Reasoning and Problem Solving
Step 5: Place Value Charts

National Curriculum Objectives:

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

Differentiation:

Questions 1, 4 and 7 (Problem Solving)
Developing Organise the manipulatives to represent 2-digit numbers up to 99 on a place value chart. Using pictorial support.
Expected Organise the manipulatives to represent 2-digit numbers up to 99 on a place value chart. Using pictorial representations and numbers.
Greater Depth Organise the manipulatives to represent 2-digit numbers up to 99 on a place value chart. Using numbers, words and some examples of unconventional partitioning.

Questions 2, 5 and 8 (Problem Solving)
Developing Find the possible totals when representing 2-digit numbers up to 99 on a place value chart. Using pictorial support.
Expected Find the possible totals when representing 2-digit numbers up to 99 on a place value chart. Using pictorial representations and numbers.
Greater Depth Find the possible totals when representing 2-digit numbers up to 99 on a place value chart. Using numbers, words, limited pictorials and some examples of unconventional partitioning.

Questions 3, 6 and 9 (Reasoning)
Developing Explain if the statement is correct using knowledge of representing 2-digit numbers up to 99 on a place value chart. Using pictorial support.
Expected Explain if the statement is correct using knowledge of representing 2-digit numbers up to 99 on a place value chart. Using pictorial representations and numbers.
Greater Depth Explain if the statement is correct using knowledge of representing 2-digit numbers up to 99 on a place value chart. Using numbers, words, limited pictorials and some examples of unconventional partitioning.

More Year 2 Place Value resources

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

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Place Value Charts

1a. Use all the counters below to create 4 different 2-digit numbers on the place value chart.

Tens	Ones



D PS

Place Value Charts

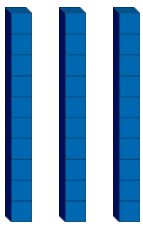
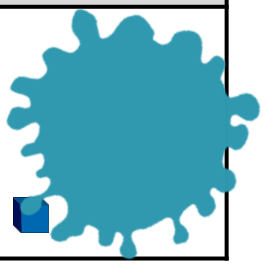
1b. Use all the counters below to create 4 different 2-digit numbers on the place value chart.

Tens	Ones



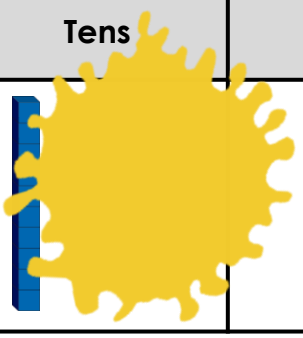
D PS

2a. Sam is representing a number on a place value chart. The ones number is less than 5. What number could she have been representing?

Tens	Ones
	

D PS

2b. Kat is representing a number on a place value chart. The tens number is less than 5. What number could she have been representing?

Tens	Ones
	

D PS

3a. Pip says,



There are 3 tens and 5 ones in the number 53.

Is he correct? Convince me using the place value chart below.

Tens	Ones
10 10 10 10 10	1 1 1

D R

3b. Rita says,



There are 2 tens and 4 ones in the number 42.

Is she correct? Convince me using the place value chart below.

Tens	Ones
10 10 10 10	1 1

D R

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Place Value Charts

4a. Use any combination of the counters below to create 6 different 2-digit numbers on the place value chart.

Tens	Ones

10 10 10 1 1 1

PS

Place Value Charts

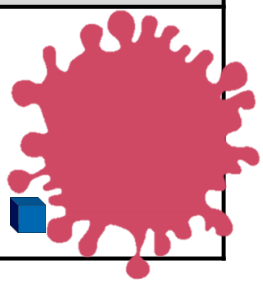
4b. Use any combination of the counters below to create 6 different 2-digit numbers on the place value chart.

Tens	Ones

10 10 10 10 1 1

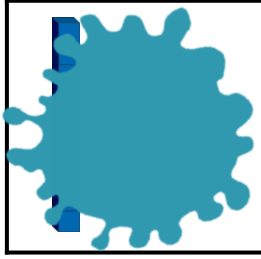
PS

5a. Annie is representing a number on a place value chart. The total is less than 50. What number could she have been representing?

Tens	Ones
4	

PS

5b. Paul is representing a number on a place value chart. The total is less than 60. What number could he have been representing?

Tens	Ones
	5

PS

6a. Boris says,



There are 8 tens and 3 ones in the number 38.

Is he correct? Convince me using a place value chart.

Tens	Ones

R

6b. Helen says,



There are 6 tens and 2 ones in the number 62.

Is she correct? Convince me using a place value chart.

Tens	Ones

R

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Place Value Charts

7a. Use the number cards below to create 38 in three different ways.

Tens	Ones

two | eight | twenty-eight

eighteen | one | three

GD PS

Place Value Charts

7b. Use the number cards below to create 65 in three different ways.

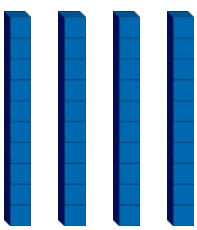
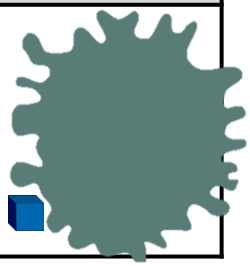
Tens	Ones

six | three | five

thirty-five | two | forty-five

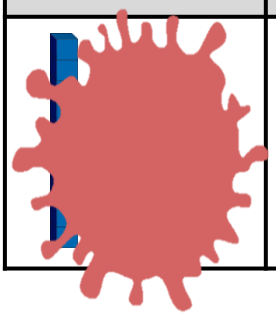
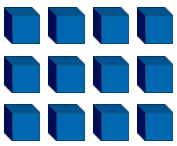
GD PS

8a. Kara is representing a number on a place value chart. The ones number is more than ten. What number could she have been representing?

Tens	Ones
	

GD PS

8b. Tyrone is representing a number on a place value chart. The tens number is less than eight. What number could he have been representing?

Tens	Ones
	

GD PS

9a. Marty says,



There are three tens and sixteen ones in the number 46.

Is he correct? Convince me using a place value chart.

Tens	Ones

GD R

9b. Sophie says,



There are two tens and twelve ones in the number 33.

Is she correct? Convince me using a place value chart.

Tens	Ones

GD R

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Reasoning and Problem Solving
Place Value Charts

Developing

1a. Various answers, for example: 24, 33, 15

2a. Accept any of the following: 31, 32, 33, 34

3a. Pip is incorrect. There are 5 tens and 3 ones.

Expected

4a. Various answers, for example: 23, 11, 12, 33

5a. Accept any number between 41 and 49.

6a. Boris is incorrect. There are 3 tens and 8 ones.

Greater Depth

7a. 3 tens and 8 ones, 2 tens and 18 ones, 1 ten and 28 ones

8a. Accept any answer totalling 51 or over.

9a. Marty is correct. There are 3 tens and 16 ones.

Reasoning and Problem Solving
Place Value Charts

Developing

1b. Various answers, for example: 34, 16, 52

2b. Accept any of the following: 13, 23, 33, 43

3b. Rita is incorrect. There are 4 tens and 2 ones.

Expected

4b. Various answers, for example: 32, 42, 12, 31

5b. Accept any of the following: 15, 25, 35, 45, 55

6b. Helen is correct. There are 6 tens and 2 ones.

Greater Depth

7b. 6 tens and 5 ones, 3 tens and 35 ones, 2 tens and 45 ones

8b. Accept any answer with 2 ones between 22 and 82.

9b. Sophie is incorrect. There are 2 tens and 13 ones.

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