

Review of Practice Comp #1

Correct 20% of the time

7. A substance has been identified as an ionic compound. As such it can be expected to _____.
- A. Have a low melting point.
 - B. Increase the electrical conductivity of water.
 - C. Be malleable. In other words, it can be dented.
 - D. Share electrons between atoms.

Practice Problem.

- A substance has been identified as a covalent compound. As such, it can be expected to _____.
- A. Completely transfer electrons from from one atom to another.
 - B. Have a high melting point.
 - C. Be soft.
 - D. Be brittle.

Correct 32% of the time

6. A particular substance is brittle and has a very high melting point. This substance is most likely to be a(n) _____ .
- A. Ionic compound
 - B. Covalent compound
 - C. Metal
 - D. Gas

Practice Problem

A particular substance is shiny and dents when hit with a hammer (malleable). This substance is most likely to be a(n) _____ .

- E. Ionic compound
- F. Covalent compound
- G. Metal
- H. Gas

Correct 37% of the time

2. How many neutrons are in the following carbon atom, ${}^{14}_6\text{C}^{-4}$?

- A. Fourteen
- B. Eight
- C. Six
- D. Twenty

Practice problem

How many electrons are in the following sulfur ion, ${}^{33}_{16}\text{S}^{2-}$?

- A. 33
- B. 16
- C. 18
- D. 17

Correct 43% of the time

13. An atom has one valence electron. It is most likely to be a(n) _____.
- A. Nonmetal
 - B. Midichlorian
 - C. Metalloid
 - D. Metal

Practice Problem

A neutral atom has seven valence electrons. It is mostly likely to be a _____.

- A. Metal
- B. Nonmetal
- C. Metalloid
- D. Midichlorian

Correct 53% of the time

10. A covalent compound is likely to _____.
- A. Have a have a low boiling point.
 - B. Be brittle.
 - C. Be hard.
 - D. Completely transfer electrons from one atom to another creating ions.

Practice Problem

An ionic compound is likely to _____.

- A. Be soft.
- B. Be lustrous (be shiny)
- C. Be malleable.
- D. Increase the electrical conductivity of

Correct 56% of the time

22. A sample of aluminum nitrate has a mass of 891 g. How many moles is this?
- A. 4.18 moles
 - B. 15.6 moles
 - C. 5.9 moles
 - D. 4.6 moles

Practice Problem

A sample of calcium phosphate has a mass of 720 g. How many moles is this?

- A. 5.3 moles
- B. 2.3 moles
- C. 2.6 moles
- D. 4.3×10^{26} moles