

Chemistry Placement Test (CPT) Information

One way to satisfy the prerequisite to enter CHEM 101/D/L is a satisfactory score (32/60) 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 you have good basic math skills and a solid general science background, you 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

1. Solve $4 \cdot x - b + 2 \cdot x + c = 0$ for x

(a) $x = c - b - 6$

(b) $x = \frac{b - c}{6}$

(c) $x = \frac{c + b}{2}$

(d) $x = \frac{c - b}{2}$

2. When the calculation $\frac{10^2 - 10}{10^2 + 10}$ is performed, the correct answer is

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

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

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

(d) -1

3. Fourteen is two-sevenths of what number?

(a) 4

(b) 7

(c) 49

(d) 98

Part II: General Chemistry Knowledge

4. In a chemical reaction there is always...

(a) ... a release of energy

(b) ... a release of gas

(c) ... a new substance formed

(d) ...none of the others

Chemistry Placement Test (CPT) Information

5. Which of the following is not a chemical compound?

- (a) Ammonia
(b) Sulfur
(c) Nitric acid
(d) ethyl alcohol

6. In which part of the periodic table are metals found?

- (a) on the left side
(b) on the right side
(c) in the block in the middle of the table
(d) in the "extra" elements at the bottom

Part III. Specific Chemical Knowledge

7. What is the correct chemical formula for copper(II) oxide?

- (a) Co_2O
(b) CuO_2
(c) Cu_2O
(d) CuO

8. What is one of the products when H_2SO_4 is mixed with NaOH ?

- (a) NaSO_4
(b) SO_2
(c) NaH_2
(d) H_2O

9. When the reaction $\text{N}_2(\text{g}) + \text{H}_2(\text{g}) \rightarrow \text{NH}_3(\text{g})$ is balanced, what is the sum of the stoichiometric coefficients?

- (a) 6
(b) 3
(c) 2
(d) 5

1 (b) 2 (c) 3 (c) 4 (c) 5 (b) 6 (a) 7 (d) 8 (d) 9 (a)