Reasoning and Problem Solving
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 one-digit 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 (Reasoning)
Developing Explain if a statement is correct using number bonds to 100, using multiples of 5. Pictorial support provided where numbers are represented using sections of a hundred square, numerals or as tens and ones using Base 10.
Expected Explain if a statement is correct using number bonds to 100. Some pictorial support provided, where numbers are represented in Base 10, sections of hundred squares, numerals and words.
Greater Depth Explain if a statement is correct using number bonds to 100. No pictorial support. Numbers represented as numerals or words.

Questions 2, 5 and 8 (Problem Solving)
Developing Rearrange the number cards to complete a bond to 100, using multiples of 5. Pictorial support provided where numbers are represented as tens and ones using Base 10.
Expected Rearrange the digit cards to complete a bond to 100. Numbers are represented as numerals.
Greater Depth Rearrange the digit cards to complete a bar model showing 100. No pictorial support. Numbers represented as numerals on a bar model with further partitioning.

Questions 3, 6 and 9 (Problem Solving)
Developing Identify a number from given clues using knowledge of number bonds to 100, using multiples of 5. Pictorial support provided where numbers are represented as tens and ones using Base 10.
Expected Identify the possibilities from given clues using knowledge of number bonds to 100. Numbers represented using numerals and words.
Greater Depth Identify the possibilities from given clues using knowledge of number bonds to 100. No pictorial support. Numbers represented as numerals and words.

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

Bonds to 100 – Tens and Ones

1a. Becca is making bonds to 100.

I have circled a number.
I need 30 to make 100.

68	69	70
78	79	80
88	89	90

Is she correct? Prove it.

D R

1b. Cole is making bonds to 100.

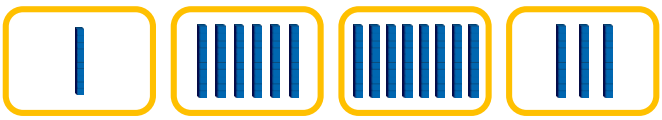
I have 35 in Base 10.
I need 65 to make 100.

Is he correct? Prove it.

D R

2a. Use the number cards to complete the number bond below.

	5	+		5	=	100		

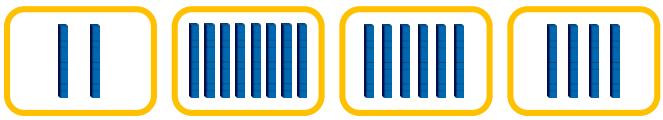


Find two ways.

D PS

2b. Use the number cards to complete the number bond below.

	0	+		0	=	100		

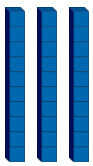


Find two ways.

D PS

3a. Harees is thinking of a number.

My number ends in a 0.
I need 3 tens to make a bond to 100.



What is his number?

D PS

3b. Jaya is thinking of a number.

My number ends in a 5.
I need 5 tens and 5 ones to make a bond to 100.

What is her number?

D PS

Bonds to 100 – Tens and Ones

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4a. Alice is making bonds to 100.

I have circled a number. I need 5 tens and 5 ones to make 100.

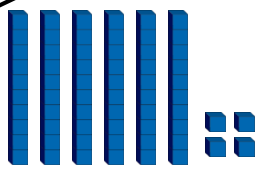
34	35	36
44	45	46
54	55	56

Is she correct? Prove it.

E R

4b. Ahmed is making bonds to 100.

I have sixty-four in Base 10. I need 4 tens and 5 ones to make 100.



Is he correct? Prove it.

E R

5a. Use the digit cards to complete the number bond below.

☐☐ + ☐☐ = 100

3 7 8 1

Rearrange the cards to find two ways.

E PS

5b. Use the digit cards to complete the number bond below.

☐☐ + ☐☐ = 100

9 5 1 4

Rearrange the cards to find two ways.

E PS

6a. Iram is thinking of a number.

My tens digit is more than my ones digit. I need 2 tens and less than 8 ones to make a bond to 100.

What could her number be?
Find two possibilities.

E PS

6b. Russ is thinking of a number.

My tens digit and ones digit are the same. I need more than five tens to make a bond to 100.

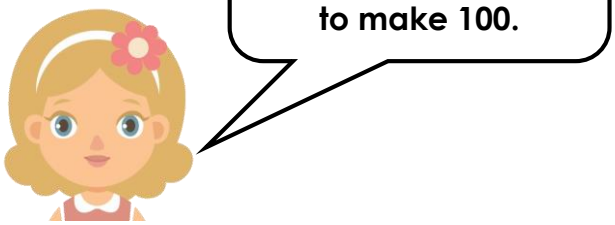
What could his number be?
Find two possibilities.

E PS

Bonds to 100 – Tens and Ones

Bonds to 100 – Tens and Ones

7a. Jo is making bonds to 100.

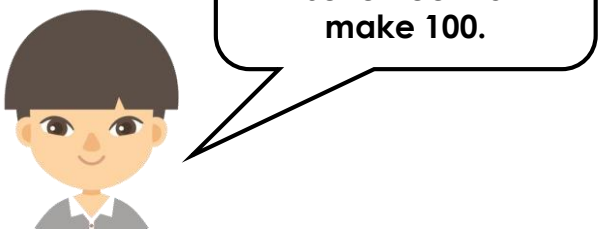


Is she correct? Prove it.

GD

R

7b. Simeon is making bonds to 100.



Is he correct? Prove it.

GD

R

8a. Use the digit cards to create two 2-digit numbers that complete the bar model below.

100	
16	

2 6 1 3

Rearrange the cards to find two ways.

GD

PS

8b. Use the digit cards to create two 2-digit numbers that complete the bar model below.

100	
32	

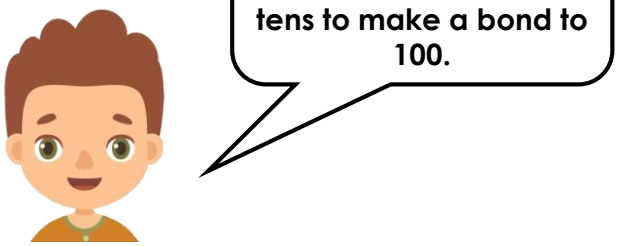
1 7 4 2

Rearrange the cards to find two ways.

GD

PS

9a. Bertie is thinking of a number.

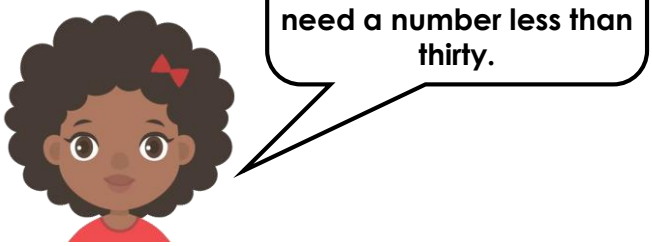


What could his number be?
Find two possibilities.

GD

PS

9b. Ayesha is thinking of a number.



What could her number be?
Find two possibilities.

GD

PS

Reasoning and Problem Solving
Bonds to 100 – Tens and Ones

Developing

1a. Becca is incorrect because 80 + 30 is not a bond to 100. She needs 20 to make a bond to 100.

2a. Various answers, for example: 15 + 85; 65 + 35

3a. 70

Expected

4a. Alice is correct because 45 + 55 = 100.

5a. Various answers, for example: 17 + 83; 87 + 13

6a. Possible answers: 73; 74; 75; 76

Greater Depth

7a. Jo is correct because 73 + 27 = 100

8a. Various answers, for example: 16 + 61 + 23; 16 + 21 + 63

9a. Possible answers: 19; 28; 37

Reasoning and Problem Solving
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Developing

1b. Cole is correct because 35 + 65 = 100.

2b. Various answers, for example: 20 + 80; 60 + 40

3b. 45

Expected

4b. Ahmed is incorrect because 64 + 45 is not a bond to 100. He needs three tens and six ones to make a bond to 100.

5b. Various answers, for example: 41 + 59; 51 + 49

6b. Possible answers: 11; 22; 33

Greater Depth

7b. Simeon is incorrect because 38 + 17 is not a bond to 100. He needs 62 to make a bond to 100.

8b. Various answers, for example: 32 + 41 + 27; 32 + 21 + 47

9b. Possible answers: 72; 81; 90