

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



# POWERS OF 10

**PART I:** Write the value of each of the following.

1.  $10^6 =$  \_\_\_\_\_

6.  $10^9 =$  \_\_\_\_\_

2.  $10^2 =$  \_\_\_\_\_

7.  $10^3 =$  \_\_\_\_\_

3.  $10^5 =$  \_\_\_\_\_

8.  $10^7 =$  \_\_\_\_\_

4.  $10^{10} =$  \_\_\_\_\_

9.  $10^4 =$  \_\_\_\_\_

5.  $10^1 =$  \_\_\_\_\_

10.  $10^8 =$  \_\_\_\_\_

**PART II:** Identify which number is larger by filling in the box with > or <

11.  $10^2$    $10^4$

14.  $10^8$    $10^{18}$

12.  $10^3$    $10^1$

15.  $10^6$    $10^3$

13.  $10^{12}$    $10^{17}$

16.  $10^{11}$    $10^{14}$

**PART III:** Solve each of the following by adding. Express your answer in exponent form.

17.  $10^7 + 10^4 =$  \_\_\_\_\_

18.  $10^3 + 10^1 =$  \_\_\_\_\_

19.  $10^3 + 10^3 =$  \_\_\_\_\_

20.  $10^2 + 10^4 =$  \_\_\_\_\_

## ANSWER KEY

PART I: Write the value of each of the following.

1.  $10^6 = 1,000,000$

6.  $10^9 = 1,000,000,000$

2.  $10^2 = 100$

7.  $10^3 = 1,000$

3.  $10^5 = 100,000$

8.  $10^7 = 10,000,000$

4.  $10^{10} = 10,000,000,000$

9.  $10^4 = 10,000$

5.  $10^1 = 10$

10.  $10^8 = 100,000,000$

PART II: Identify which number is larger by filling in the box with > or <

11.  $10^2 < 10^4$

14.  $10^8 < 10^{18}$

12.  $10^3 > 10^1$

15.  $10^6 > 10^3$

13.  $10^{12} < 10^{17}$

16.  $10^{11} < 10^{14}$

PART III: Solve each of the following by adding. Express your answer in exponent form.

17.  $10^7 + 10^4 = 10^{11}$

18.  $10^3 + 10^1 = 10^4$

19.  $10^3 + 10^3 = 10^6$

20.  $10^2 + 10^4 = 10^6$