

# Chemistry Placement Test

One way to satisfy the pre-requisite for enrollment in Chem 101 is a satisfactory score (40/60) on the Chemistry Placement Test (CPT). This test consists of sixty multiple-choice questions equally divided among three parts: General Mathematics, General Chemical Knowledge and Specific Chemical Knowledge. If one has good basic math skills and a solid science background, one can pass the CPT even without an extensive knowledge of chemistry.

The following questions are examples of the types of problems in each part of the CPT. Please note that the use of calculators is not permitted when taking the CPT.

## Part I. General Mathematics

Solve for x:  $4x - b = 2x + c$

(1)  $c - b - 6$

(3)  $\frac{c + b}{2}$

(2)  $\frac{b + c}{6}$

(4)  $\frac{c - b}{2}$

When the following calculation

$$\frac{10^2 - 10}{10^2 + 10}$$

is performed, the correct answer is:

(1)  $\frac{900}{1000}$

(3)  $\frac{10}{1000}$

(2)  $\frac{9}{11}$

(4) -1

## Part II. General Chemical Knowledge

In a chemical reaction, there is always:

- (1) a release of energy
- (2) a new substance formed
- (3) a gas involved
- (4) none of these.

Which of the following is not a chemical compound?

- (1) ammonia
- (2) nitric acid
- (3) sulfur
- (4) ethyl alcohol

## Part III. Specific Chemical Knowledge

The correct chemical formula for copper(II) oxide is:

- (1)  $\text{Co}_2\text{O}$
- (2)  $\text{Cu}_2\text{O}$
- (3)  $\text{CuO}_2$
- (4)  $\text{CuO}$

When  $\text{H}_2\text{SO}_4$  is mixed with  $\text{NaOH}$ , one of the products is:

- (1)  $\text{NaSO}_4$
- (2)  $\text{NaH}_2$
- (3)  $\text{SO}_2$
- (4)  $\text{H}_2\text{O}$

## Correct Answers

(3), (2), (2), (2), (3), (4)