

Day 1~ Scientific Notation HW

Student _____

Date _____

1. Which expression is equivalent to $\frac{5^{12} \cdot 7}{5^2 \cdot 7^2}$?
- A. $\frac{5^6}{7^2}$
 - B. $\frac{5^6}{7}$
 - C. $\frac{5^{10}}{7}$
 - D. $\frac{5^{10}}{7^2}$
2. What is the value of $\sqrt{0.04}$?
- A. 2
 - B. 0.2
 - C. 0.02
3. A small paper clip weighs about 0.0005 kilogram. What is 0.0005 written in scientific notation?
- A. 5×10^{-4}
 - B. 5×10^{-3}
 - C. 5×10^3
 - D. 5×10^4
4. What is the value of 0.002 written in scientific notation?
- A. 2×10^{-3}
 - B. 2×10^{-2}
 - C. 2×10^2
 - D. 2×10^3
5. The average distance from Earth to the Moon is approximately 238,855 miles. Which expression is the best estimate of this distance?
- A. 2×10^5 miles
 - B. 3×10^5 miles
 - C. 2×10^6 miles
 - D. 3×10^6 miles
6. What is the standard form of 7.95×10^8 ?
- A. 795,000,000
 - B. 7,950,000,000
 - C. 79,500,000,000
7. The speed of light is about 3.0×10^8 meters per second. The speed of sound at sea level is about 3.0×10^2 meters per second. *About* how many times faster is the speed of light than sound?
- A. 1,000
 - B. 6,000
 - C. 1,000,000
 - D. 3,000,000

8. In 2005, about 3.1 billion books were sold in the United States. How is the number of books sold written in scientific notation?

- A. 3.1×10^6
- B. 3.1×10^7
- C. 3.1×10^8
- D. 3.1×10^9

9. The measure of a virus is 0.000085 cm. How is the measure of the virus written in scientific notation?

- A. 8.5×10^5
- B. 8.5×10^{-4}
- C. 8.5×10^{-5}

10. How many solutions does the equation $3x - 2x + 4 = 2 + x + 2$ have?

- A. no solution
- B. one solution
- C. two solutions
- D. infinitely many solutions

11. Which equation is equivalent to $3(2x - 5) = 7(x + 2)$?

- A. $6x - 5 = 7x + 2$
- B. $6x + 5 = 7x + 2$
- C. $6x - 15 = 7x + 14$
- D. $6x + 15 = 7x + 14$

12. Which fraction is equal to $0.555\dots$?

- A. $\frac{5}{11}$
- B. $\frac{1}{2}$
- C. $\frac{5}{9}$
- D. $\frac{5}{8}$