Place Value

BLUE GROUP

- Pick any 4 digit number
- How many different ways can you represent it?

17

1. **Odd** or even? How do you know?

2. What is the **value** of the 1?

3. What is the **value** of the 7?

4. **Round** to the nearest 10

5. Write in **expanded form**

6. Write in **expanded notation**

7. Write in **word form**

354

1. Odd or even? How do you know?
2. What is the value of the 4?
3. What is the value of the 5?
4. What is the value of the 3?
5. **Round** to the nearest 100
6. **Round** to the nearest 10
7. Write in **expanded form**
8. Write in **expanded notation**
9. Write in **word form**

8,615

1. **Odd** or **even**? How do you know?

2. What is the **value** of the 8?

3. What is the **value** of the 6?

4. What is the **value** of the 1?

5. What is the **value** of the 5?

6. **Round** to the nearest 1,000

7. **Round** to the nearest 100

8. Write in **expanded form**

9. Write in **expanded notation**

10. Write in **word form**

54,018

1. **Odd** or **even**? How do you know?

2. What is the **value** of the 8?

3. What is the **value** of the 4?

4. What is the **value** of the 5?

5. What is the **value** of the 0?

6. **Round** to the nearest 10,000

7. **Round** to the nearest 1,000

8. Write in **expanded form**

9. Write in **expanded notation**

10. Write in **word form**

789,123

1. **Odd** or **even**? How do you know?

2. What is the **value** of the 7?

3. What is the **value** of the 8?

4. What is the **value** of the 9?

5. What is the **value** of the 2?

6. **Round** to the nearest 100,000

7. **Round** to the nearest 10,000

8. Write in **expanded form**

9. Write in **expanded notation**

10. Write in **word form**

56,123

1. **Odd** or **even**?

2. What's the value of the 6?

3. What's the value of the 5?

4. Round to the nearest 10,000

5. Round to the nearest 1,000

6. Write in expanded form

Rounding

53,873

★ Draw a number line and place this number between the nearest 10,000

★ Round to the nearest ten thousand

53,873

★ Draw a number line and place this number between the nearest 1,000

★ Round to the nearest thousand

53,873

★ Draw a number line and place this number between the nearest one hundred

★ Round to the nearest hundred

53,873

★ Draw a number line and place this number between the nearest ten

★ Round to the nearest ten

299,013

★ **Draw a number line and place this number between the nearest hundred thousand**

★ **Round to the nearest hundred thousand**

299,013

- ★ **Draw a number line and place this number between the nearest ten thousand**

- ★ **Round to the nearest ten thousand**

299,013

★ **Draw a number line and place this number between the nearest thousand**

★ **Round to the nearest thousand**

299,013

★ Draw a number line and place this number between the nearest hundred

★ Round to the nearest hundred

299,013

★ Draw a number line and place this number between the nearest ten

★ Round to the nearest ten

421,139

★ **Round to the nearest hundred thousand**

★ **Round to the nearest hundred**

★ **Round to the nearest ten thousand**

★ **Round to the nearest thousand**

4,215,050

- ★ Round to the nearest hundred

- ★ Round to the nearest hundred thousand

- ★ Round to the nearest ten

- ★ Round to the nearest thousand

- ★ Round to the nearest million

The Pencil Company

The Pencil Company sells pencils in the following quantities:
- Singles (1 pencil)
- Bundles (10 pencils)
- Boxes (100 pencils)
- Cases (1,000 pencils)

The Pencil Company just received an order for 2,342 pencils. However, they currently have only one case of pencils in stock, but they have a large quantity of the other packing sizes.

Show at least three different ways that the pencils could be packed for this order. Explain your thinking using pictures, numbers, and words.

Argument

Jessie & Hanna are having an argument about place value.

Jessie argues that the # in the hundreds place is ten times bigger than the number in the tens place.

Hannah argues that the number in the hundreds place is one-hundred times bigger than the number in the tens place.

Who is correct? Why?

Jackson joins the argument. He says that he knows that the number in the thousands place is one-thousand times bigger than the number in the hundreds place. Is he right?

4TH GRADERS

- There are almost **40 thousand** fourth graders in Mississippi and almost **400 thousand** fourth graders in Texas. There are almost **4 million** fourth graders in the United States.
- We write 4 million as 4,000,000.
- How many times more fourth graders are there in Texas than in Mississippi?
- How many times more fourth graders are there in the United States than in Texas?
- Use the approximate populations listed above to solve.
- There are about 4 thousand fourth graders in Washington, D.C. How many times more fourth graders are there in the United States than in Washington, D.C.?

How many ways can you come up with to solve....

★ 54 + 99
★ 130 - 60
★ 103 - 7

$$$$$$$$$$$$

Part I. Gina said, "In my pocket I have 25 of the same amount of dollar bills. What is the value of Gina's money if she has:

a. 25 one dollar bills

b. 25 ten dollar bills

a. 25 hundred dollar bills

Part II: Gina reasoned, "The value of the 2 when I have ten dollar bills is 200, but the value of the 2 when I have one dollar bills is only 20." **Is Gina correct?** Why or why not?

MORE $$$$$$$$$$$$

Consider Parts A, B, and C above. If you had 260 of the same amount of dollar bills, what would the value of the bills be?

    a) 260 one dollar bills?

    b) 260 ten dollar bills?

    c) 260 hundred dollar bills?

Place Value on a number line

Draw a number line that starts
at 0 and ends at 100.

Where does 10 belong on this number
line?

Where does 1 belong?

Place Value on a number line

Draw a number line that starts
at 0 and ends at 10,000.

Where does 1,000
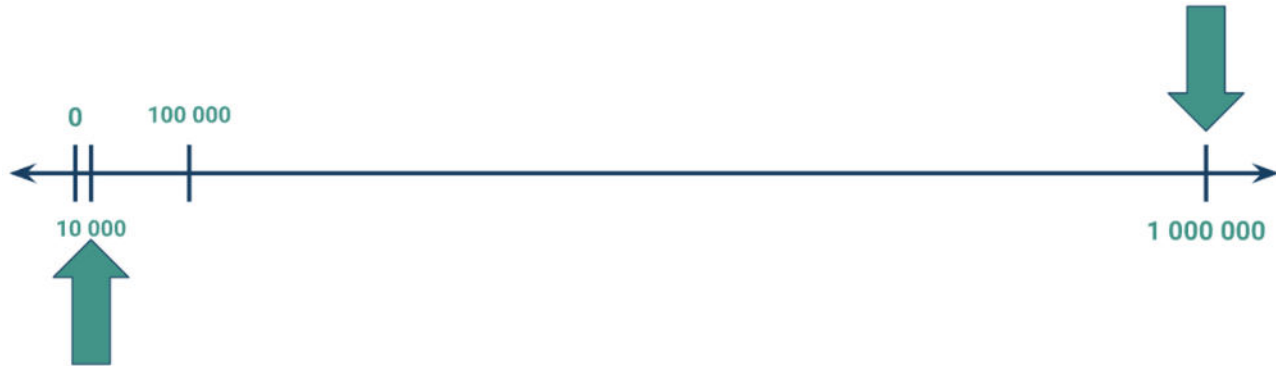belong on this
number line?

Where does 100
belong?

Place Value on a number line

Draw a number line that starts at 0 and ends at 1,000,000.

Where does 100,000 belong?

Where does 10,000 belong on this number line?

1 million Pennies

Picture how big 1 penny is. How big is 100 pennies? How much is it worth?

Now picture 1 million pennies. How big do you think it is? How much is it worth?
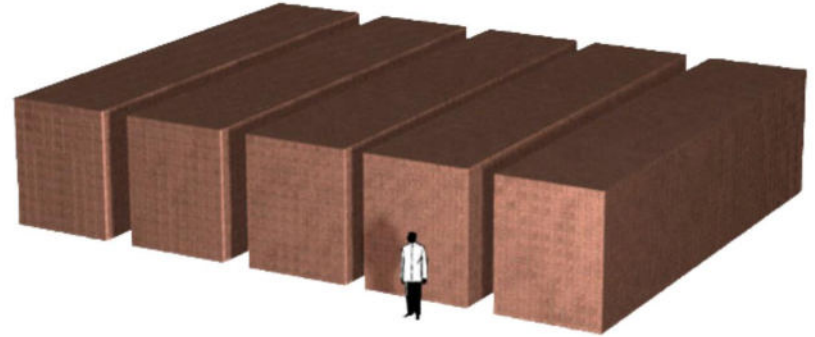
1 billion Pennies

Now, can you picture what 1 billion pennies looks like?

How much is 1 billion pennies worth?

Each of these blocks represents one 9x11x41 foot school bus – as seen below. If you were to stack all these pennies in a single pile, one atop the other, the stack would reach nearly one thousand miles high. For comparison, note that the Space Shuttle typically orbits only 225 miles above the Earth's surface.

One Billion Pennies

1,000,018,176
One billion, eighteen thousand, one hundred and seventy-six Pennies
Five school buses