

5\_Numbers and Operation in Base Ten Part 1 (5NBT\_Part1)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

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1. Carbon makes up 0.032 percent of Earth's crust. Which expression has a value of 0.032?

A.  $3.2 + 10^2$

B.  $3.2 \times 10^2$

C.  $3.2 + 10^3$

D.  $3.2 \times 10^3$

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2. Energy travels down the cables between electrical pylons at about 155,000 miles per second. Which expression is equal to 155,000?

A.  $155 \times 10^2$

B.  $155 \times 10^3$

C.  $155 \times 10^5$

D.  $155 \times 10^6$

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3. Sandy plays a math game. She wins the game by creating a number with the greatest value. She pulls a tile with the number 3 from a bag. She placed the 3 in one of the empty spaces.



Which statement should Sandy consider before she places the tile?

A. The value of the number is ten times greater in the thousands place than the value of the number in the hundreds place.

B. The value of the number is three times greater in the thousands place than the value of the number in the hundreds place.

C. The value of the number is one thousand times greater in the thousands place than the value of the number in the hundreds place.

D. The value of the number is three thousand times greater in the thousands place than the value of the number in the hundreds place.

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4. The table shows the lengths of six covered bridges.

**Covered Bridges**

<b>Bridge</b>	<b>Length (meters)</b>
Benetka Road Bridge	42.06
Olin's Bridge	35.05
Doyle Road Bridge	28.65
Giddings Road Bridge	32.61
Harpersfield Bridge	69.49
Smolen Gulf Bridge	186.7

A company plans to build a new covered bridge with a length of 18.6 meters.

**Part A**

Compare the length of the new covered bridge with the Smolen Gulf Bridge. How does the value of the number 8 in each number differ between the two lengths?

**Part B**

Use the greater than symbol or the less than symbol to compare the length of Benetka Road Bridge to the length of Olin's Bridge. Explain your answer.

**Part C**

Megan states that the Smolen Gulf Bridge was 3 times as long as the next longest bridge. Is Megan's statement correct? Explain your answer.

**Be sure to complete ALL parts of the task.  
Write your answer and show your work on the paper provided.  
Do NOT type your answer in the text box below.**

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5. Five people entered a rowing competition. The table shows the recorded finishing times for three of the people.

**Rowing Times**

Person	Time (seconds)
A	20.528
B	20.53
C	20.319
D	
E	

**Part A**

Compare the time of person A to the time of person B using  $>$ ,  $<$ , or  $=$ .

**Part B**

The rowing time for person D is equal to the time of person C. The rowing time of person E was less than 20.3 seconds, but greater than 20.2 seconds. What are possible times for persons D and E? Label your answers.

**Part C**

List the 5 people in order from the fastest time to the slowest time. Any person that finished the race in less than 20.4 seconds qualifies for the next rowing competition. Which people qualified? Explain your answer.

**Part D**

Round the times of the 5 people to the nearest tenth. Compare the results to your answers from Part C. Does the order of the people change? Explain your answer.

**Be sure to complete ALL parts of the task.  
Write your answer and show your work on the paper provided.  
Do NOT type your answer in the text box below.**

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6. What number is equivalent to the expression below?

$$(3 \times 1,000,000) + (6 \times 10,000) + (5 \times 100) + 1$$

- A. 3,651
- B. 306,501
- C. 3,060,501
- D. 3,065,001

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7. Which decimal is the greatest?

- A. 0.41
- B. 1.41
- C. 0.14
- D. 1.14

8. Which is the largest number?

- A. 3.800
- B. 3.90
- C. 3.89
- D. 3.09

9.

What is the value of the 3 in 45,089.213?

- A. three thousandths
- B. three hundredths
- C. three tenths
- D. thirty

10.

What is the value of the 7 in 23,078,566,000?

- A. 7 million
  - B. 70 million
  - C. 78 million
  - D. 700 million
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11. Which number goes into the box to make the statement true?

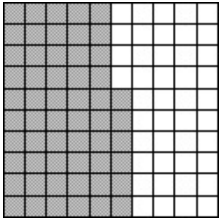
$$4,\square 76,192 < 4,578,136$$

- A. 7
- B. 6
- C. 3
- D. 8

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12. If the model is one unit, which decimal is represented by the shaded part?



- A. 0.44
- B. 0.56
- C. 0.64
- D. 0.65

**Answer Key**

1. A)  $3.2 \times 10^2$

2. B)  $155 \times 10^3$

3. A) The value of the number is ten times greater in the thousands place than the value of the number in the hundreds place.

4.

5.

6. C) 3,060,501

7. B) 1.41

8. B) 3.90

9. A) three thousandths

10. B) 70 million

11. C) 3

12. B) 0.56