, \square, \square$

## Problem solving and reasoning questions

## Year 2

What number adds to 63 to make 83 ?
What number is subtracted from 85 to give 55?

Write the missing numbers in the sequences:
$13, \square, 53, \square, 93$
$96,76, \square, \square, \square$
81, $\square, 61, \square, \square, \square$

Start with 2. Keep adding 20. What is the last 2-digit number you write?

## Problem solving and reasoning answers

## Year 1

What is the number after...
(a) 46? 47
(b) $59 ? 60$
(c) $80 ? 81$

What is the number before...
(a) 81? 80
(b) 70? 69
(c) 39 ? 38

Check these and the following questions on a 1-100 grid.

Mystery number
-- I add 10 to my number and get 75 . What is my number? 65
--10 less than my number is 42 . What is my number? 52

Finish the sequences:
$68,58,48,38,28,18,8$
32, 42, 52, 62, 72, 82, 92

## Problem solving and reasoning answers

## Year 2

What number adds to 63 to make 83 ? 20
What number is subtracted from 85 to give 55 ? 30

Write the missing numbers in the sequences:
13, 33, 53, 73, 93
96, 76, 56, 36, 16
81, 71, 61, 51, 41, 31

Start with 2 . Keep adding 20 . What is the last 2-digit number you write? 82 - the sequence is $22,42,62,82$ - the next would be 102.

