

## Practice Quiz: Calculations In Chemistry

### Chapters 1-4:

Name \_\_\_\_\_

Section \_\_\_\_\_

Print the LETTER of  
the answer below.

You *may* use a calculator on this quiz. You may write on this paper.

On the calculations, do the math, *then* pick an answer.

1. Answer in scientific notation  
with proper significant figures

$$\frac{4.00 \times 10^{-23} \text{ m}^2}{(0.200 \text{ m})(2.50 \times 10^{-15} \text{ s})} =$$

2. Which of these is the smallest quantity?

- a. 1 kilosecond      b. 1 picosecond      c. 1 microsecond      d. 1 nanosecond

3. How many significant figures are in: 100.170      a. 2      b. 3      c. 4      d. 5      e. 6

4. How many significant figures are in: 0.00360      a. 2      b. 3      c. 4      d. 5      e. 6

5. How *many* significant figures can there be in the *answer* to this calculation:  $406.90 \times 0.03200 =$

- a. 2      b. 3      c. 4      d. 5      e. 6

6. How *many* significant figures can there be in the *answer* to this calculation: 132.1

- a. 2      b. 3      c. 4      d. 5      e. 6

$$+ \underline{1.08}$$

7. If one in. = 2.54 cm and 12 in. = 1 foot (ft.), ? ft. = **175 cm**

- a. 37.0 ft.      b. 827 ft.      c. 5330 ft      d. 5.74 ft      e. 0.174 ft.

8. If one inch = 2.54 cm and 12 inches = 1 foot (ft.),

$$? \frac{\text{cm}}{\text{min}} = \frac{9.0 \text{ ft.}}{\text{hour}}$$

- a. 0.032 cm/min      b. 4.6 cm/min      c. 18 cm/min      d. 0.71 cm/min      e. 16,000 cm/min

9. Symbol for Bromine = ?

10. Symbol Na is the element named ?

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

## Answer Key

- |  |                |                |                |                |                |                |                |                 |                      |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------------|
| <u>1.</u><br>8.00 x 10 <sup>-8</sup> m/s | <u>2.</u><br>B | <u>3.</u><br>E | <u>4.</u><br>B | <u>5.</u><br>C | <u>6.</u><br>C | <u>7.</u><br>D | <u>8.</u><br>B | <u>9.</u><br>Br | <u>10.</u><br>Sodium |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------------|