Reasoning and Problem Solving
Step 3: Tens and Ones 1

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 (Problem Solving)
Developing Complete the partitioning using place value counters and finish the corresponding description. Value up to 99; numbers mainly shown using pictorial representation.
Expected Complete the partitioning using place value counters and finish the corresponding description. Value up to 99; using numerals only.
Greater Depth Complete the partitioning using place value counters and finish the corresponding description, using mixed pictorials. Value up to 99; using numerals and words.

Questions 2, 5 and 8 (Reasoning)
Developing Find and explain any errors in a part whole model of a number to 99; numbers mainly shown using pictorial representation.
Expected Find and explain any errors in a part whole model of a number to 99; using numerals only.
Greater Depth Find and explain any errors in a part whole model of a number to 99 using mixed pictorials and using numerals and words..

Questions 3, 6 and 9 (Problem Solving)
Developing Find 2 combinations of a partitioned number. Pictorial representation given. Value up to 99; using numerals only.
Expected Find 3 combinations of a partitioned number. Pictorial representation given. Value up to 99; using numerals only.
Greater Depth Find 3 combinations of a partitioned number. Value up to 99; using numerals and words.

More Year 2 Place Value resources.

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

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Tens and Ones 1

1a. Laney is partitioning the number 22. Finish her sentence and use tens and ones to complete the partition.

1 ten and __ ten and __ ones



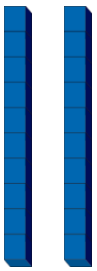
and

D PS

Tens and Ones 1

1b. Eric is partitioning the number 36. Finish his sentence and use tens and ones to complete the partition.

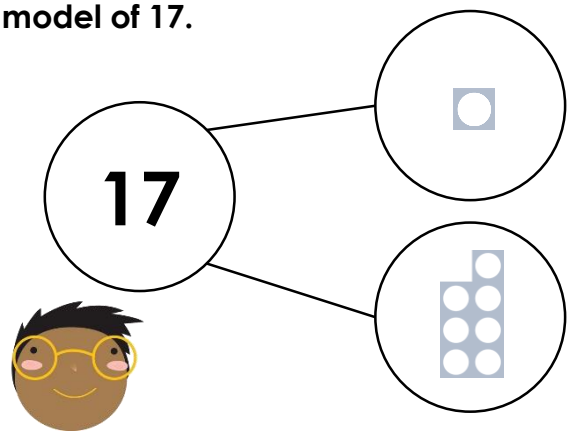
2 tens and __ ten and __ ones



and

D PS

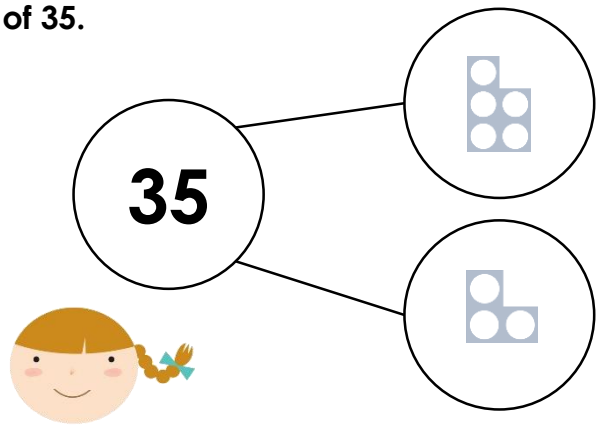
2a. Romesh has created a part whole model of 17.



Is he correct? Explain your answer.

D R

2b. Rose has created a part whole model of 35.



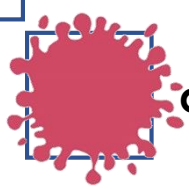
Is she correct? Explain your answer.

D R

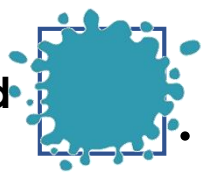
3a. Fred has spilled paint on his work.



39 can be partitioned into



and

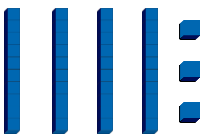


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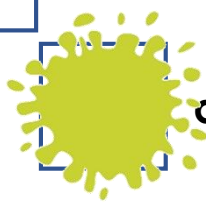
Find 2 combinations that could complete the statement above.

D PS

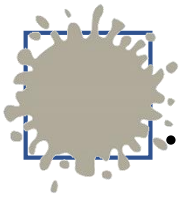
3b. Jodie has spilled paint on her work.



43 can be partitioned into



and



.

Find 2 combinations that could complete the statement above.

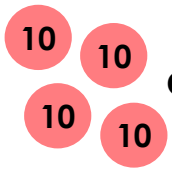
D PS

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Tens and Ones 1

4a. Jenny is partitioning the number 92. Finish her sentence and use place value counters to complete the partition.

4 tens and __ tens and __ ones

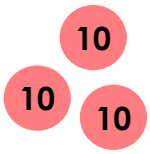


and

E PS

4b. Suzi is partitioning the number 73. Finish her sentence and use place value counters to complete the partition.

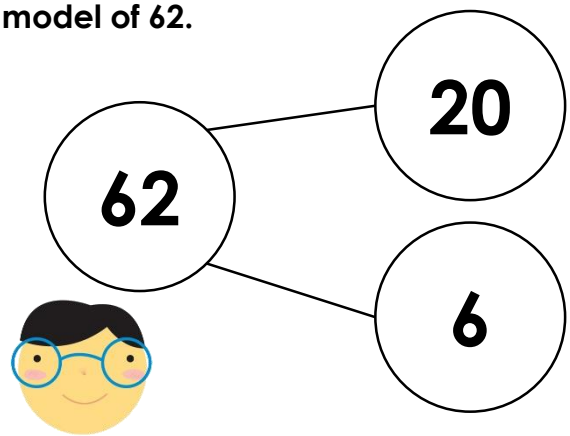
3 tens and __ tens and __ ones



and

E PS

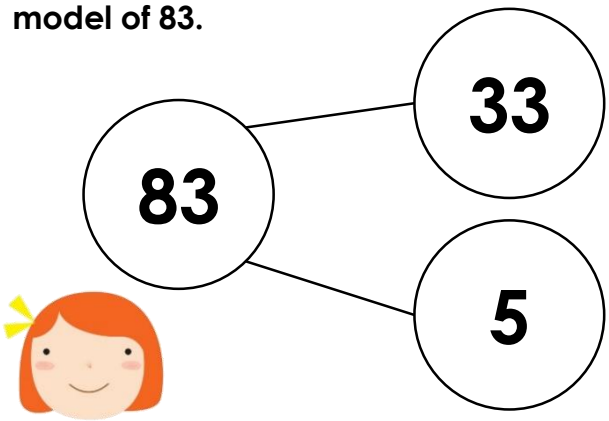
5a. Tyrone has created a part whole model of 62.



Is he correct? Explain your answer.

E R

5b. Janine has created a part whole model of 83.



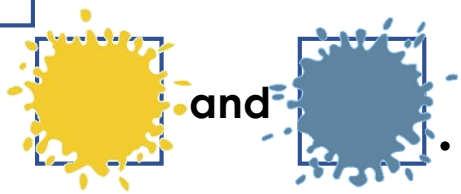
Is she correct? Explain your answer.

E R

6a. Holly has spilled paint on her work.



67 can be partitioned into

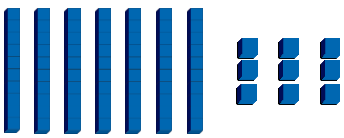


and .

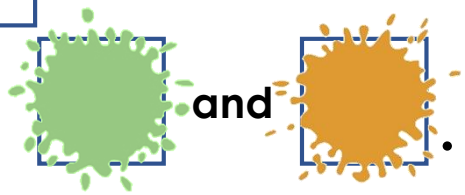
Find 3 combinations that could complete the statement above.

E PS

6b. Manni has spilled paint on his work.



79 can be partitioned into



and .

Find 3 combinations that could complete the statement above.

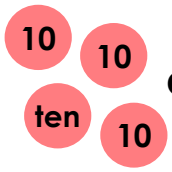
E PS

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Tens and Ones 1

7a. Sam is partitioning the number sixty-four. Finish his sentence and use place value counters to complete the partition.

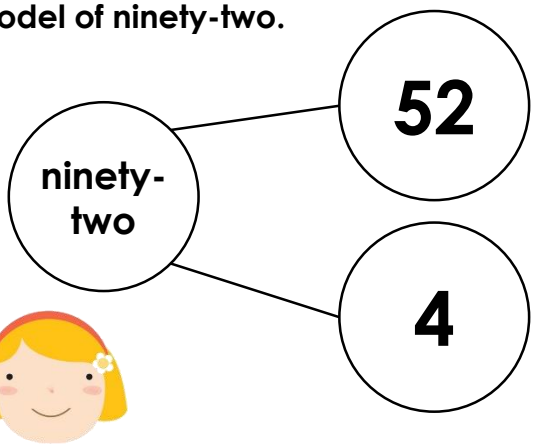
4 tens and __ tens and __ ones



and

GD PS

8a. Sophie has created a part whole model of ninety-two.

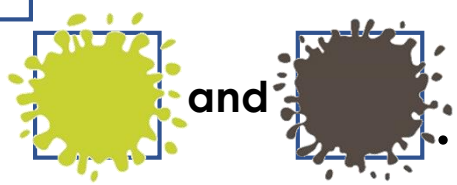


Is she correct? Explain your answer.

GD R

9a. Abe has spilled paint on his work.

85 can be partitioned into



and .

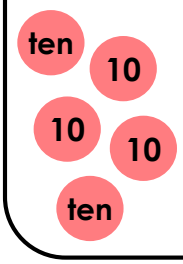
Find 3 combinations that could complete the statement above.

GD PS

Tens and Ones 1

7b. Eddie is partitioning the number seventy-one. Finish his sentence and use place value counters to complete the partition.

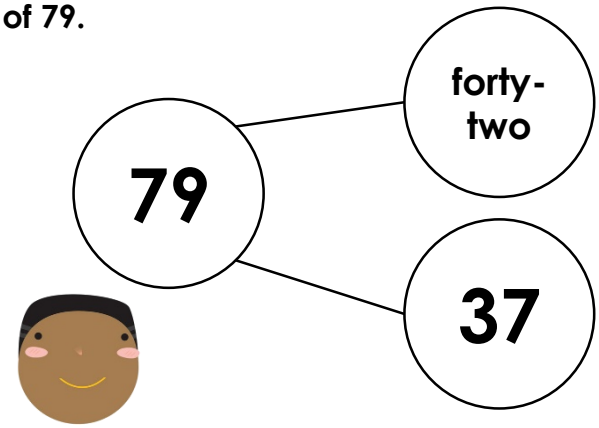
5 tens and __ tens and __ ones



and

GD PS

8b. Joel has created a part whole model of 79.

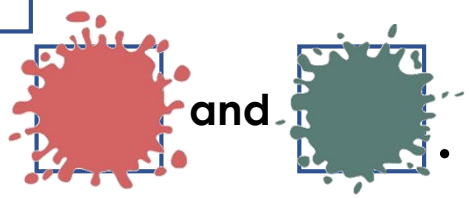


Is he correct? Explain your answer.

GD R

9b. Maya has spilled paint on her work.

98 can be partitioned into



and .

Find 3 combinations that could complete the statement above.

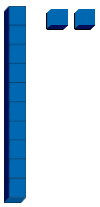
GD PS

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Reasoning and Problem Solving
Tens and Ones 1

Developing

1a. 1 ten and 1 ten and 2 ones;

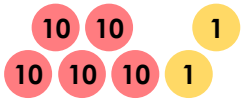


2a. Romesh is incorrect because he has partitioned the number into 1 and 7 instead of 10 and 7.

3a. Various answers, for example: 30 and 9; 10 and 29.

Expected

4a. 4 tens and 5 tens and 2 ones;



5a. Tyrone is incorrect, he has mixed his digits up instead of 2 tens he should have 2 ones, instead of 6 ones he should have 6 tens. His parts should therefore be 60 and 2.

6a. Various answers, for example: 50 and 17; 40 and 27; 30 and 37.

Greater Depth

7a. 4 tens and 2 tens and 4 ones;



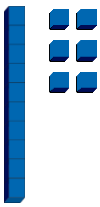
8a. Sophie is incorrect because she has partitioned the number but has mistakenly written 40 as 4. 52 and 4 make 56, not 92.

9a. Various answers, for example: 80 and 5; 70 and 15; 60 and 25. An example of further unconventional partitioning could be 43 and 42.

Reasoning and Problem Solving
Tens and Ones 1

Developing

1b. 2 tens and 1 ten and 6 ones;

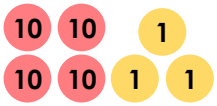


2b. Rose is incorrect because she has partitioned the number into 5 and 3 instead of 5 and 30.

3b. Various answers, for example: 30 and 13; 20 and 23

Expected

4b. 3 tens and 4 tens and 3 ones;



5b. Janine is incorrect because 33 and 5 make 38. Her 5 needed to be 50 to make the part whole model correct.

6b. Various answers, for example: 70 and 9; 60 and 19; 50 and 29

Greater Depth

7b. 5 tens and 2 tens and 1 one;



8b. Joel is correct. 79 can be partitioned with 4 tens and 3 tens equalling 7 tens. 2 ones and 7 ones creating 9 ones. So they can be combined into 4 tens and 2 ones (42) plus 3 tens and 7 ones (37) which creates the whole 79.

9b. Various answers, for example: 90 and 8; 80 and 18; 70 and 28. An example of further unconventional partitioning could be 49 and 49.

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