Reasoning and Problem Solving
Step 3: Tens and Ones 2

National Curriculum Objectives:

Mathematics Year 2: (2N2a) Read and write numbers to at least 100 in numerals and in words
Mathematics Year 2: (2N3) Recognise the place value of each digit in a two-digit number (tens, ones)
Mathematics Year 2: (2N4) Identify, represent and estimate numbers using different representations, including the number line
Mathematics Year 2: (2N6) Use place value and number facts to solve problems

Differentiation:

Questions 1, 4 and 7 (Reasoning)
Developing Explain if a statement about a number sentence is correct or not. Using numbers up to 99, with numbers represented with Base 10.
Expected Explain if a statement about a number sentence is correct or not. Using numbers up to 99, with numbers represented with a variety of pictorial representations.
Greater Depth Explain if a statement about a number sentence is correct or not. Using numbers up to 99, with numbers represented with a variety of pictorial representations and unconventional partitioning.

Questions 2, 5 and 8 (Problem Solving)
Developing Use the pictorial representations to create three addition number sentences. Use numbers up to 99.
Expected Use the pictorial representations to create five addition number sentences. Use numbers up to 99.
Greater Depth Use the pictorial representations to create five addition number sentences. Use numbers up to 99. Numbers represented with mixed pictorial representations with unconventional partitioning.

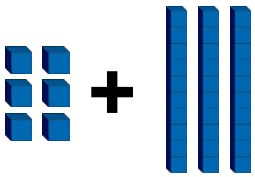
Questions 3, 6 and 9 (Problem Solving)
Developing Use the digit cards to create 3 addition number sentences. Numbers up to 99 given in digits. Numbers up to 99 given in digits and pictorially.
Expected Use the digit cards to create 3 addition number sentences. Numbers up to 99 given in digits.
Greater Depth Use the digit cards to create 3 addition number sentences. Numbers up to 99 given in digits. Numbers up to 99 unconventionally partitioned given in digits and words.

More Year 2 and Year 3 Place Value resources.

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

Tens and Ones 2

1a. Edwin is using concrete resources to make number sentences.



He says,

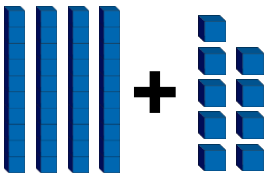
The number sentence is 60 + 3 = 63.

Is Edwin correct? Convince me.

D

2 R

1b. Brenda is using concrete resources to make number sentences.



She says,

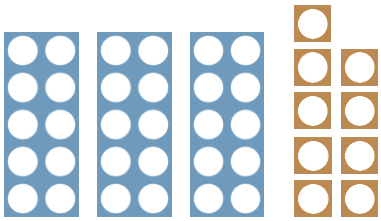
The number sentence is 40 + 9 = 49.

Is Brenda correct? Convince me.

D

2 R

2a. Use the Numicon to create number sentences for the number 37.



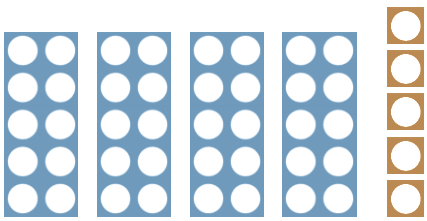
+ =

Find 3 possibilities.

D

2 PS

2b. Use the Numicon to create number sentences for the number 45.



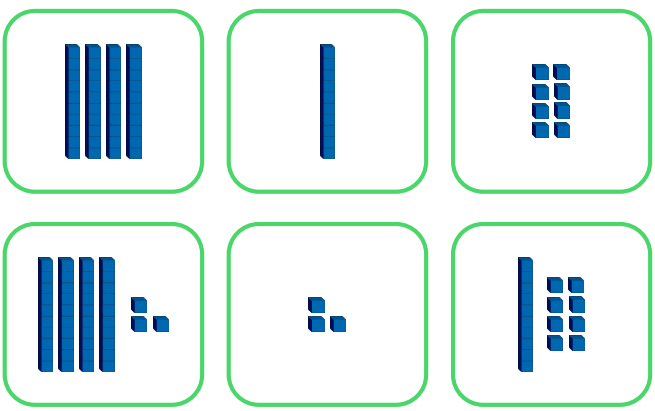
+ =

Find 3 possibilities.

D

2 PS

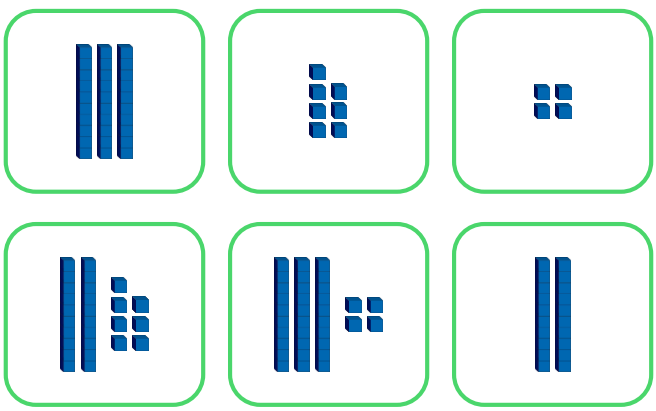
3a. Use all the number cards below to make 2 addition number sentences.



D

2 PS

3b. Use all the number cards below to make 2 addition number sentences.

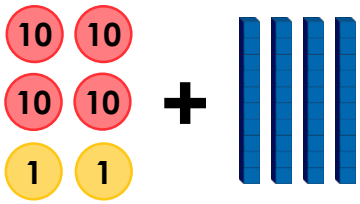


D

2 PS

Tens and Ones 2

4a. Harry is using concrete resources to make number sentences.



He says,

The number sentence is 42 + 4 = 46.

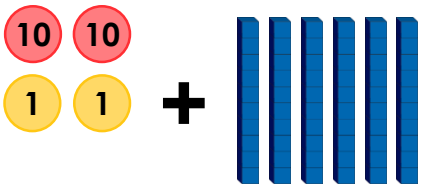
Is Harry correct? Convince me.

E

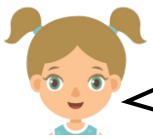
2 R

Tens and Ones 2

4b. Sally is using concrete resources to make number sentences.



She says,



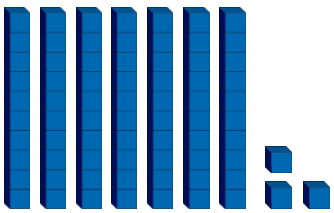
The number sentence is 22 + 60 = 82.

Is Sally correct? Convince me.

E

2 R

5a. Use the Base 10 to create number sentences for the number 73.



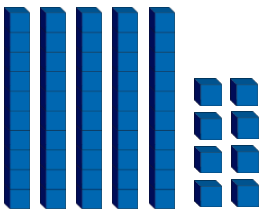
□ + □ = □

Find 5 possibilities.

E

2 PS

5b. Use the Base 10 to create number sentences for the number 58.



□ + □ = □

Find 5 possibilities.

E

2 PS

6a. Use all the number cards below to make 3 addition number sentences.

13	10	33
48	40	25
20	35	8

E

2 PS

6b. Use all the number cards below to make 3 addition number sentences.

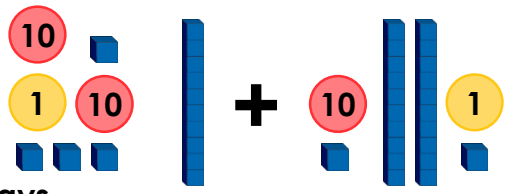
11	21	8
32	17	30
25	2	10

E

2 PS

Tens and Ones 2

7a. Hamish is using concrete resources to make number sentences.



He says,

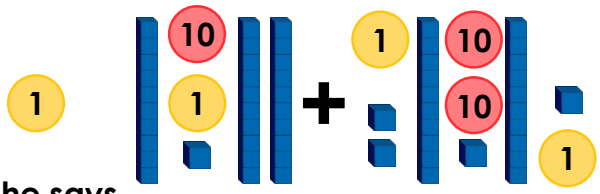
The number sentence is 44 + 33 = 77.

Is Hamish correct? Convince me.

GD

2 R

7b. Agnes is using concrete resources to make number sentences.



She says,

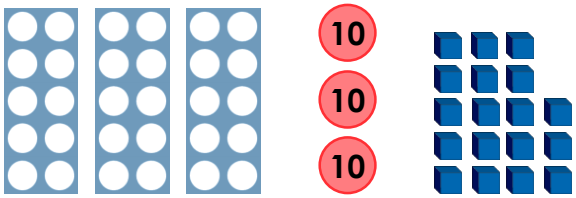
The number sentence is 80 + 9 = 89.

Is Agnes correct? Convince me.

GD

2 R

8a. Use the resources to create number sentences for the number below.



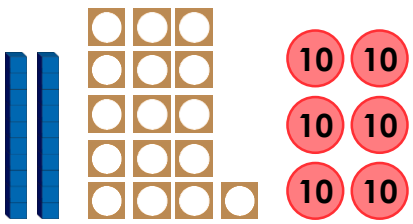
□ + □ = □

Find 5 possibilities.

GD

2 PS

8b. Use the resources to create number sentences for the number below.



□ + □ = □

Find 5 possibilities.

GD

2 PS

9a. Use all the number cards below to make 3 addition number sentences.

31	sixty-seven	26
56	12	forty-eight
fourteen	eleven	seventy-nine

GD

2 PS

9b. Use all the number cards below to make 3 addition number sentences.

twenty-nine	ninety-eight	eighty-five
23	62	fifty-nine
30	35	63

GD

2 PS

Reasoning and Problem Solving
Tens and Ones 2

Developing

1a. Edwin is not correct as there actually 3 tens and 6 ones. He has mixed them up. The number sentence should be 30 + 6 = 36.

2a. Various answers, for example: 30 + 7 = 27; 17 + 20 = 37; 12 + 25 = 37

3a. 40 + 3 = 43; 10 + 8 = 18

Expected

4a. Harry is not correct as there are 4 tens and 2 ones added to 4 tens. This is 42 + 40 which equals 82.

5a. Various answers, for example: 60 + 13 = 73; 23 + 50 = 73; 42 + 31 = 73; 63 + 10 = 73; 22 + 51 = 73

6a. 10 + 25 = 35; 8 + 40 = 48; 20 + 13 = 33

Greater Depth

7a. Hamish is not correct as there are 3 tens and 5 ones added to 3 tens and 3 ones. This is 35 + 33 which equals 68.

8a. Various answers, for example: 60 + 18 = 78; 40 + 38 = 78; 45 + 33 = 78; 22 + 56 = 78; 26 + 52 = 78

9a. 12 + fourteen = 28; forty-eight + 31 = seventy-nine; eleven + 56 = sixty-seven

Reasoning and Problem Solving
Tens and Ones 2

Developing

1b. Brenda is correct as there are 4 tens and 9 ones, meaning her number sentence of 40 + 9 = 49 matches the representation.

2b. Various answers, for example: 40 + 5 = 45; 22 + 23 = 45; 14 + 31 = 45

3b. 30 + 4 = 34; 20 + 7 = 27

Expected

4b. Sally is correct as there are 2 tens and 2 ones added to 6 tens. This is 22 + 60 which equals 82.

5b. Various answers, for example: 50 + 8 = 58; 44 + 14 = 58; 23 + 35 = 58; 18 + 40 = 58; 31 + 27 = 58

6b. 17 + 8 = 25; 2 + 30 = 32; 10 + 11 =21

Greater Depth

7b. Agnes could be correct as there are 8 tens and 9 ones in total which would make a number sentence of 80 + 9 = 89. The representation shows 43 + 46 = 89.

8b. Various answers, for example: 20 + 76 = 96; 46 + 50 = 96; 31 + 65 = 96; 11 + 85 = 96; 82 + 14 = 96

9b. 30 + twenty-nine = fifty-nine; 35 + 63 = ninety-eight; 62 + 23 = eighty-five