1. The base unit for the length in metric system is
   A. cm  B. m  C. in.  D. yd

2. Express 0.000840 in scientific notation
   A. $8.40 \times 10^{-3}$  B. $8.40 \times 10^3$  C. $8.40 \times 10^{-4}$  D. $8.4 \times 10^4$

3. In metric system the prefix nano- means
   A. $10^{-9}$  B. $10^9$  C. $10^{12}$  D. $10^{-12}$

4. Which of the following is an exact number?
   A. 10.25 g  B. 4.000 kg  C. 7 chairs  D. 60 seconds

5. When numbers are added, the limiting term is the one with the __________ number of __________.
   A. largest, decimal places  B. smallest, decimal places  C. largest, significant digits  D. smallest, significant digits

6. The conversion factor to change kilograms to pounds is
   A. $\frac{1 \text{ kg}}{2.20 \text{ lb}}$  B. $\frac{2.20 \text{ lb}}{1 \text{ kg}}$  C. $\frac{1 \text{ lb}}{454 \text{ kg}}$  D. $\frac{454 \text{ kg}}{1 \text{ lb}}$

7. Convert 3.25 mi to kilometers.
   A. 2.02 km  B. 4.95 km  C. 5.23 km  D. 1.91 km

8. What is the mass of 20.0 mL solution if its density is 1.84 g/mL?
   A. 10.8 g  B. 21.8 g  C. 10.9 g  D. 36.8 g

9. 65.0°C is equivalent to
   A. -85.0°F  B. 85.0°F  C. 120.0°F  D. 149°F

10. When 20.0 g of titanium is heated from 10.0°C to 20.0°C, 25.0 cal of heat is absorbed. What is the specific heat of titanium?
    A. 0.125 cal/g·°C  B. 8.00 cal/g·°C  C. 0.800 cal/g·°C  D. 12.5 cal/g·°C
## Multiple Choice Questions

### Unit (1)  
**Chem-100**

### Answers

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