Reasoning and Problem Solving
Step 5: Bonds to 100 – Tens

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

Differentiation:

Questions 1, 4 and 7 (Problem Solving)
Developing Use the cards to create addition number bond sentences for numbers to 100. Multiples of 10. Numbers represented using Base 10.
Expected Use the cards to create addition and subtraction number bond sentences for numbers within 100. Multiples of 10. Numbers represented using a mixture of numerals and pictorials.
Greater Depth Use the cards to create addition and subtraction number bond sentences for numbers within 100. Multiples of 5. Numbers represented using a mixture of numerals, pictorial and words.

Questions 2, 5 and 8 (Reasoning)
Developing Identify the incorrect number bond for 100 and explain why it is incorrect. Multiples of 10 and numbers given in numerals and pictorials.
Expected Identify the incorrect number bond for 100 and explain why it is incorrect. Multiples of 10 and numbers represented using a mixture of numerals and words.
Greater Depth Identify the incorrect number bond within 100 and explain why it is incorrect. Multiples of 5 and numbers given in words.

Questions 3, 6 and 9 (Problem Solving)
Developing Use knowledge of number bonds for 100 to identify which two items have been purchased. Pictorial representations for prices.
Expected Use knowledge of number bonds within 100 to identify two items could have been purchased. Find all possibilities. Prices represented in numerals.
Greater Depth Use knowledge of number bonds within 100 to identify two or more items that could have been purchased. Find all possibilities. Prices represented in a mixture of numerals, words and pictorials.
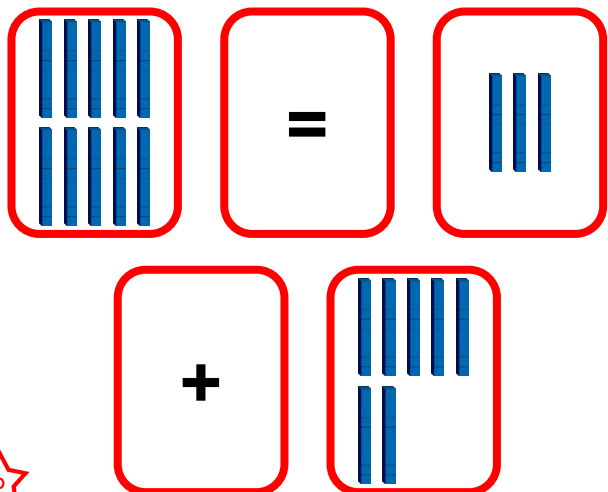
More Year 2 Addition and Subtraction resources.

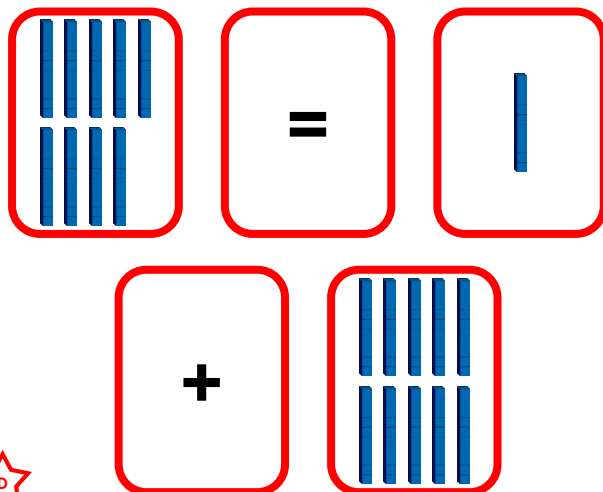Did you like this resource? Don't forget to review it on our website.

Bonds to 100 – Tens

Bonds to 100 – Tens

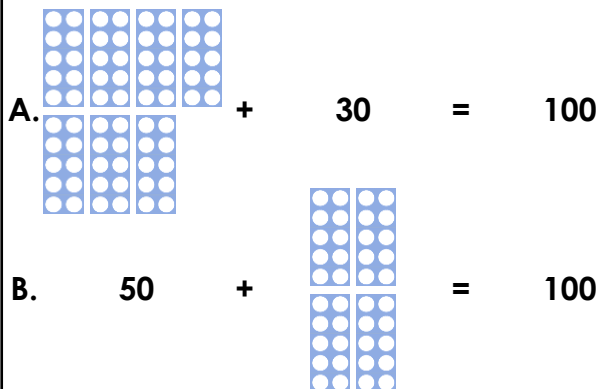**1a.** Arrange the cards below to create a number sentence. Find all the possibilities.

D   PS

1b. Arrange the cards below to create a number sentence. Find all the possibilities.

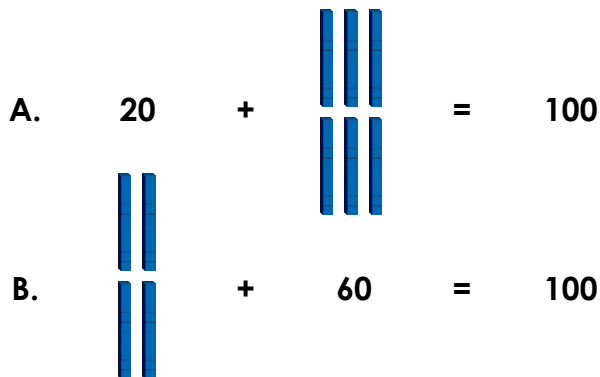D   PS

2a. Circle the incorrect number sentence below.

A.   +   30   =   100

B.   50   +   =   100

Explain why it is incorrect.

D   R

2b. Circle the incorrect number sentence below.

A.   20   +   =   100

B.   +   60   =   100

Explain why it is incorrect.

D   R

3a. Anwar spends £100 on two items. Which items did he buy?
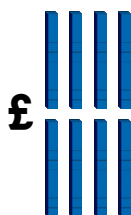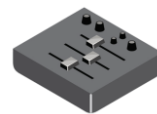

keyboard   MP3   microphone

£   £   £

D   PS

3b. Alice spends £100 on two items. Which items did she buy?
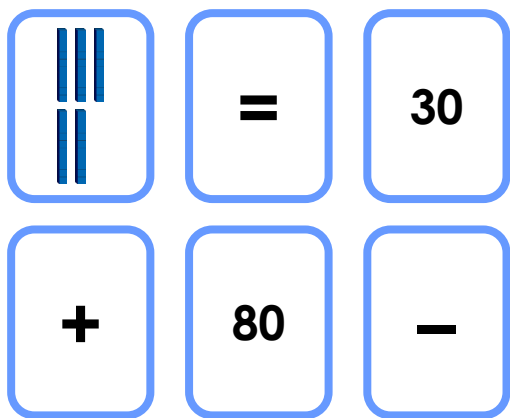

clock   speaker   mixer

£   £   £

D   PS

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Reasoning and Problem Solving – Bonds to 100 – Tens – Year 2 Developing

Bonds to 100 – Tens

4a. Arrange the cards below to create a number sentence. Find all the possibilities.

<image>	**=**	**30**
+	**80**	**–**

E · PS

Bonds to 100 – Tens

4b. Arrange the cards below to create a number sentence. Find all the possibilities.

20	**=**	<image>
+	**90**	**–**
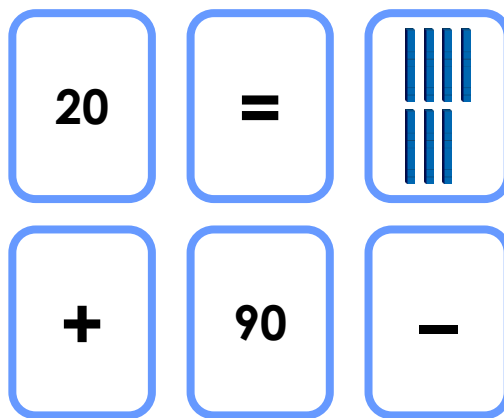
E · PS

5a. Circle the incorrect number sentence below.

A.   70   +   thirty   =   one hundred

B.   fifty   +   forty   =   100

C.   one hundred   =   80   +   twenty

Explain why it is incorrect.

E · R

5b. Circle the incorrect number sentence below.

A.   10   +   eighty   =   ninety

B.   Fifty   +   forty   =   90

C.   ninety   =   80   +   twenty

Explain why it is incorrect.

E · R

6a. Johnny spends £90 on two items. Which items did he buy?
Find all the possible combinations.

£10   £20   £40

£50   £70

E · PS

6b. Tilly spends £100 on two items. Which items did she buy?
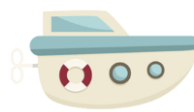Find all the possible combinations.
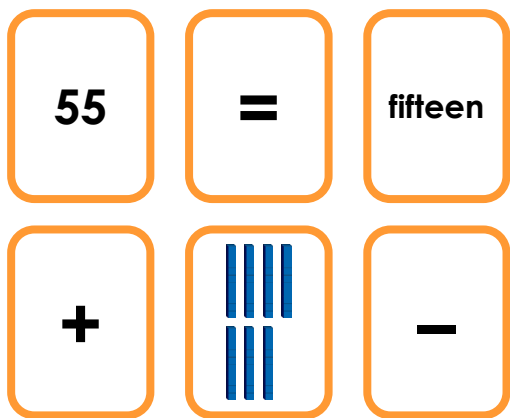
£20   £30   £40

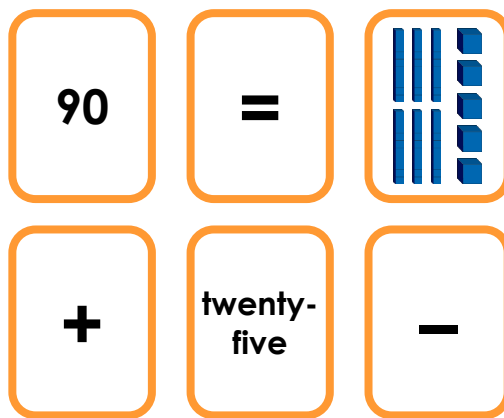£60   £80

E · PS

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Reasoning and Problem Solving – Bonds to 100 – Tens – Year 2 Expected

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7a. Arrange the cards below to create a number sentence. Find all the possibilities.

| 55 | = | fifteen |

| + | | – |

GD · PS

7b. Arrange the cards below to create a number sentence. Find all the possibilities.

| 90 | = | |

| + | twenty-five | – |

GD · PS

8a. Circle the incorrect number sentence below.

A.   sixty-five   +   thirty   =   ninety-five

B.   Fifty   +   forty-five   =   eighty-five

C.   seventy-five   =   fifteen   +   sixty

Explain why it is incorrect.

GD · R

8b. Circle the incorrect number sentence below.

A.   thirty-five   +   fifty-five   =   ninety

B.   thirty-five   +   thirty-five   =   seventy

C.   one hundred   =   thirty   +   sixty-five

Explain why it is incorrect.

GD · R

9a. Alec spends £90 on two or more items. Which items did he buy?
Find all the possible combinations.

£15   £

five pounds   fifty pounds

GD · PS

9b. Leila spends £95 on two or more items. Which items did she buy?
Find all the possible combinations.

£   £35

twenty pounds   thirty pounds

GD · PS

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Reasoning and Problem Solving – Bonds to 100 – Tens – Year 2 Greater Depth

Reasoning and Problem Solving
Bonds to 100 – Tens

Developing

1a. 70 + 30 = 10; 30 + 70 = 100; 100 = 70 + 30; 100 = 30 + 70

2a. B is incorrect as 50 + 40 = 90, not 100 as the number sentence states.

3a. Keyboard and microphone

Expected

4a. 50 + 30 = 80; 30 + 50 = 80; 80 – 30 = 50; 80 – 50 = 30; 80 = 50 + 30; 80 = 30 + 50; 50 = 80 – 30; 30 = 80 – 50

5a. B is incorrect as fifty + forty = 90, not 100 as the number sentences states.

6a. Drum and robot; keyboard and scooter

Greater Depth

7a. 55 + fifteen = 70; fifteen + 55 = 70; 70 – fifteen = 55; 70 – 55 = fifteen; 70 = 55 + fifteen; 70 = fifteen + 55; fifteen = 70 – 55; 55 = 70 – fifteen

8a. B is incorrect as fifty + forty-five = ninety-five, not eighty-five as the number sentence states.

9a. Camera, notebook and controller; camera, MP3, notebook and mouse

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Developing

1b. 90 + 10 = 100; 10 + 90 = 100; 100 = 90 + 10; 100 = 10 + 90

2b. A is incorrect as 20 + 60 = 80, not 100 as the number sentence states.

3b. Speaker and mixer

Expected

4b. 20 + 70 = 90; 70 + 20 = 90; 90 – 20 = 70; 90 – 70 = 20; 90 = 20 + 70; 90 = 70 + 20; 70 = 90 – 20; 20 = 70 – 90

5b. C is incorrect as 80 + twenty = one hundred, not ninety as the number sentence states.

6b. Train and rocket; boat and helicopter

Greater Depth

7b. 65 + twenty-five = 90; twenty-five + 65 = 90; 90 – twenty-five = 65; 90 – 65 = twenty-five; 90 = 65 + twenty-five; 90 = twenty-five + 65; twenty-five = 90 – 65; 65 = 90 – twenty-five

8b. C is correct as thirty + sixty-five = ninety-five, not one hundred as the number sentence states.

9b. Headphones, USB and speaker; keyboard, tablet and headphones