Living World 9th edition Johnson Test Bank

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Chapter 02 Test Bank

Multiple Choice Questions

1. The nucleus of an atom is composed of two subatomic particles, _____ and _____.

   A. protons; neutrons
   B. protons; electrons
   C. neutrons; electrons

2. Atoms that bear a positive or negative charge are known as:

   A. magnetic
   B. electrically neutral
   C. ions
   D. lacking nuclei

3. The _____ of atoms determine how atoms will react with each other.

   A. protons
   B. neutrons
   C. nuclei
   D. electrons

4. In a neutral atom, the number of protons are equal to the number of:

   A. electrons
   B. neutrons
   C. ions
   D. the atomic mass

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5. The volume of space around a nucleus where an electron is most likely to be located is called the _____ of that electron.

A. energy level
B. spin
C. pathway
D. orbital

6. Electrons possess energy of position, also known as _____ energy.

A. kinetic
B. latent
C. potential
D. opposition

7. Most elements in nature exist as:

A. solitary unreactive atoms
B. mixtures of different isotopes
C. mixtures of gases
D. mixtures of liquids

8. What is true about the half-life of ^{14}C?

A. It takes 5,730 years for half of ^{14}C to be converted to ^{14}N.
B. The half-life never changes over time.
C. It can be employed in the radioisotopic dating of fossils.
D. All of these are correct.

9. When an electron is transferred from one atom to the next, and the two atoms are then electrically attracted to one another, the type of bond is a(n) _____ bond.

A. hydrogen
B. covalent
C. kinetic
D. ionic

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10. The type of bond that forms between two atoms when electrons are shared is a(n) _____ bond.

A. hydrogen
B. covalent
C. kinetic
D. ionic

11. _____ bonds are needed for complex shapes of large organic molecules.

A. Directional
B. Nondirectional
C. Stationary
D. Ionic

12. What property of water is *not* attributable to hydrogen bonding between water molecules?

A. heat storage
B. ice formation
C. polarity
D. cohesion

13. A solution with a pH of 4 has _____ the concentration of H^+ present compared to a solution with a pH of 5.

A. 10 times
B. 100 times
C. 2 times
D. 1000 times

14. The mass number of an atom is:

A. the number of neutrons only
B. the number of electrons plus the number of protons
C. the number of protons only
D. the number of protons plus the number of neutrons
E. the number of electrons, plus the number of neutrons, plus the number of protons

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15. The atomic number of an atom is the:

A. number of neutrons only
B. number of electrons plus the number of protons
C. number of protons only
D. number of protons plus the number of neutrons
E. number of electrons, plus the number of neutrons, plus the number of protons

16. The first shell in any atom contains one orbital which may contain as many as:

A. 2 electrons
B. 8 protons
C. 8 electrons
D. 4 neutrons
E. 2 neutrons

17. The second shell in an atom contains _____ orbitals and holds up to _____ electrons.

A. 4; 4
B. 3; 2
C. 4; 8
D. 3; 8
E. 8; 24

18. If an element has an atomic number of 6 and a mass number of 14, how many neutrons does it have?

A. 6
B. 14
C. 7
D. 8
E. impossible to determine

19. Which is *not* correct about water molecules?

A. Hydrogen is more electronegative than oxygen.
B. Water is a polar molecule.
C. Covalent bonds exist within a water molecule.
D. Hydrogen bonds exist between water molecules.
E. Hydrogen bonds are weak bonds.

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20. Which type of chemical bond exists within a water molecule?

A. hydrogen
B. ionic
C. covalent
D. It depends on the temperature of the water.
E. weak

21. Water moving up into a paper towel is attributable to:

A. heat storage
B. high heat of vaporization
C. electronegativity
D. cohesion
E. adhesion

22. The high surface tension of water that allows some insects to literally walk on water is because of:

A. high heat of vaporization
B. cohesion
C. adhesion
D. polar covalent bonds
E. heat storage

23. Which statement is *incorrect* about acid rain?

A. It comes from the tall stacks of coal-burning power plants.
B. Its effects have been more devastating to the Southeast than the Northeast.
C. Sulfuric acid in the atmosphere is carried back to earth with rain.
D. It has resulted in lakes becoming devoid of life.
E. In 1989, rain and snow in the Northeast often had a pH as low as 2.

True / False Questions

24. Hydrogen bonds exist within a water molecule.

True False

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25. Nonpolar molecules are water soluble.

True False

26. A solution of pH 3 is 100 times more acidic than a solution of pH 5.

True False

Fill in the Blank Questions

27. The number of protons in the nucleus of an atom is called the _____.

_____

28. Atomic mass refers to the sum of the number of _____ and _____ of an atom.

_____

29. Atoms that have the same number of protons but differ in their number of neutrons are _____.

_____

30. Nonpolar compounds are defined as _____ because they do not form bonds with water.

_____

31. When water ionizes, the negatively charged OH- fragment is the _____ ion.

_____

32. The _____ scale is used to measure concentrations of hydrogen ions in a solution.

_____

33. A solution with a pH of 3 is highly _____.

_____

34. Cells contain chemical substances called _____ that minimize changes in concentrations of H^+ and OH^-.

_____

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35. The chemical bond within a water molecule is a _____ bond.

_____

36. Hydrogen bonding causes ice to be _____ dense than liquid water.

_____

37. A substance that increases the concentration of H^+ is called a(n) _____.

_____

Essay Questions

38. What are two of the characteristics of water that make it so important in living organisms?

39. What are some of the uses of radioactive isotopes?

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40. Discuss the difference between covalent, ionic, and hydrogen bonds.

41. What is acid rain and how does it affect forests and lakes?

42. Describe the structure of an atom, and include how the number of electrons in the outer shell will affect an atom's tendency to interact with other atoms.

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Multiple Choice Questions

43.

One of the buffers that contribute to pH stability in human blood is carbonic acid (H_2CO_3). Carbonic acid is a weak acid that dissociates into a bicarbonate ion (HCO_3-) and a hydrogen ion (H+). Thus,

$H_2CO_3 \leftrightarrow HCO_3^- + H^+$

If the pH of the blood drops, one would expect:

A. a decrease in the concentration of H_2CO_3 and an increase in the concentration of HCO_3-
B. the concentration of hydroxide ion (OH-) to increase
C. the concentration of bicarbonate ion (HCO_3-) to increase
D. the HCO_3- to act as a base and remove excess H+ with the formation of H_2CO_3
E. the HCO_3- to act as an acid and remove excess H+ with the formation of H_2CO_3

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Chapter 02 Test Bank Key

Multiple Choice Questions

1. The nucleus of an atom is composed of two subatomic particles, _____ and _____.

A. protons; neutrons
B. protons; electrons
C. neutrons; electrons
The nucleus of an atom is composed of two subatomic particles, protons and neutrons.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.01.01 Describe the basic structure of an atom, naming its particles.
Section: 02.01
Topic: Atomic Structure

2. Atoms that bear a positive or negative charge are known as:

A. magnetic
B. electrically neutral
C. ions
D. lacking nuclei
Atoms that bear a positive or negative charge are known as ions.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.02.01 Define ion, differentiating between cations and anions.
Section: 02.02
Topic: Atomic Structure

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3. The _____ of atoms determine how atoms will react with each other.

A. protons
B. neutrons
C. nuclei
D. electrons
The electrons of atoms determine how atoms will react with each other.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.01.02 Explain how electrons carry energy.
Section: 02.01
Topic: Atomic Structure

4. In a neutral atom, the number of protons are equal to the number of:

A. electrons
B. neutrons
C. ions
D. the atomic mass
In a neutral atom, the number of protons are equal to the number of electrons.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.01.02 Explain how electrons carry energy.
Section: 02.01
Topic: Atomic Structure

5. The volume of space around a nucleus where an electron is most likely to be located is called the _____ of that electron.

A. energy level
B. spin
C. pathway
D. orbital
The volume of space around a nucleus where an electron is most likely to be located is called the orbital of that electron.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.01.02 Explain how electrons carry energy.
Section: 02.01

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6. Electrons possess energy of position, also known as _____ energy.

A. kinetic
B. latent
C. potential
D. opposition

Electrons possess energy of position, also known as potential energy.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.01.02 Explain how electrons carry energy.
Section: 02.01
Topic: Atomic Structure

7. Most elements in nature exist as:

A. solitary unreactive atoms
B. mixtures of different isotopes
C. mixtures of gases
D. mixtures of liquids

Most elements in nature exist as mixtures of different isotopes.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.02.02 Differentiate between an ion and an isotope.
Section: 02.02
Topic: Atomic Structure

8. What is true about the half-life of ^{14}C?

A. It takes 5,730 years for half of ^{14}C to be converted to ^{14}N.
B. The half-life never changes over time.
C. It can be employed in the radioisotopic dating of fossils.
D. All of these are correct.

It takes 5,730 years for half of ^{14}C to be converted to ^{14}N. The half-life never changes over time and it can be employed in the radioisotopic dating of fossils.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand

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Learning Objective: 02.02.03 Explain why 14C radioisotopic dating cannot be used to date dinosaur fossils.
Section: 02.02
Topic: Atomic Structure

9. When an electron is transferred from one atom to the next, and the two atoms are then electrically attracted to one another, the type of bond is a(n) _____ bond.

A. hydrogen
B. covalent
C. kinetic
D. ionic
When an electron is transferred from one atom to the next, and the two atoms are then electrically attracted to one another, the type of bond is an ionic bond.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.03.01 Explain why ionic bonds promote crystal formation.
Section: 02.03
Topic: Chemical Bonds

10. The type of bond that forms between two atoms when electrons are shared is a(n) _____ bond.

A. hydrogen
B. covalent
C. kinetic
D. ionic
The type of bond that forms between two atoms when electrons are shared is a covalent bond.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.03.02 Distinguish between polar and nonpolar covalent bonds.
Section: 02.03
Topic: Chemical Bonds

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11. _____ bonds are needed for complex shapes of large organic molecules.

A. Directional
B. Nondirectional
C. Stationary
D. Ionic

Directional bonds are needed for complex shapes of large organic molecules.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.03.02 Distinguish between polar and nonpolar covalent bonds.
Section: 02.03
Topic: Chemical Bonds

12. What property of water is *not* attributable to hydrogen bonding between water molecules?

A. heat storage
B. ice formation
C. polarity
D. cohesion

The polarity of water is NOT attributable to hydrogen bonding between water molecules.

Accessibility: Keyboard Navigation
Blooms Level: 3. Apply
Learning Objective: 02.04.01 List and describe the five general properties of water.
Section: 02.04
Topic: Properties of Water

13. A solution with a pH of 4 has _____ the concentration of H^+ present compared to a solution with a pH of 5.

A. 10 times
B. 100 times
C. 2 times
D. 1000 times

A solution with a pH of 4 has 10 times the concentration of H^+ present compared to a solution with a pH of 5.

Accessibility: Keyboard Navigation
Blooms Level: 3. Apply
Learning Objective: 02.05.02 Predict the change in H ion concentration represented by a difference of 1 on the pH scale.
Section: 02.05
Topic: Acids and Bases

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14. The mass number of an atom is:

A. the number of neutrons only
B. the number of electrons plus the number of protons
C. the number of protons only
D. the number of protons plus the number of neutrons
E. the number of electrons, plus the number of neutrons, plus the number of protons

The mass number of an atom is the number of protons plus the number of neutrons.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.01.01 Describe the basic structure of an atom, naming its particles.
Section: 02.01
Topic: Atomic Structure

15. The atomic number of an atom is the:

A. number of neutrons only
B. number of electrons plus the number of protons
C. number of protons only
D. number of protons plus the number of neutrons
E. number of electrons, plus the number of neutrons, plus the number of protons

The atomic number of an atom is the number of protons only.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.01.01 Describe the basic structure of an atom, naming its particles.
Section: 02.01
Topic: Atomic Structure

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16. The first shell in any atom contains one orbital which may contain as many as:

A. 2 electrons
B. 8 protons
C. 8 electrons
D. 4 neutrons
E. 2 neutrons

The first shell in any atom contains one orbital which may contain as many as 2 electrons.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.01.02 Explain how electrons carry energy.
Section: 02.01
Topic: Atomic Structure

17. The second shell in an atom contains _____ orbitals and holds up to _____ electrons.

A. 4; 4
B. 3; 2
C. 4; 8
D. 3; 8
E. 8; 24

The second shell in an atom contains 4 orbitals and holds up to 8 electrons.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.01.02 Explain how electrons carry energy.
Section: 02.01
Topic: Atomic Structure

18. If an element has an atomic number of 6 and a mass number of 14, how many neutrons does it have?

A. 6
B. 14
C. 7
D. 8
E. impossible to determine

If an element has an atomic number of 6 and a mass number of 14, then it is has 8 neutrons.

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Blooms Level: 3. Apply
Learning Objective: 02.01.01 Describe the basic structure of an atom, naming its particles.
Section: 02.01
Topic: Atomic Structure

19. Which is *not* correct about water molecules?

A. Hydrogen is more electronegative than oxygen.
B. Water is a polar molecule.
C. Covalent bonds exist within a water molecule.
D. Hydrogen bonds exist between water molecules.
E. Hydrogen bonds are weak bonds.
Hydrogen is less electronegative than oxygen.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.04.01 List and describe the five general properties of water.
Section: 02.04
Topic: Chemical Bonds
Topic: Properties of Water

20. Which type of chemical bond exists within a water molecule?

A. hydrogen
B. ionic
C. covalent
D. It depends on the temperature of the water.
E. weak
Covalent bonds exists within a water molecule.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.04.01 List and describe the five general properties of water.
Section: 02.04
Topic: Chemical Bonds
Topic: Properties of Water

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21. Water moving up into a paper towel is attributable to:

A. heat storage
B. high heat of vaporization
C. electronegativity
D. cohesion
E. adhesion

Water moving up into a paper towel is attributable to adhesion.

Accessibility: Keyboard Navigation
Blooms Level: 3. Apply
Learning Objective: 02.04.01 List and describe the five general properties of water.
Section: 02.04
Topic: Properties of Water

22. The high surface tension of water that allows some insects to literally walk on water is because of:

A. high heat of vaporization
B. cohesion
C. adhesion
D. polar covalent bonds
E. heat storage

The high surface tension of water that allows some insects to literally walk on water is because of cohesion.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.04.01 List and describe the five general properties of water.
Section: 02.04
Topic: Properties of Water

23. Which statement is *incorrect* about acid rain?

A. It comes from the tall stacks of coal-burning power plants.
B. Its effects have been more devastating to the Southeast than the Northeast.
C. Sulfuric acid in the atmosphere is carried back to earth with rain.
D. It has resulted in lakes becoming devoid of life.
E. In 1989, rain and snow in the Northeast often had a pH as low as 2.

Its effects have been more devastating to the Northeast than the Southeast.

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Blooms Level: 2. Understand
Learning Objective: 02.05.02 Predict the change in H ion concentration represented by a difference of 1 on the pH scale.
Section: 02.05
Topic: Acids and Bases

True / False Questions

24. Hydrogen bonds exist within a water molecule.

FALSE
Hydrogen bonds exist between water molecules.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.04.01 List and describe the five general properties of water.
Section: 02.04
Topic: Chemical Bonds
Topic: Properties of Water

25. Nonpolar molecules are water soluble.

FALSE
Nonpolar molecules are not water soluble.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.03.02 Distinguish between polar and nonpolar covalent bonds.
Section: 02.03
Topic: Properties of Water

26. A solution of pH 3 is 100 times more acidic than a solution of pH 5.

TRUE
A solution of pH 3 is 100 times more acidic than a solution of pH 5.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.05.02 Predict the change in H ion concentration represented by a difference of 1 on the pH scale.
Section: 02.05
Topic: Acids and Bases

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Fill in the Blank Questions

27. The number of protons in the nucleus of an atom is called the _____.

atomic number

The number of protons in the nucleus of an atom is called the atomic number.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.01.01 Describe the basic structure of an atom, naming its particles.
Section: 02.01
Topic: Atomic Structure

28. Atomic mass refers to the sum of the number of _____ and _____ of an atom.

protons, neutrons *or*
neutrons, protons

Atomic mass refers to the sum of the number of protons and neutrons of an atom.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.01.01 Describe the basic structure of an atom, naming its particles.
Section: 02.01
Topic: Atomic Structure

29. Atoms that have the same number of protons but differ in their number of neutrons are _____.

isotopes

Atoms that have the same number of protons but differ in their number of neutrons are isotopes.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.02.02 Differentiate between an ion and an isotope.
Section: 02.02
Topic: Atomic Structure

30. Nonpolar compounds are defined as _____ because they do not form bonds with water.

hydrophobic

Nonpolar compounds are hydrophobic because they do not form bonds with water.

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Blooms Level: 1. Remember
Learning Objective: 02.03.02 Distinguish between polar and nonpolar covalent bonds.
Section: 02.03
Topic: Chemical Bonds

31. When water ionizes, the negatively charged OH- fragment is the _____ ion.

hydroxide

When water ionizes, the negatively charged OH- fragment is the hydroxide ion.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.05.01 Distinguish between a hydrogen ion and a hydroxide ion.
Section: 02.05
Topic: Acids and Bases
Topic: Properties of Water

32. The _____ scale is used to measure concentrations of hydrogen ions in a solution.

pH

The pH scale is used to measure concentrations of hydrogen ions in a solution.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.05.02 Predict the change in H ion concentration represented by a difference of 1 on the pH scale.
Section: 02.05
Topic: Acids and Bases

33. A solution with a pH of 3 is highly _____.

acidic

A solution with a pH of 3 is highly acidic.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.05.01 Distinguish between a hydrogen ion and a hydroxide ion.
Section: 02.05
Topic: Acids and Bases

34. Cells contain chemical substances called _____ that minimize changes in concentrations of H^+ and OH^-.

buffers

Cells contain chemical substances called buffers that minimize changes in concentrations of H^+ and OH^-.

Accessibility: Keyboard Navigation

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Blooms Level: 1. Remember
Learning Objective: 02.05.03 Explain how a buffer maintains a constant pH.
Section: 02.05
Topic: Acids and Bases

35. The chemical bond within a water molecule is a _____ bond.

covalent

The chemical bond within a water molecule is a covalent bond.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.04.01 List and describe the five general properties of water.
Section: 02.04
Topic: Chemical Bonds

36. Hydrogen bonding causes ice to be _____ dense than liquid water.

less

Hydrogen bonding causes ice to be less dense than liquid water.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.04.01 List and describe the five general properties of water.
Section: 02.04
Topic: Chemical Bonds
Topic: Properties of Water

37. A substance that increases the concentration of H^+ is called a(n) _____.

acid

A substance that increases the concentration of H^+ is called an acid.

Accessibility: Keyboard Navigation
Blooms Level: 1. Remember
Learning Objective: 02.05.01 Distinguish between a hydrogen ion and a hydroxide ion.
Section: 02.05
Topic: Acids and Bases

Essay Questions

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38. What are two of the characteristics of water that make it so important in living organisms?

Water is a polar molecule, and can form hydrogen bonds. These two characteristics are responsible for the properties of high polarity, heat-storing ability, high heat of vaporization, low density of ice, and cohesion.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.04.01 List and describe the five general properties of water.
Section: 02.04
Topic: Properties of Water

39. What are some of the uses of radioactive isotopes?

Some uses of radioactive isotopes are medical tests and fossil dating.

Accessibility: Keyboard Navigation
Blooms Level: 3. Apply
Learning Objective: 02.02.03 Explain why 14C radioisotopic dating cannot be used to date dinosaur fossils.
Section: 02.02
Topic: Atomic Structure

40. Discuss the difference between covalent, ionic, and hydrogen bonds.

Covalent bonds involve sharing electrons between atoms. Ionic bonds occur when oppositely charged ions are attracted to each other. Hydrogen bonds occur when polar molecules are attracted by opposite partial charges on different molecules.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Blooms Level: 4. Analyze
Learning Objective: 02.03.01 Explain why ionic bonds promote crystal formation.
Learning Objective: 02.03.02 Distinguish between polar and nonpolar covalent bonds.
Learning Objective: 02.03.03 Explain why hydrogen bonds cannot form stable molecules.
Section: 02.03
Topic: Chemical Bonds

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41. What is acid rain and how does it affect forests and lakes?

Will vary, but should include the emissions of coal-burning power plants and the effect of sulfuric acid on the pH of rain and snow. Also, answers should include acid rain's effect on biodiversity, forests, and lakes.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.05.01 Distinguish between a hydrogen ion and a hydroxide ion.
Section: 02.05
Topic: Acids and Bases

42. Describe the structure of an atom, and include how the number of electrons in the outer shell will affect an atom's tendency to interact with other atoms.

Atoms contain protons (positively charged), and neutrons (neutral) in their nucleus. Electrons are in electron shells around the nucleus. Each orbital holds a maximum of 2 electrons and atoms try to fill their outer shells with electrons.

Accessibility: Keyboard Navigation
Blooms Level: 2. Understand
Learning Objective: 02.01.01 Describe the basic structure of an atom, naming its particles.
Section: 02.01
Topic: Atomic Structure

Multiple Choice Questions

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43.

One of the buffers that contribute to pH stability in human blood is carbonic acid (H_2CO_3). Carbonic acid is a weak acid that dissociates into a bicarbonate ion (HCO_3-) and a hydrogen ion (H+). Thus,

$H_2CO_3 \leftrightarrow HCO_3^- + H^+$

If the pH of the blood drops, one would expect:

A. a decrease in the concentration of H_2CO_3 and an increase in the concentration of HCO_3-
B. the concentration of hydroxide ion (OH-) to increase
C. the concentration of bicarbonate ion (HCO_3-) to increase
D. the HCO_3- to act as a base and remove excess H+ with the formation of H_2CO_3
E. the HCO_3- to act as an acid and remove excess H+ with the formation of H_2CO_3

Whenever there is a drop in the pH, the role of HCO_3- is to act as a base and remove excess H+ with the formation of H_2CO_3.

Accessibility: Keyboard Navigation
Blooms Level: 3. Apply
Learning Objective: 02.05.03 Explain how a buffer maintains a constant pH.
Section: 02.05
Topic: Acids and Bases

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