**Name Date Block**

**C:\Users\sbailey\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\WD3MRBH6\MC900441888[1].wmf**

|  |  |
| --- | --- |
| **Word Bank** | |
| base | exponent |
| factors | power of 10 |

1. are numbers that are multiplied to get a product.

2. A(n) is a number that is multiplied by itself a certain number of times.

3. A(n) is a number that tells how many times a given number is used as a factor.

4. A(n) is a value represented by multiplying 10 by itself a certain number of times.

Fill in the missing information on the table.

|  |  |  |
| --- | --- | --- |
| **Using Multiplication** | **Exponential Form** | **Word Form** |
| 10 | 101 |  |
| 10 x 10 |  | 10 to the second power |
| 10 x 10 x 10 |  |  |
| 10 x 10 x 10 x 10 |  |  |

5. Circle true or false for each equation.

1. 20 x 103 = 2,000 true false
2. 20 x 105 = 2,000,000 true false
3. 20 x 101 = 200 true false
4. 20 x 100 = 1 true false

6. Draw a line from each expression to its value.

1. 8 x 102 • 80
2. 80 x 103 • 80,000
3. 8 x 101 • 800
4. 80 x 102 • 8,000

7. Zach and Joseph raced across the playground 20 meters. Which expression has a value of 20 meters? Circle all that apply.

|  |  |  |
| --- | --- | --- |
| 2 x 101 | 20 x 101 | 20 x 100 |
| 2 x 102 | 20 x 102 | 2 x 100 |

|  |  |  |
| --- | --- | --- |
|  | 101 |  |
| 5 x | 102 | = 500 |
|  | 103 |  |

Circle the power of ten that makes the equation true.

|  |  |  |
| --- | --- | --- |
|  | 102 |  |
| 4 x | 103 | = 4,000 |
|  | 104 |  |

8. 9.

Compare each expression to 100. Write the expression in the correct box.

|  |  |  |
| --- | --- | --- |
| 4 x 101 | 9 x 103 | 20 x 100 |
| 70 x 101 | 3 x 102 | 2 x 101 |

|  |  |
| --- | --- |
| **Less than 100** | **Greater than 100** |
|  |  |