Scientific Notation Quiz   Name: _____ Block: ____

1.   Which expression represents 238.42 in scientific notation?
A 2.3842×10^5
B 2.3842×10^4
C 2.3842×10^3
D 2.3842×10^2

2.   Which expression represents 0.000362 in scientific notation?
A 3.62×10^{-6}
B 3.62×10^{-5}
C 3.62×10^{-4}
D 3.62×10^{-3}

3.   Which expression represents 0.783 in scientific notation?
A 7.83×10^{-2}
B 7.83×10^{-1}
C 7.83×10^{1}
D 7.83×10^{2}

4. Which expression represents 348,000 in scientific notation?
A 3.48×10^4
B 3.48×10^5
C 3.48×10^6
D 3.48×10^7

5. Which expression represents the product of 0.000008 and 3,500,000?
A 11.5×10^3
B 2.8×10^1
C 2.8×10^4
D 28×10^4

6. Which expression represents the product of (4.63×10^8) and 500?
A 2.315×10^4
B 2.315×10^6
C 2.315×10^{11}
D 2.315×10^{16}

7. The sun is about 1.5×10^8 kilometers from Earth. If light travels about 3×10^5 kilometers per second, about how many seconds does it take light from the sun to reach Earth?

A. 5
B. 50
C. 500
D. 5,000

8. The population of Asia is about 3.4×10^9. The population of Africa is about 7×10^8. About how many more people live in Asia than live in Africa?

A. 27,000,000
B. 270,000,000
C. 360,000,000
D. 2,700,000,000

9. The diameter of a barium atom is 0.0000004346 millimeters. In scientific notation it is

A. 43.46×10^{-8} mm
B. 4.346×10^{7} mm
C. 4.346×10^{-7} mm
D. 4346.0×10^{-7} mm

10. Evaluate $(4.67 \times 10^7) \bullet (3.24 \times 10^3)$.

A. 1.51308×10^{11}
B. 1.51308×10^{21}
C. 7.91×10^{10}
D. 15.1308×10^{10}

11. 648,392 in scientific notation is—

A. 648.392×10^3
B. 6.48392×10^5
C. 6.48392×10^{-5}
D. $.648392 \times 10^{-6}$

12. **What is 253,000,000 in scientific notation?**

A 25.3×10^7
B 2.53×10^8
C 253×10^6
D 2.53×10^9

13. **Simplify:** $\dfrac{9.0 \times 10^7}{3.0 \times 10^{14}}$

A 3.0×10^{-7}
B 3.0×10^{-2}
C 3.0×10^2
D 3.0×10^7

14. **Simplify:** $\dfrac{1.65 \times 10^{25}}{3.3 \times 10^5}$

A 5.0×10^4
B 5.0×10^5
C 5.0×10^{19}
D 5.0×10^{20}

15. **The distance from the sun to the Earth is about 2.0×10^8 km. Saturn is about 4.0×10^9 km from the sun. What is the <u>ratio</u> of the distance from Saturn to the sun to the distance from Earth to the sun?**

A 2.0×10^1
B 8.0×10^1
C 2.0×10^{17}
D 8.0×10^{17}