

Name: _____

Date: _____ Per: _____

Chemistry
Scientific Notation WS

I. *Convert the following decimal numbers to scientific notation:*

1. 900

6. 0.134

2. 2,800

7. 0.000656

3. 15,392

8. 0.0000009

4. 854,000

9. 12,867,000

5. 0.072

10. 0.000200042

II. *Convert the following scientific notation numbers to decimal numbers:*

11. 6.10×10^2

16. 4×10^{13}

12. 3.8×10^4

17. 7.24×10^6

13. 7.72×10^{-1}

18. 1.006×10^{-9}

14. 8.18×10^7

19. 2.608×10^{-2}

15. 9.4006×10^{-3}

20. 6.02×10^{23}

III. Perform the following multiplications and division, expressing your answer in scientific notation:

21. $5 \times 10^2 * 3 \times 10^4 =$ _____

22. $3.3 \times 10^{-1} * 2.01 \times 10^7 =$ _____

23. $8.92 \times 10^9 \div 7.75 \times 10^4 =$ _____

24. $6.24 \times 10^{-5} \div 4.091 \times 10^3 =$ _____

25. $9.11 \times 10^{-31} * 6.02 \times 10^{23} =$ _____

26. $4.87 \times 10^3 \div 1.092 \times 10^{-7} =$ _____

IV. Perform the following additions and subtractions, expressing your answer in scientific notation:

27. $9 \times 10^3 + 4 \times 10^3 =$ _____

28. $2.4 \times 10^{-2} - 7.8 \times 10^{-3} =$ _____

29. $6.61 \times 10^6 + 8.0 \times 10^4 =$ _____

30. $3.03 \times 10^8 - 1.8 \times 10^9 =$ _____

31. $4.1145 \times 10^2 + 8.275 \times 10^{-2} =$ _____

32. $3.49 \times 10^{-1} + 7.0 \times 10^3 =$ _____