

Chemistry Placement Test (CPT)

A score of ≥ 36 on the CPT or a grade $\geq C^-$ in Chem 101 is required to enroll in Chem 150 or Chem 211. **Only one attempt to pass the CPT is allowed.** Scores will be processed as soon as possible and will appear on BannerWeb as soon as they are entered (usually within one week).

Times/Locations: See the announcement page for department administered exams or contact the Testing Center, Modular West (next to the Children's Center) at (661) 654-3373, for more information about making alternative arrangements.

Test Format

60 multiple choice questions – 55 minutes. There is no penalty for guessing.

- Part I: General Mathematics (elementary algebra including exponential notation)– 20 questions
- Part II: General Chemical Knowledge – 20 questions
- Part III: Specific Chemical Knowledge – 20 questions

Additional Information

If you have not completed a high school chemistry course or have completed such a course more than two years ago, you should enroll directly in Chem 101 to prepare for Chem 150 or Chem 211. Completion of Chem 101 at CSUB with a grade of "C-" or better will automatically qualify you for admission to Chem 150 or Chem 211. You should be aware that approximately one-half of the students who pass the CPT with a score in the low 40's fail to earn a grade of "C" or greater in CHEM 150 and CHEM 211.

If you feel the need to prepare for the CPT, we recommend that you review standard elementary algebra and high school level chemistry texts. These texts are available at most public libraries.

Sample Questions from CPT

One way to satisfy the pre-requisite for enrollment in CHEM 150 or CHEM 211 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) $c - b - 2$ (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 (3) a gas involved
(2) a new substance formed (4) none of these.

Which of the following is not a chemical compound?

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

Part III. Specific Chemical Knowledge

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

- (1) Co_2O (3) CuO_2
(2) Cu_2O (4) CuO

When H_2SO_4 is mixed with NaOH , one of the products is:

- (1) NaSO_4 (3) SO_2
(2) NaH_2 (4) H_2O

Correct Answers

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