

PRE-ADMISSION CHEMISTRY ASSESSMENT SAMPLE ASSESSMENT AND PREPARATION GUIDE

This booklet is designed to help you prepare for your Chemistry Assessment.

HELPFUL HINTS

1. For online tests, make sure your computer meets the [minimum requirements](#).
2. Be on time! This will give you the opportunity to get setup.
3. Listen carefully and follow directions.
4. The tests are multiple choice. You will be required to choose the best answer to a question from several choices.
5. If one question is too hard, leave it and go on to the next. You can always come back and try it again if there is time.
6. Work steadily, and complete as many questions as you can. Please note the following are samples of the types of question you will encounter on the assessment and may not reflect exactly the difficulty of the assessment.

If you have a documented disability and require accommodations, please contact accessibility@conestogac.on.ca.

WHAT TO EXPECT

You will be asked to complete 31 questions in 60 minutes.

We do not allow the use of calculators, dictionaries or learning aids, with the exception for individuals with approved testing accommodations.

SAMPLE CHEMISTRY ASSESSMENT

1. Iron rusting is an example of what kind of change?
 - a) chemical
 - b) physical
 - c) nuclear
 - d) biological
2. A structure consisting of nucleus with electrons orbiting around it is a(n):
 - a) molecule
 - b) organism
 - c) cell
 - d) atom
3. A bond that is formed between two atoms of opposite charge is called:
 - a) impossible
 - b) ionic
 - c) maternal
 - d) covalent
4. Atoms which have gained or lost electrons are:
 - a) molecules
 - b) ions
 - c) neutrons
 - d) neutral
5. Arrange the following components in descending order of relative size (largest first, smallest last):

1) glucose molecule ($C_6H_{12}O_6$)	3) water molecule (H_2O)
2) electron	4) carbon atom

 - a) 1, 3, 4, 2
 - b) 2, 1, 3, 4
 - c) 3, 1, 2, 4
 - d) 4, 1, 3, 2
6. When sugar is dissolved in water, the water is called the:

- a) solution
 - b) solvent
 - c) solute
 - d) syrup
7. A bond that is formed through a sharing of electrons by two atoms is:
- a) impossible
 - b) covalent
 - c) unlikely
 - d) ionic
8. Compounds releasing hydroxyl ions (OH^{-1}) when dissolved in water are:
- a) alcohols
 - b) acids
 - c) salts
 - d) bases
9. When heat is applied to a liquid, the molecules of the liquids:
- a) come closer together
 - b) increase in weight
 - c) are converted to heat energy
 - d) move faster
10. Which of the following is NOT true of an ion?
- a) it has an unequal number of protons and electrons
 - b) it has an electrical charge
 - c) it has the same number of electrons and protons
 - d) it is an atom that has gained or lost electrons
11. If the atomic weight of an element is eight, and if it contains four protons in the nucleus, what else do we know about the atom?
- a) there are eight electrons in its shell
 - b) the atomic number is eight
 - c) there are four electrons in the nucleus
 - d) there are four neutrons in the nucleus
12. Many hydrogen ions will be yielded by:
- a) strong acids
 - b) weak bases
 - c) strong bases
 - d) weak acids

For questions 13-15 indicate whether the following are:

- a) atoms

- b) molecules
- c) ions

13. CO₂ _____

14. H⁺ _____

15. O _____

Answers

- | | |
|--------|---------|
| 1. (a) | 9. (d) |
| 2. (d) | 10. (c) |
| 3. (b) | 11. (d) |
| 4. (b) | 12. (a) |
| 5. (a) | 13. (b) |
| 6. (b) | 14. (c) |
| 7. (b) | 15. (a) |
| 8. (d) | |