## Step 15: Bonds to 100 - Tens and Ones

## National Curriculum Objectives:

Mathematics Year 2: (2C1) Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
Mathematics Year 2: (2C2a) Add and subtract numbers mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers, adding three onedigit numbers
Mathematics Year 2: (2C3) Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems

## Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Find and correct the mistakes when creating bonds to 100 using multiples of 5. Pictorial support where numbers are represented as tens and ones using Base 10.
Expected Find and correct the mistakes when creating bonds to 100 . Some pictorial support where numbers are represented in Base 10, numerals and words.
Greater Depth Find and correct the mistakes when creating bonds to 100. No pictorial support. Numbers represented in numerals, words and bar models or part-whole models with further partitioning.

Questions 2, 5 and 8 (Varied Fluency)
Developing Identify if two statements are correct when creating number bonds to 100 using multiples of 5 . Pictorial support where numbers are represented as tens and ones using Base 10.
Expected Identify if two statements are correct when creating number bonds to 100 . Some pictorial support where numbers are represented in Base 10, numerals and words. Greater Depth Identify if two statements are correct when creating bonds to 100 . No pictorial support. Numbers represented in words.

> Questions 3,6 and 9 (Reasoning and Problem Solving)
> Developing Explain the mistake using number bonds to 100 , using multiples of 5 . Pictorial support where numbers are represented using a hundred square and tens and ones using Base 10 .
> Expected Explain the mistake using number bonds to 100 . Some pictorial support where numbers are represented as numerals, words and on a hundred square.
> Greater Depth Explain the mistake using number bonds to 100 . No pictorial support. Numbers represented in numerals and on part-whole models with further partitioning.

## More Year 2 Addition and Subtraction resources.

Did you like this resource? Don't forget to review it on our website.

## Bonds to 100 - Tens and Ones

1. Bianca has been making number bonds to 100.

B.

C.


Find and correct her mistakes.

2. Ali and Lacey are making number bonds to 100 .


Are Ali and Lacey correct?

## 안

3. Ethan has made a number using Base 10.

Explain his mistake.

| 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 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

## Ethan



My number is 35 so I need option D.

## Bonds to 100 - Tens and Ones

4. Frankie has been making number bonds to 100.
A.

B.

| three tens |
| :--- |
| and <br> nine ones |$+\quad 79$

C.

Find and correct his mistakes.
5. Josh and Marie are making number bonds to 100.


Josh

My number has seven tens and six ones so I need option $C$.

A.

B. $\square$
78
C. $\qquad$
D.

Are Josh and Marie correct?
6. Naila has written a number in words.


I have circled the number I need to make a bond to 100 .

Naila

Explain her mistake.

| 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 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

## Bonds to 100 - Tens and Ones

7. Zaina has been making number bonds to 100 .
A.

| 100 |  |  |
| :--- | :--- | :--- |
| 22 | 28 | 55 |

B.

| three tens |
| :---: |
| and |
| seven ones |$+$| seven tens |
| :---: |
| and |
| three ones |

C.


Find and correct her mistakes.
8. Scarlet and Adam are making number bonds to 100.

Scarlet
A.

C.

D.

My number has eight tens and six ones so I need option D.
Adam


## Homework/Extension Bonds to 100 - Tens and Ones

## Developing

1. A. $55+55$ is not a bond to $100 \rightarrow 55+45=100 ;$ B. $70+35$ is not a bond to $100 \rightarrow 70+$ 30; C. $25+65$ is not a bond to $100 \rightarrow 25+75$.
2. Ali is correct. Lacey is incorrect because she needs option C.
3. Ethan has created $25+65$, which is not a bond to 100 . He should have circled 75 on the hundred square because $25+75=100$.

## Expected

4. A. $44+66$ is not a bond to $100 \rightarrow 44+$ five tens and six ones $=100$; B. $39+79$ is not a bond to $100 \rightarrow$ three tens and nine ones + 61 = 100; C. $37+73$ is not a bond to $100 \rightarrow 37+$ $63=100$.
5. Josh is correct. Marie is incorrect because she needs option A.
6. Naila has created $87+23$, which is not a bond to 100 . She should have circled 13 on the hundred square because $87+13=100$.

## Greater Depth

7. A. $22+28+55$ is not a bond to $100 \rightarrow 22+28+50=100$; B. three tens and seven ones + seven tens and three ones is not a bond to $100 \rightarrow$ three tens and seven ones + six tens and three ones $=100 ; C .56+46$ is not a bond to $100 \rightarrow 56+44=100$
8. Scarlet is incorrect because she needs option A. Adam is correct.
9. Codie has created $66+33$, which is not a bond to 100 . He could have written 34 in his other part because $66+34=100$.
