

Lesson 2 – Numbers to 100,000 (R)

NC Objective:
Read, write numbers to at least 100,000 and determine the value of each digit

Resources needed:
Differentiated Worksheets
Teaching Slides

Vocabulary:
Thousands, hundreds, tens, ones, ten thousand, represent, place value chart, represent

Children focus on numbers up to 100,000. They represent numbers on a place value grid and rad and write numbers up to 100,000 in words and digits. Children have a worksheet to do, or they can cut out place value charts and write the number in words and digits into their books.

Key Questions:

How can the place value grid help you to add 10, 100 or 1,000 to any number?

How many digits change when you add 10, 100 or 1,000? Is it always the same number of digits that change?

Do you need to count forwards and backwards to find out if a number is in a number sequence? Explain.

★ Working Towards

Children on this sheet will write given numbers in place value grids in words and as digits.

★★ Working Within

Children on this sheet will work out problems and then write the represented number in words and in digits.

★★★ Greater Depth

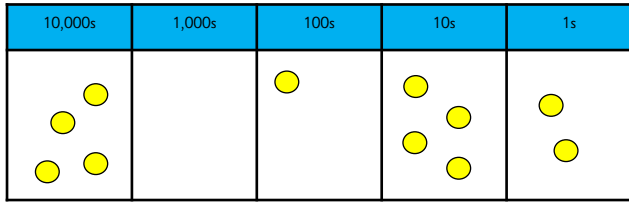
Children on this sheet have exchanges to work with whilst writing the number in words and digits.

Reasoning & Problem Solving

Children continue working on numbers to 100,000 by answering reasoning tasks.

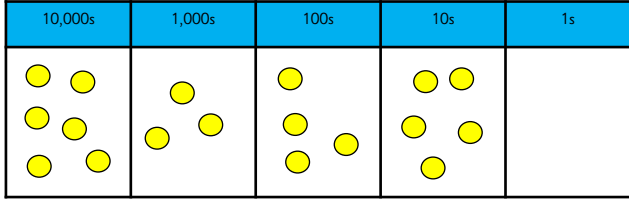


Look at the place value chart.
 What number does it show? Write it in numerals and words.



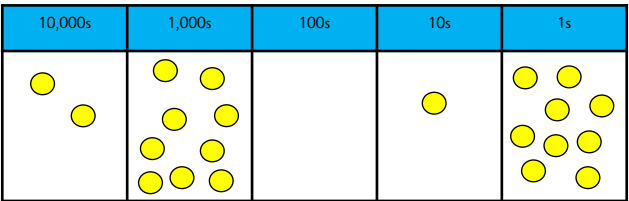
Figures: _____

Words: _____



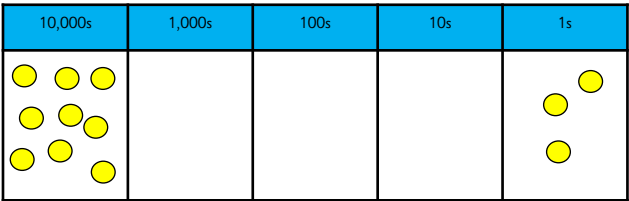
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Words: _____



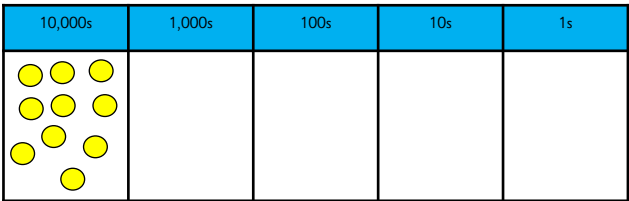
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Words: _____



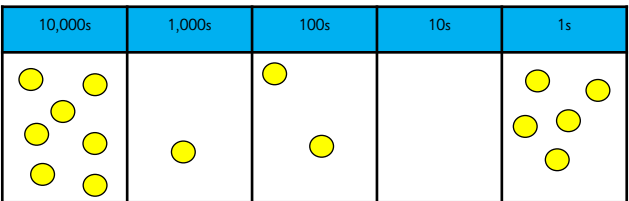
Figures: _____

Words: _____



Figures: _____

Words: _____



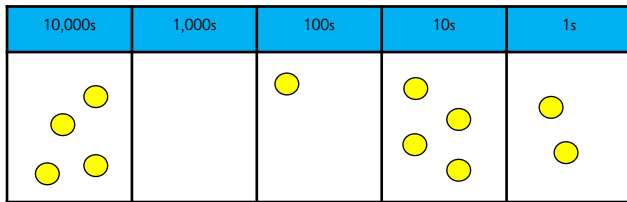
Figures: _____

Words: _____



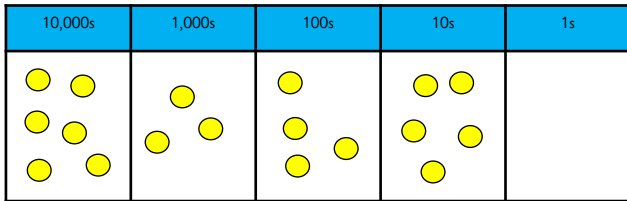
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What number does it show? Write it in numerals and words.



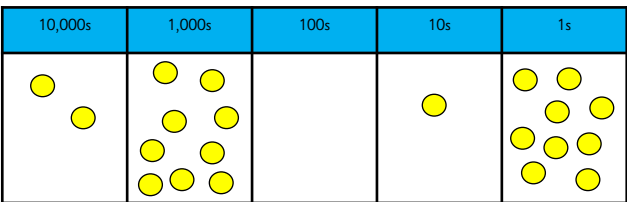
Figures: 40,142

Words: forty thousand, one hundred and forty - two



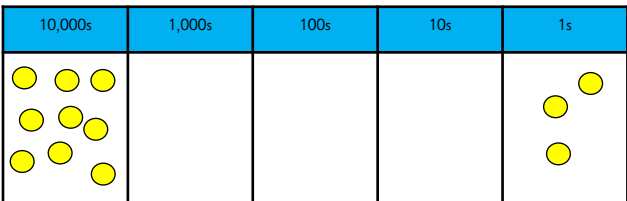
Figures: 63,450

Words: sixty - three thousand, four hundred and fifty



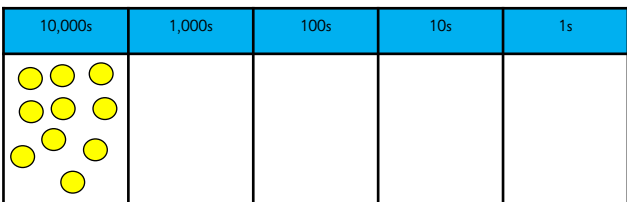
Figures: 29,019

Words: twenty - nine thousand and nineteen



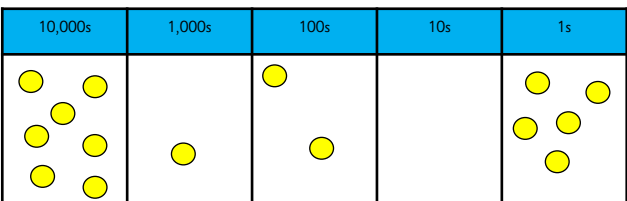
Figures: 90,003

Words: ninety thousand and three



Figures: 100,000

Words: one hundred thousand



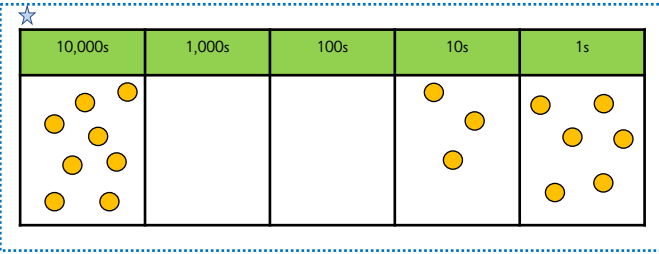
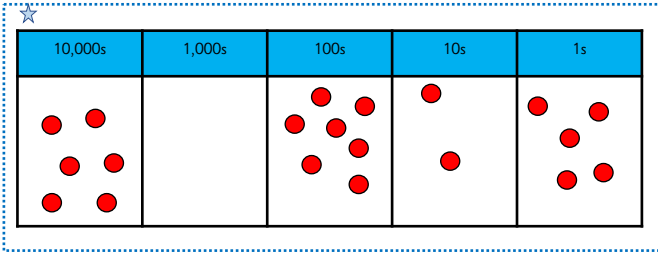
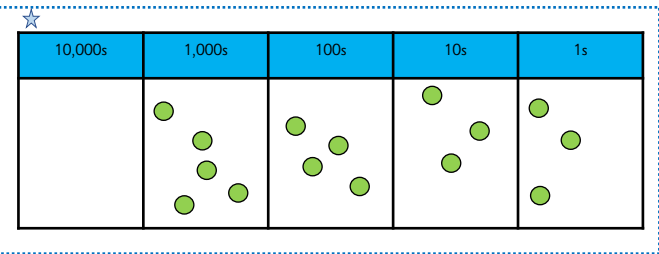
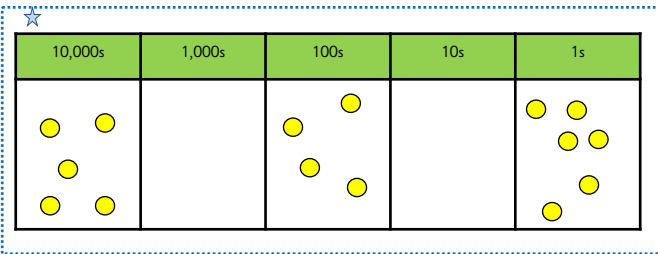
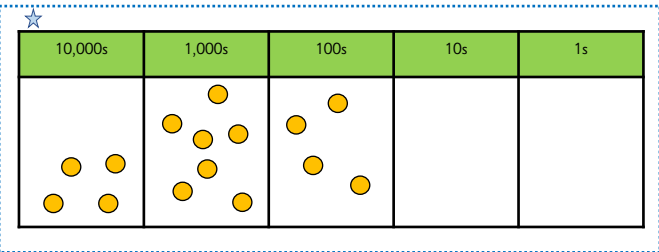
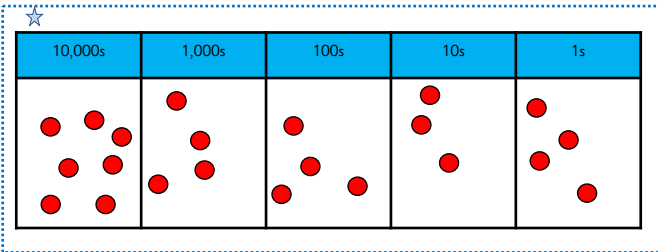
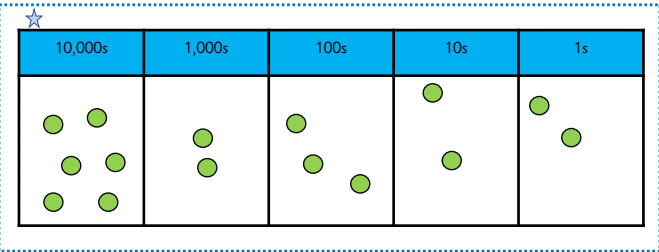
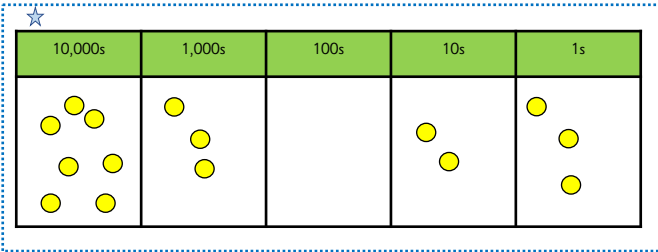
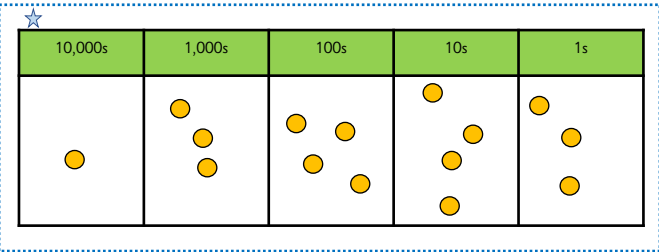
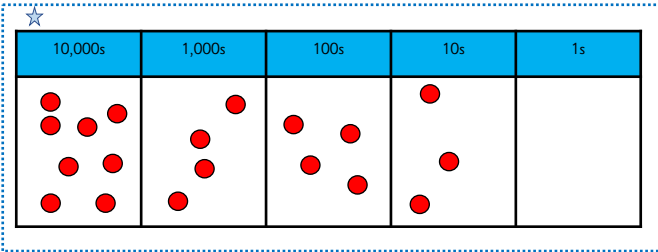
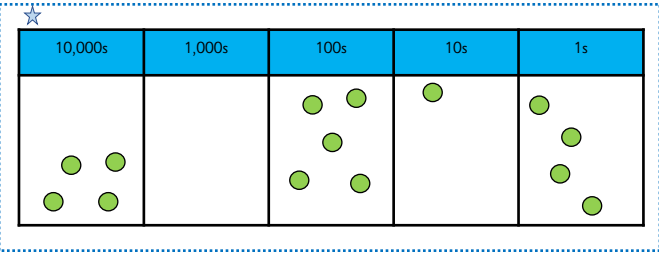
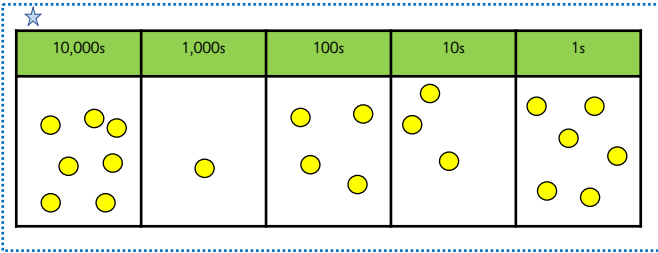
Figures: 71,205

Words: seventy - one thousand, two hundred and five



Cut out the place value chart.

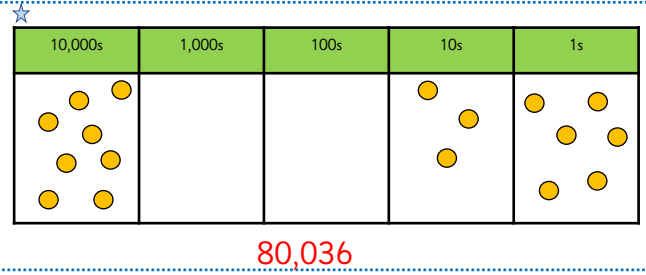
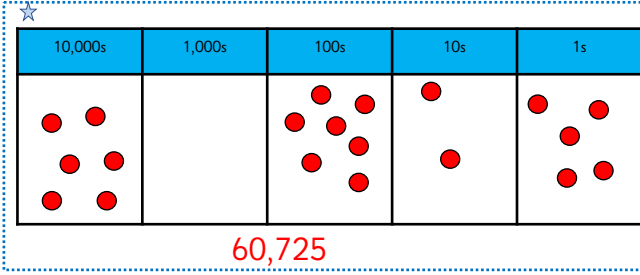
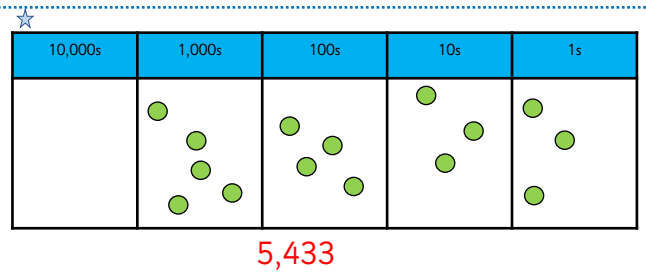
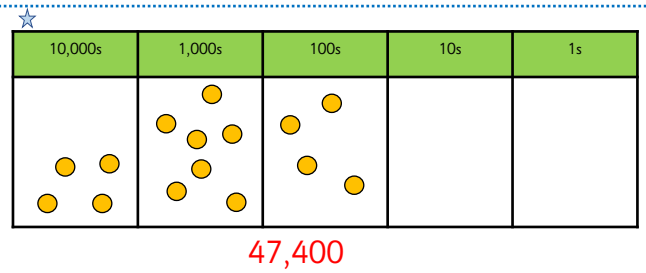
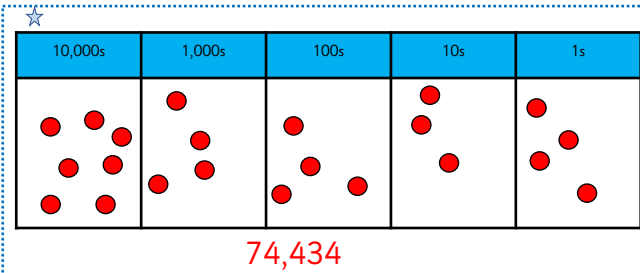
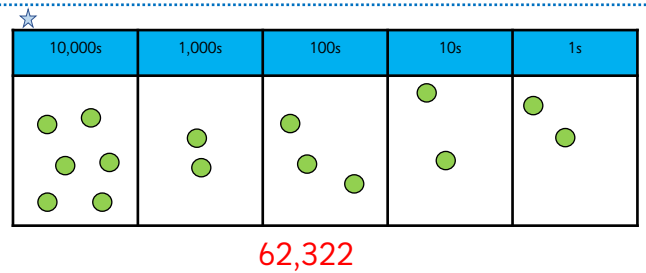
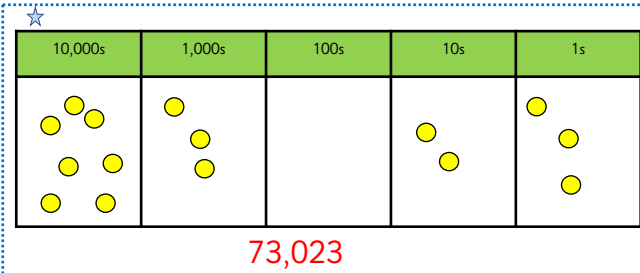
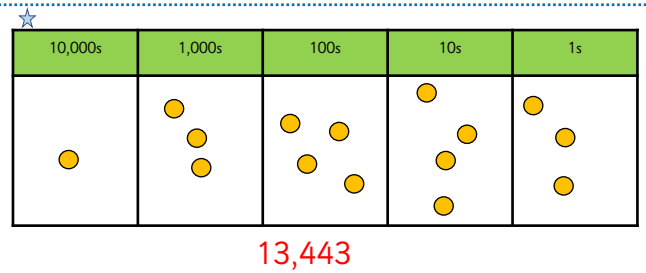
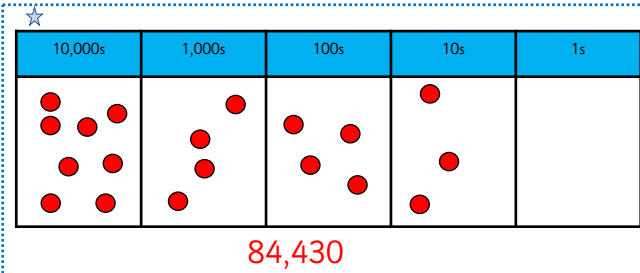
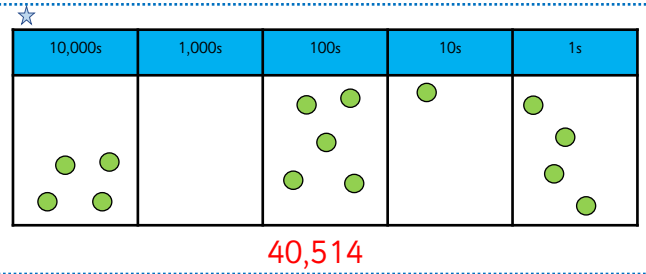
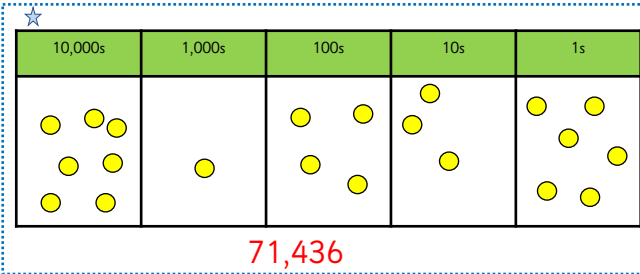
Write the number the place value chart is showing in figures and words.





Cut out the place value chart.

Write the number the place value chart is showing in figures and words.





Look at the place value chart. Write the number it represents in figures and words.

10,000s	1,000s	100s	10s	1s
5	2	2	1	2

Figures: _____

Words: _____

Esin adds 10 to this number.

Tia adds 100 to this number.

Malachi subtracts 10,000 from this number.

Write each of their new numbers in figures and words



Esin's new number: _____



Tia's new number: _____



Malachi's new number: _____

10,000s	1,000s	100s	10s	1s
8	3	0	6	5

Figures: _____

Words: _____

Rosie adds three 100s to this number.

Tia subtracts two 10,000 from this number.

Malachi adds 1,000 to this number.

Write each of their new numbers in figures and words.



Rosie's new number: _____



Tia's new number: _____



Malachi's new number: _____



Look at the place value chart. Write the number it represents in figures and words.

10,000s	1,000s	100s	10s	1s

Figures: 62,322

Words: sixty two thousand, three hundred and
twenty - two

Esin adds 10 to this number.

Tia adds 100 to this number.

Malachi subtracts 10,000 from this number.

Write each of their new numbers in figures and words



Esin's new number: 62,332 - sixty two thousand, three hundred and thirty- two



Tia's new number: 62,422 - sixty two thousand, four hundred and twenty - two



Malachi's new number: 52,322 - fifty two thousand, three hundred and twenty - two

10,000s	1,000s	100s	10s	1s

Figures: 94,075

Words: ninety four thousand and seventy - five

Rosie adds three 100s to this number.

Tia subtracts two 10,000 from this number.

Malachi adds 1,000 to this number.

Write each of their new numbers in figures and words.



Rosie's new number: 94,375 - ninety four thousand, three hundred and seventy - five



Tia's new number: 74,075 - seventy four thousand and seventy - five



Malachi's new number: 95,075 - ninety five thousand and seventy - five



Cut out the question.
 Write the number the place value chart is showing in figures and words.
 Then look at how each child has changed the number.
 Write their new numbers in numerals and words.

☆☆ 1.

10,000s	1,000s	100s	10s	1s
0	0	4	2	3

Sadie adds four 100s to this number.
 Antony adds seven 1s to this number.
 Charlotte subtracts 1,000 from this number.

☆☆ 2.

10,000s	1,000s	100s	10s	1s
0	7	0	0	0

Sadie adds seven 1000s to this number.
 Antony adds one 10,000 to this number.
 Charlotte adds four 10s to this number.

☆☆ 3.

10,000s	1,000s	100s	10s	1s
6	0	0	0	3

Sadie subtracts six 10,000s from this number.
 Antony subtracts three 1s from this number.
 Charlotte adds four 10,000s to this number.

☆☆ 4.

10,000s	1,000s	100s	10s	1s
0	4	0	0	11

Sadie adds eleven 1s to this number.
 Antony subtracts four 1,000s from this number.
 Charlotte adds four 10,000s to this number.

☆☆ 5.

10,000s	1,000s	100s	10s	1s
0	2	0	3	0

Sadie adds 900 to this number.
 Antony adds 3 to this number.
 Charlotte adds 6,000 to this number.

☆☆ 6.

10,000s	1,000s	100s	10s	1s
0	0	8	0	0

Sadie adds 8,000 to this number.
 Antony subtracts forty from this number.
 Charlotte adds 700 to this number.



Cut out the question.

Write the number the place value chart is showing in figures and words.

Then look at how each child has changed the number.

Write their new numbers in numerals and words.

1.

75,643 – seventy five thousand, six hundred and forty-three

76,043 – seventy six thousand and forty - three

75,650 – seventy five thousand, six hundred and fifty

74,643 – seventy four thousand, six hundred and forty- three

2.

50,565– fifty thousand, five hundred and sixty – five

57,565– fifty seven thousand, five hundred and sixty-five

60,565– sixty thousand, five hundred and sixty-five

50,605– fifty thousand, six hundred and five

3.

66,404 – sixty six thousand, four hundred and four

6,404– six thousand, four hundred and four

66,401– sixty six thousand, four hundred and one

106,404– one hundred and six thousand, four hundred and four

4.

74,400– seventy four thousand, four hundred

74,411– seventy four thousand, four hundred and eleven

70,400 – seventy thousand and four hundred

114,400– one hundred and fourteen thousand and four hundred

5.

82,028 – eighty two thousand and twenty-eight

82,928– eighty two thousand, nine hundred and twenty-eight

82,031– eighty two thousand and thirty-one

88,028– eighty eight thousand and twenty-eight

6.

22,335– twenty two thousand, three hundred and thirty- five

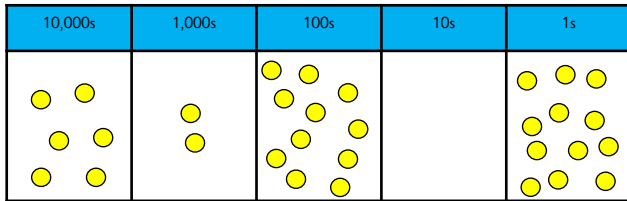
30,335– thirty thousand, three hundred and thirty- five

22,295– twenty two thousand, two hundred and ninety - five

23,035– twenty three thousand and thirty-five



Look at the place value chart. Write the number it represents in figures and words.



Figures: _____

Words: _____

Esin adds 110 to this number.

Tia adds 9 to this number.

Malachi subtracts 4,000 from this number.

Write each of their new numbers in figures and words.



Esin's new number: _____



Tia's new number: _____



Malachi's new number: _____



Figures: _____

Words: _____

Rosie adds 174 to this number.

Tia subtracts 600 from this number.

Malachi adds 1,600 to this number.

Write each of their new numbers in figures and words.



Rosie's new number: _____



Tia's new number: _____



Malachi's new number: _____



Look at the place value chart. Write the number it represents in figures and words.

10,000s	1,000s	100s	10s	1s
6	3	1	1	2

Figures: 63,112

Words: sixty three thousand, one hundred and twelve

Esin adds 110 to this number.

Tia adds 9 to this number.

Malachi subtracts 4,000 from this number.

Write each of their new numbers in figures and words.



Esin's new number: 63,222 – sixty three thousand, two hundred and twenty-two



Tia's new number: 63,121 – sixty three thousand, one hundred and twenty-one



Malachi's new number: 59,112 – fifty nine thousand, one hundred and twelve

10,000s	1,000s	100s	10s	1s
1	0	0	15	5

Figures: 100,155

Words: one hundred thousand, one hundred and fifty-five

Rosie adds 174 to this number.

Tia subtracts 600 from this number.

Malachi adds 1,600 to this number.

Write each of their new numbers in figures and words.



Rosie's new number: 100,329 – one hundred thousand, three hundred and twenty-nine



Tia's new number: 99,555 – ninety nine thousand, five hundred and fifty-five



Malachi's new number: 101,755 – one hundred and one thousand, seven hundred and fifty-five



Cut out the question.
Write the number the place value chart is showing in figures and words.
Then look at how each child has changed the number.

Write their new numbers in numerals and words.

☆☆☆ 1.

10,000s	1,000s	100s	10s	1s
5	2	8	3	2

Sadie adds eight 100s to this number.
Antony adds fifteen 1s to this number.
Charlotte subtracts seven 1,000s from this number.

☆☆☆ 2.

10,000s	1,000s	100s	10s	1s
1	0	4	14	9

Sadie adds seventeen 1000s to this number.
Antony adds one 10,000 and nine 1s to this number.
Charlotte adds four 100s and fourteen 10s to this number.

☆☆☆ 3.

10,000s	1,000s	100s	10s	1s
0	1	7	8	0

Sadie adds 1,780 to this number.
Antony adds 37 to this number.
Charlotte subtracts 14,400 from this number.

☆☆☆ 4.

10,000s	1,000s	100s	10s	1s
0	5	6	1	0

Sadie adds 561 to this number.
Antony adds nineteen and forty-eight to this number.
Charlotte adds four 10,000s to this number.

☆☆☆ 5.

10,000s	1,000s	100s	10s	1s
4	9	0	3	5

Sadie adds 49,345 to this number.
Antony adds 8,333 to this number.
Charlotte subtracts 24,901 from this number.

☆☆☆ 6.

10,000s	1,000s	100s	10s	1s
2	5	0	2	7

Sadie adds 257 to this number.
Antony adds one 1,493 to this number.
Charlotte adds 3,009 to this number.



Cut out the question.

Write the number the place value chart is showing in figures and words.

Then look at how each child has changed the number.

Write their new numbers in numerals and words.

1.

- | 76,443 – seventy six thousand, four hundred and forty-three
- | 77,243 – seventy seven thousand, two hundred and forty- three
- | 76,458– seventy six thousand, four hundred and fifty- eight
- | 69,443– sixty nine thousand, four hundred and forty- three

2.

- | 50,616– fifty thousand, six hundred and sixteen
- | 67,616– sixty seven thousand, six hundred and sixteen
- | 60,625– sixty thousand, six hundred and twenty-five
- | 51,156– fifty one thousand, one hundred and fifty-six

3.

- | 70,416– seventy thousand, four hundred and sixteen
- | 72,196– seventy two thousand, one hundred and ninety- six
- | 70,453– seventy thousand, four hundred and fifty-three
- | 56,016– fifty six thousand and sixteen

4.

- | 43,500– forty three thousand and five hundred
- | 44,061– forty four thousand and sixty-one
- | 43,567– forty three thousand, five hundred and sixty- seven
- | 83,500– eighty three thousand and five hundred

5.

- | 74,128– seventy four thousand, one hundred and twenty-eight
- | 123,473– one hundred and twenty three thousand, four hundred and seventy-three
- | 82,461– eighty two thousand, four hundred and sixty -one
- | 49,227– forty nine thousand, two hundred and twenty - seven

6.

- | 110,335– one hundred and ten thousand, three hundred and thirty- five
- | 110,592– one hundred and ten thousand, five hundred and ninety-two
- | 111,828– one hundred and eleven thousand, eight hundred and twenty-eight
- | 113,344– one hundred and thirteen thousand, three hundred and forty- four

Rosie counts forwards and backwards in tens from 216.

Circle the numbers Rosie will count.

516

- 196

3,116

- 104

47

- 1,005

856

- 34

18,400

Explain why Rosie will not say the other numbers.

Here are three ways of partitioning 34,128:

- 34 thousand and 128 ones
- 34 thousand, 1 hundred and 28 ones
- 34 thousand, 12 tens and 8 ones

Write three more ways.

Rosie counts forwards and backwards in tens from 216.

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Circle the numbers Rosie will count.

516	- 196	3,116
- 104	47	- 1,005
856	- 34	18,400

Explain why Rosie will not say the other numbers.

Any positive number will have to end in a 6.
Any negative number will have to end in a 4.

Here are three ways of partitioning 34,128:

- 34 thousand and 128 ones
- 34 thousand, 1 hundred and 28 ones
- 34 thousand, 12 tens and 8 ones

Write three more ways.

- 3 ten thousand, 4 thousand and 128 ones
- 3 ten thousand, 4 thousand, 1 hundred and 28 ones
- 34 thousand, 10 tens and 28 ones.

Rosie counts forwards and backwards in tens from 216.

Circle the numbers Rosie will count.

516	- 196	3,116
- 104	47	- 1,005
856	- 34	18,400

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