

Name _____ Date _____ Period _____

Math 8 Unit 4 Scientific Notation Review

Round all answers to the hundredths place!

Recognizing Scientific Notation: Is each number written in scientific notation? Explain why or why not!

1. 56.29×10^{12}

2. 0.84×10^{-3}

3. 6.11×10^5

Writing Each Number in Scientific Notation

4. 56,900,000

5. 0.0985

6. 267,000

7. 0.000000009

Writing each number in Standard Notation

8. 1.55×10^6

9. 2×10^{-11}

10. 5.07×10^4

11. 5.6×10^{-4}

Using Scientific Notation to order Numbers

12. Order from least to greatest

0.052×10^7

5.12×10^5

5.32×10^3

5.34×10^3

13. Order from greatest to least

60.2×10^{-5}

63×10^4

0.067×10

61×10^{-2}

Operations in Scientific Notation

14. $(3.4 \times 10^4) + (7.8 \times 10^4)$

15. $(5.72 \times 10^{-2}) - (3.85 \times 10^{-3})$

16. $(7 \times 10^2)(4 \times 10^5)$

17. $(3.2 \times 10^{-3})(1.3 \times 10^5)$

18. $\frac{9.3 \times 10^4}{3.1 \times 10^{-2}}$

19. $\frac{1.2 \times 10^{-2}}{4.1 \times 10^4}$

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Problem Solving using Values in Scientific Notation

20. In 2005, the population was about 2.87×10^8 . Spending for health care was about \$5745 per person. About how much did the US spend on health care in 2005? Express your answer in scientific notation
21. A computer can perform 4.66×10^8 instructions per second. How many instructions is that per hour? Use scientific notation.
22. If you were writing a report about the national debt in Mr. Lemmond's class, would you use scientific notation or standard notation to express the debt amount? In 2017, the US national debt is approximately 23 trillion dollars. Explain why.
23. The world population in 2025 may reach 7.84×10^9 . This is about 3 times the world population in 1950. What was the world population in 1950?
24. In 2014, the US government spent \$634 billion on 5.07×10^7 kindergarten-12th grade students attending public schools. How much was spent on each child?

Parent Signature: _____