

NAME: \_\_\_\_\_

1. 060927ia, P.I. A.N.4

What is the product of 12 and  $4.2 \times 10^6$  expressed in scientific notation?

- [A]  $50.4 \times 10^6$       [B]  $5.04 \times 10^6$   
[C]  $5.04 \times 10^7$       [D]  $50.4 \times 10^7$

2. 010927ia, P.I. A.N.4

What is the product of  $8.4 \times 10^8$  and  $4.2 \times 10^3$  written in scientific notation?

- [A]  $2.0 \times 10^5$       [B]  $3.528 \times 10^{12}$   
[C]  $35.28 \times 10^{11}$       [D]  $12.6 \times 10^{11}$

3. 010319a, P.I. A.N.4

What is the value of  $\frac{6.3 \times 10^8}{3 \times 10^4}$  in scientific notation?

- [A]  $2.1 \times 10^{-4}$       [B]  $2.1 \times 10^4$   
[C]  $2.1 \times 10^{-2}$       [D]  $2.1 \times 10^2$

4. 060207a, P.I. A.N.4

If  $3.85 \times 10^6$  is divided by  $385 \times 10^4$ , the result is

- [A]  $3.85 \times 10^{10}$       [B] 1  
[C] 0.01      [D]  $3.85 \times 10^4$

5. fall0725ia, P.I. A.N.4

What is the quotient of  $8.05 \times 10^6$  and  $3.5 \times 10^2$ ?

- [A]  $2.3 \times 10^8$       [B]  $2.3 \times 10^4$   
[C]  $2.3 \times 10^{12}$       [D]  $2.3 \times 10^3$

6. 010018a, P.I. A.N.4

If the number of molecules in 1 mole of a substance is  $6.02 \times 10^{23}$ , then the number of molecules in 100 moles is

- [A]  $6.02 \times 10^{22}$       [B]  $6.02 \times 10^{21}$   
[C]  $6.02 \times 10^{25}$       [D]  $6.02 \times 10^{24}$

7. 060429a, P.I. A.N.4

If the mass of a proton is  $1.67 \times 10^{-24}$  gram, what is the mass of 1,000 protons?

- [A]  $1.67 \times 10^{-21}$       [B]  $1.67 \times 10^{-22}$   
[C]  $1.67 \times 10^{-27}$       [D]  $1.67 \times 10^{-23}$

8. 060815b, P.I. A.N.4

In 1995, the federal government paid off one-third of its debt. If the original amount of the debt was \$4,920,000,000,000, which expression represents the amount that was not paid off?

- [A]  $1.64 \times 10^4$       [B]  $3.28 \times 10^8$   
[C]  $1.64 \times 10^{12}$       [D]  $3.28 \times 10^{12}$

9. 060628a

What is the sum of  $6 \times 10^3$  and  $3 \times 10^2$ ?

- [A]  $9 \times 10^6$       [B]  $18 \times 10^5$   
[C]  $9 \times 10^5$       [D]  $6.3 \times 10^3$

[1] C

[2] B

[3] B

[4] B

[5] B

[6] C

[7] A

[8] D

[9] D