

Name _____

Powers of 10 and Exponents



COMMON CORE STANDARD MACC.5.NBT.1.2

Understand the place value system.

Write in exponent form and word form.

1. $10 \times 10 \times 10$

2. 10×10

3. $10 \times 10 \times 10 \times 10$

exponent form: 10^3

exponent form: _____

exponent form: _____

word form: **the
third power
of ten**

word form: _____

word form: _____

Find the value.

4. 10^3

5. 4×10^2

6. 9×10^4

7. 10^1

8. 10^5

9. 5×10^1

10. 7×10^3

11. 8×10^0

Problem Solving 

12. The moon is about 240,000 miles from Earth. What is this distance written as a whole number multiplied by a power of ten?

13. The sun is about 93×10^6 miles from Earth. What is this distance written as a whole number?

Lesson Check (MACC.5.NBT.1.2)

- Which of the following is NOT equivalent to "3 times the sixth power of 10?"
 - 3×10^6
 - 3,000,000
 - $3 \times 10 \times 6$
 - $3 \times 1,000,000$
- Gary mails 10^3 flyers to clients in one week. How many flyers does Gary mail?
 - 10
 - 100
 - 1,000
 - 10,000

Spiral Review (Reviews MACC.4.NBT.2.5, MACC.4.NBT.2.6)

- Harley is loading 625 bags of cement onto small pallets. Each pallet holds 5 bags. How many pallets will Harley need? (Grade 4)
 - 125
 - 620
 - 630
 - 3,125
- Marylou buys a package of 500 jewels to decorate 4 different pairs of jeans. She uses the same number of jewels on each pair of jeans. How many jewels will she use for each pair of jeans? (Grade 4)
 - 100
 - 125
 - 200
 - 2,000
- Manny buys 4 boxes of straws for his restaurant. There are 500 straws in each box. How many straws does he buy? (Grade 4)
 - 20,000
 - 2,000
 - 200
 - 125
- Cammie goes to the gym to exercise 4 times per week. Altogether, how many times does she go to the gym in 10 weeks? (Grade 4)
 - 4
 - 10
 - 20
 - 40