Year 6 Place Value Maths

Chilli Challenge Cards

twinkl

Nice and Spicy!

Counting

Use negative numbers in context, and calculate intervals across zero.

What number is three less than one?

"Count forwards from -3."

-3, _____, _____, 0, _____, 2, _____,

Nice and Spicy!

Place Value

Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.

_____

_____ _____

261,093

_____ _____

_____

Nice and Spicy!
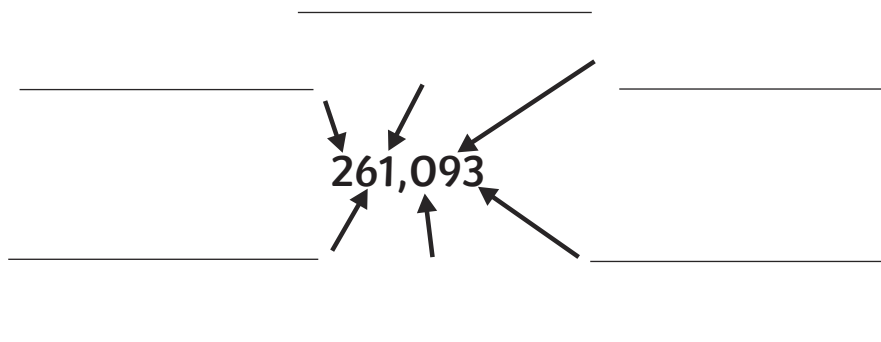
Compare and Order

Order and compare numbers to at least 1,000,000 and determine the value of each digit. Write <, > or =

151,515 ☐ 151,155

Order the following:

722,727, 27,277, 727,272, 722,772

smallest			greatest

Rounding

Explain why 67,286 could be rounded to 70,000.

_____

_____

_____

_____
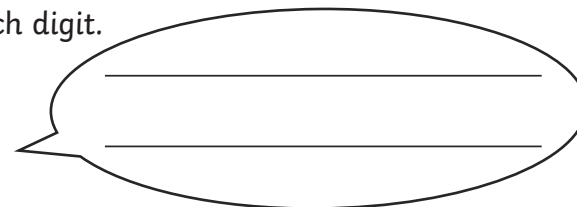
Round 50 to the nearest 20.

_____

Read and Write

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

624,104

_____
_____

Seven hundred and twenty-three thousand, six hundred and thirteen

_____

Solve Problems

Solve number and practical problems that involve all of the other objectives.

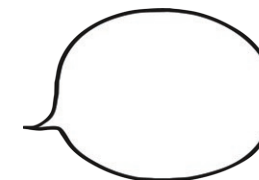Which 2 numbers can be multiplied to equal one thousand?

    5   50   20   200

A pond is frozen so has ice on top but water underneath. The temperature at the bottom of the pond is 4°C. The temperature of the air above the ice is -2°C? What is the difference in temperature?

Counting

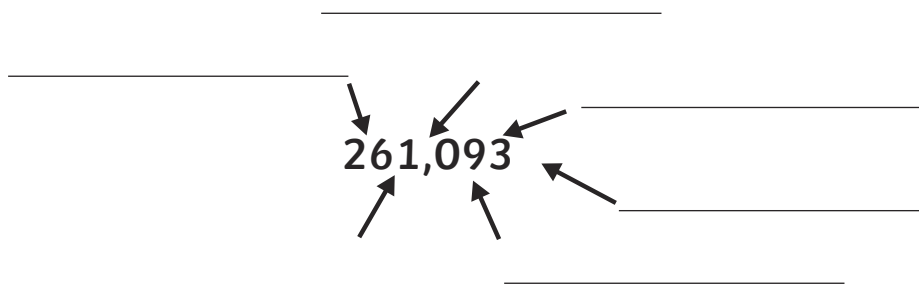Use negative numbers in context, and calculate intervals across zero.

What number is twelve less than seven?

Explain why -12 + 7 is -5 and not -19.

_____

_____

_____

It's getting hot!

Place Value

Read, write, order and compare numbers to at least 10,000,000 and determine the value of each digit.

261,093

It's getting hot!

Compare and Order

Order and compare numbers to at least 10,000,000 and determine the value of each digit. Write <, > or =

5,151,515 ☐ 5,151,155

Order the following:

2,722,727, 277,277, 2,727,272, 2,722,772

smallest   greatest

It's getting hot!

Rounding

Explain why 567,286 could be rounded to 570,000.

Round 425 to the nearest 50.

It's getting hot!

Read and Write

Read and write numbers to at least 10,000,000 and determine the value of each digit.

1,214,621

two million, eight hundred and thirty thousand and twenty

It's getting hot! 🌶🌶

Solve Problems

Solve number and practical problems that involve all of the other objectives.

Which 2 numbers can be multiplied to equal one hundred thousand?

50   500   2000   20,000

The temperature at the bottom of a mountain is 9°C, but at the top it is -13°C. What is the difference between the temperature at the top and bottom of the mountain?

Burning up! 🌶🌶🌶

Counting

Use negative numbers in context, and calculate intervals across zero.

What number is the difference between 12 and -17?

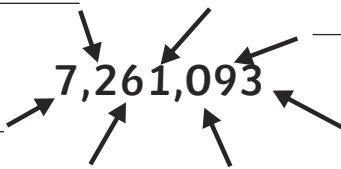Explain why -12 -7 is -19 and not -5.

A man has £12 in cash and owes a friend £20. How much money has the man?

Burning up! 🌶🌶🌶

Place Value

Read, write, order and compare numbers to at least 10,000,000 and determine the value of each digit.

7,261,093

Burning up! 🌶🌶🌶

Compare and Order

Order and compare numbers to at least 10,000,000 and determine the value of each digit.

When comparing 5,151,515 and 5,151,155, what is the place value of the digit which will tell which is greater?

Explain the reasons you would use to order the following numbers:

2,722,727, 277,277, 2,727,272, 2,722,772

Rounding

Round any whole number to a required degree of accuracy.

Explain why 2,567,286 could be rounded to 2,600,000.

Round 3250 to the nearest 500.

The population of London is 8.674 million.

To what number would you round the population of London when writing about London, giving your reasons.

Read and Write

Read and write numbers to at least 10,000,000 and determine the value of each digit.

Write half of this number using words: 4,208,092

_____

_____

_____

Write fifty five thousand more than this number in numerals.

_____

Solve Problems

Solve number and practical problems that involve all

of the other objectives.

Which 2 numbers can be multiplied to equal twenty million?

500   5000   40,000   400,000

The temperature at the bottom of a mountain is 9°C, but at the top it is -13°C. Half way up the mountain the temperature is halfway between the temperatures at the top and bottom. What is the temperature half way up the mountain?

Year 6 Place Value Maths

Answers

twinkl

Nice and Spicy!

Counting Answers

Use negative numbers in context, and calculate intervals across zero.
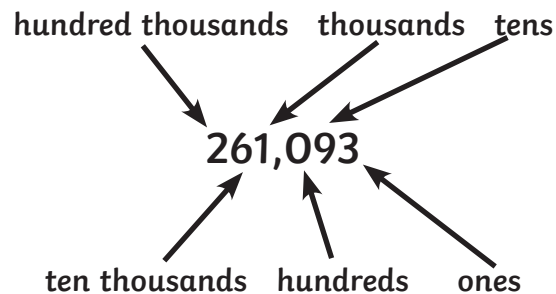
What number is three less than one?

-2

"Count forwards from -3."

-3, -2, -1, 0, 1, 2, 3...

Nice and Spicy!

Place Value Answers

Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.

hundred thousands   thousands   tens

261,093

ten thousands   hundreds   ones

Nice and Spicy!

Compare and Order Answers

Order and compare numbers to at least 1,000,000 and determine the value of each digit. Write <, > or =

151,515 **>** 151,155

Order the following:

722,727, 27,277, 727,272, 722,772

27,277	**722,727**	**722,772**	**727,272**
smallest			greatest

Rounding Answers

Explain why 67,286 could be rounded to 70,000.

Rounding 67,286 to the nearest ten thousand would mean using the number of thousands (7) and this is greater than or equal to 5, so it is rounded up to the next ten thousand (70,000) so it is rounded to 70,000.

Round 50 to the nearest 20.

60

Read and Write Answers

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

624,104

Six hundred and twenty-four thousand, one hundred and four

723,613

Seven hundred and twenty-three thousand, six hundred and thirteen

Solve Problems Answers

Solve number and practical problems that involve all of the other objectives.

Which 2 numbers can be multiplied to equal one thousand?

5 × 200 or 50 × 20

A pond is frozen so has ice on top but water underneath. The temperature at the bottom of the pond is 4°C. The temperature of the air above the ice is -2°C? What is the difference in temperature?

6°C

Counting Answers

Use negative numbers in context, and calculate intervals across zero.

What number is twelve less than seven?

-5

Explain why -12 + 7 is -5 and not -19.

Because starting at -12 and adding 7 will mean counting towards 0, so -11, -10, -9 etc. If the answer were -19 then the counting would go -13, -14, but this is subtracting not adding.

Place Value Answers

Read, write, order and compare numbers to at least 10,000,000 and determine the value of each digit.

hundred thousands   thousands   tens

261,093

ten thousands   hundreds   ones
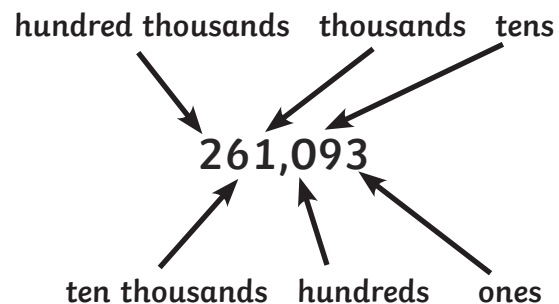
Place Value Answers

Order and compare numbers to at least 10,000,000 and determine the value of each digit. Write <, > or =

5,151,515   **>**   5,151,155

Order the following:

2,722,727, 277,277, 2,727,272, 2,722,772

| **277,277** | **2,722,727** | **2,722,772** | **2,727,272** |

smallest   greatest

Place Value Answers

Explain why 567,286 could be rounded to 570,000.

Rounding 567,286 to the nearest ten thousand would mean using the number of thousands (7) and this is greater than or equal to 5, so it is rounded up to the next ten thousand (70,000) so it is rounded to 570,000.

Round 425 to the nearest 50.

450

Place Value Answers

Read and write numbers to at least 10,000,000 and determine the value of each digit.

1,214,621

One million, two hundred and fourteen thousand, six hundred and twenty-one

2,830,020

two million, eight hundred and thirty thousand and twenty

Solve Problems Answers

Solve number and practical problems that involve all of the other objectives.

Which 2 numbers can be multiplied to equal one hundred thousand?

50   500   2000   20,000

50 and 2000

The temperature at the bottom of a mountain is 9°C, but at the top it is -13°C. What is the difference between the temperature at the top and bottom of the mountain?

22°C

Counting Answers

Use negative numbers in context, and calculate intervals across zero.

What number is the difference between 12 and -17?

29 degrees

Because starting at -12 and subtracting 7 will lead you away from 0, so -13, -14, etc If the answer were 5, then the counting would be going towards 0 so this would be adding and not subtracting.

-£8

Place Value Answers

Read, write, order and compare numbers to at least 10,000,000 and determine the value of each digit.

hundred thousands   thousands   tens

7,261,093

millions   ten thousands   hundreds   ones
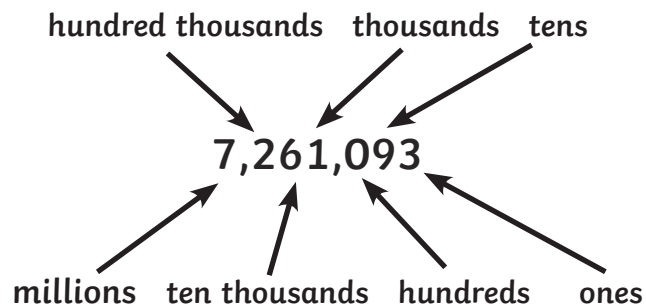
Compare and Order Answers

Order and compare numbers to at least 10,000,000 and determine the value of each digit.

When comparing 5,151,515 and 5,151,155, what is the place value of the digit which will tell which is greater?

The hundreds digit (500)

Explain the reasons you would use to order the following numbers:

2,722,727, 277,277, 2,727,272, 2,722,772

Answers will vary depending on the methods children have used.

Rounding Answers

Round any whole number to a required degree of accuracy.

The number could be rounded to the nearest hundred thousand.

Round 3250 to the nearest 500.   **3500**

The population of London is 8.674 million.

To what number would you round the population of London when writing about London, giving your reasons.

Accept all suitable explanations.

Read and Write Answers

Read and write numbers to at least 10,000,000 and determine the value of each digit.

Write half of this number using words: 4,208,092

Two million, one hundred and four thousand and forty-six.

Write fifty five thousand more than this number in numerals.

2,159,046

Solve Problems Answers

Solve number and practical problems that involve all

of the other objectives.

Which 2 numbers can be multiplied to equal twenty million?

500 x 40,000

The temperature at the bottom of a mountain is 9°C, but at the top it is -13°C. Half way up the mountain the temperature is halfway between the temperatures at the top and bottom. What is the temperature half way up the mountain?   **-2°C**