

Scientific Notation

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- _____ 1. What is 78,900,000,000 expressed in scientific notation?
a. 789×10^9 c. 7.89×10^9
b. 78.9×10^8 d. 7.89×10^{10}
- _____ 2. What is 423,000 expressed in scientific notation?
a. 4.2×10^5 c. 4.23×10^5
b. 42.3×10^3 d. 4.23×10^{-5}
- _____ 3. Which of the following is equal to 5,800,000,000?
a. 5.8×10^9 c. 5.8×10^8
b. 58×10^9 d. 58×10^7
- _____ 4. Which of the following shows 0.0000043?
a. 4.3×10^7 c. 4.3×10^{-6}
b. 4.3×10^6 d. 4.3×10^{-7}
- _____ 5. The diameter of a carbon atom is 0.000 000 000 154 m. What is this number expressed in scientific notation?
a. 1.54×10^{12} c. 1.54×10^{10}
b. 1.54×10^{-12} d. 1.54×10^{-10}
- _____ 6. Express 3.45×10^6 in standard notation:
a. 345 c. 3,450,000
b. 345,000,000 d. 0.000000345
- _____ 7. Express 2.4×10^{-4} in standard notation:
a. 24,000 c. 0.0024
b. 0.00024 d. 240,000
- _____ 8. What is the result of adding 2.5×10^3 and 3.5×10^2 ?
a. 2.85×10^3 c. 2.9×10^2
b. 6.0×10^3 d. 6.0×10^5
- _____ 9. The speed of light is approximately 3×10^8 m/s. How would this be written in conventional notation?
a. 300,000 m/s c. 30,000,000 m/s
b. 3,000,000 m/s d. 300,000,000 m/s
- _____ 10. A scientific hypothesis
a. can be based on personal beliefs or opinions.
b. can be tested by experiments or observations.
c. does not have to be tested to be accepted as correct.
d. is a proven fact with much evidence to support it.

Scientific Notation Answer Section

MULTIPLE CHOICE

1. ANS: D PTS: 1 DIF: 1 REF: 3
 OBJ: 2 STA: D.INQ.8
2. ANS: C PTS: 1 DIF: 1 REF: 3
 OBJ: 2 STA: D.INQ.8
3. ANS: A PTS: 1 DIF: 1 REF: 3
 OBJ: 2 STA: D.INQ.8
4. ANS: C PTS: 1 DIF: 1 REF: 3
 OBJ: 3 STA: D.INQ.8
5. ANS: D PTS: 1 DIF: L1 REF: p. 63
 OBJ: 3.1.1 Convert measurements to scientific notation. STA: DINQ.8
6. ANS: C PTS: 1 DIF: L1 REF: p. 63
 OBJ: 3.1.1 Convert measurements to scientific notation. STA: DINQ.8
7. ANS: B PTS: 1 DIF: L1 REF: p. 63
 OBJ: 3.1.1 Convert measurements to scientific notation. STA: DINQ.8
8. ANS: A PTS: 1 DIF: L2 REF: p. 63 | p. 71
 OBJ: 3.1.1 Convert measurements to scientific notation. STA: DINQ.8
9. ANS: D PTS: 1 DIF: 1 REF: 3
 OBJ: 2 STA: D.INQ.8
10. ANS: B PTS: 1 DIF: L2 REF: p. 9
 OBJ: 1.1.2 Describe the steps used in scientific methodology. STA: DINQ.3 | DINQ.4 | DINQ.5
 TOP: Foundation Edition MSC: synthesis