حل مراجعة اختيار من متعدد منهج انسباير

تم تحميل هذا الملف من موقع المناهج الإماراتية	
موقع المناهج ⇦ المناهج الإماراتية ⇦ الصف التاسع المتقدم ⇦ علوم ⇦ الفصل الأول ⇦ ملفات متنوعة ⇦ الملف	
تاريخ إضافة الملف على موقع المناهج: 2025-11-27 16:25:36	
المزيد من مادة علوم:	ملفات ا كتب للمعلم ا كتب للطالب ا اختبارات الكترونية ا اختبارات ا حلول ا عروض بوربوينت ا أوراق عمل منهج انجليزي ا ملخصات وتقارير ا مذكرات وبنوك ا الامتحان النهائي ا للمدرس

التواصل الاجتماعي بحسب الصف التاسع المتقدم					
صفحة المناهج الإماراتية على فيسبوك					
المواد على تلغرام	التربية الاسلامية	اللغة العربية	اللغة الانجليزية	الرياضيات	

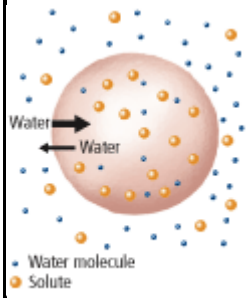
المزيد من الملفات بحسب الصف التاسع المتقدم والمادة علوم في الفصل الأول	
1	حل كراسة تدريبية مراجعة وفق الهيكل الوزاري الجديد منهج بريدج
2	حل مراجعة نهائية وفق الهيكل الوزاري الجديد منهج انسباير
3	حل مراجعة عامة وفق منهج انسباير
4	مراجعة نهائية عامة منهج انسباير
5	كراسة تدريبية مراجعة وفق الهيكل الوزاري الجديد منهج بريدج

Chapter 1: Cellular Structure and Function

Chapter Test Practice

1.		Which of the following is not a fundamental idea of cell theory?	
		A)	All organisms contain prokaryotic cells.
		B)	Cells arise only from previously existing cells.
		C)	Cells are the basic unit of structure for all living organisms.
		D)	All living organisms are composed of one or more cells.
2.		A ____ contains polar and nonpolar ends, forming the plasma membrane.	
		A)	microtubule
		B)	transport protein
		C)	cytoskeleton
		D)	phospholipid bilayer
3.		A cell's genetic material is contained in the ____.	
		A)	plasma membrane
		B)	nucleus
		C)	unicellular bacteria
		D)	phospholipid bilayer
4.		In which cell structure are ribosomes produced?	
		A)	microtubules
		B)	nucleolus
		C)	plasma membrane
		D)	golgi apparatus

5. The animal cells below were placed in a hypotonic solution. What happened to the damaged cell?

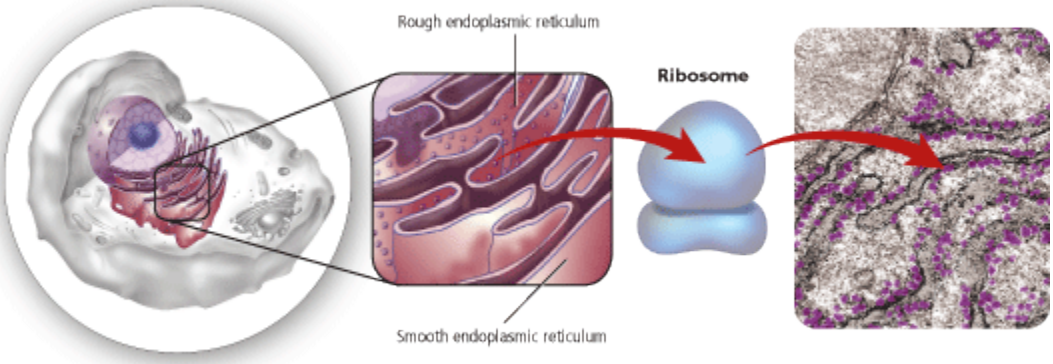


A)	Osmosis was prevented in the cell.
B)	Osmosis caused the cell to shrivel.
C)	Osmotic pressure caused the cell to rupture.
D)	The cell was damaged by bacteria.

6. The semifluid environment inside the plasma membrane is called ____.

A)	endoplastic reticulum
B)	microtubules
C)	cytoplasm
D)	mitochondria

7. This shows an example of endoplasmic reticulum. What is the significance of its structure?



A)	provides a location for DNA production
B)	helps decrease surface area
C)	allows selective permeability of cell membrane
D)	facilitates breakdown of chemical bonds

8. Vesicles that digest worn-out organelles or food particles are called ____.

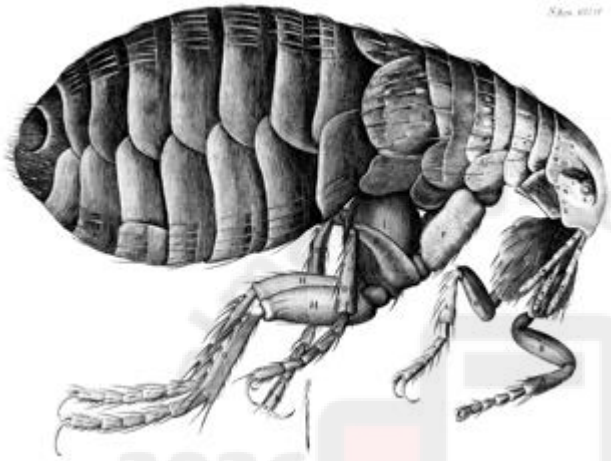
A)	lysosomes
B)	centrioles
C)	ribosomes
D)	plasma membranes

9. What critical function does cholesterol serve in the body?

A)	destroys the plasma membrane
B)	binds fatty acid tails to water
C)	disrupts homeostasis
D)	increases fluidity of plasma membrane

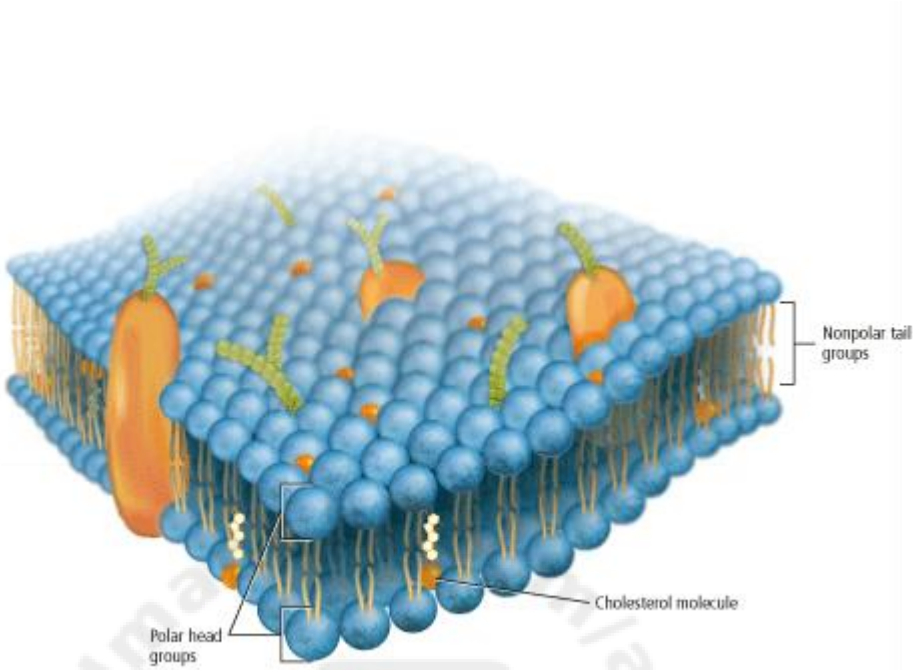
10. What describes transport proteins moving molecules across the plasma membrane?

		A)	diffusion
		B)	osmosis
		C)	dynamic equilibrium
		D)	facilitated diffusion

11.		What did Robert Hooke use to study this organism? 

		A)	light microscope
		B)	electron microscope
		C)	cork chamber
		D)	DNA analysis

12.		What does this depict?



A)	cytoskeleton
B)	fluid mosaic model
C)	impermeable membrane
D)	genetic material

13. What effect has eukaryotic evolution had on cells?

A)	more simplified structures
B)	greater adaptability
C)	eliminated organelles
D)	decreased cell diversity

14. What is one significant disadvantage of scanning and transmission electron microscopes?

A)	cells cannot absorb electrons
B)	not as powerful as light microscopes
C)	cells die when prepared for viewing

		D)	cannot observe plant cells

15.		What is the function of a selectively permeable membrane?	
		A)	provides alternative to phospholipid bilayer
		B)	prevents transport proteins from harming cell
		C)	controls what enters and leaves cell
		D)	blocks all water from entering cell

16.		What moves needed substances or waste materials through the plasma membrane?	
		A)	transport proteins
		B)	polar heads
		C)	DNA
		D)	water molecules

17.		Which of the following is not a function of the Golgi apparatus?	
		A)	modifies proteins
		B)	produces proteins
		C)	organizes where proteins are sent
		D)	packages proteins into vesicles

18.		Which of the following is not true of exocytosis?	
		A)	results in hormone secretion
		B)	does not require energy input
		C)	allows waste matter to be expelled
		D)	occurs at the plasma membrane

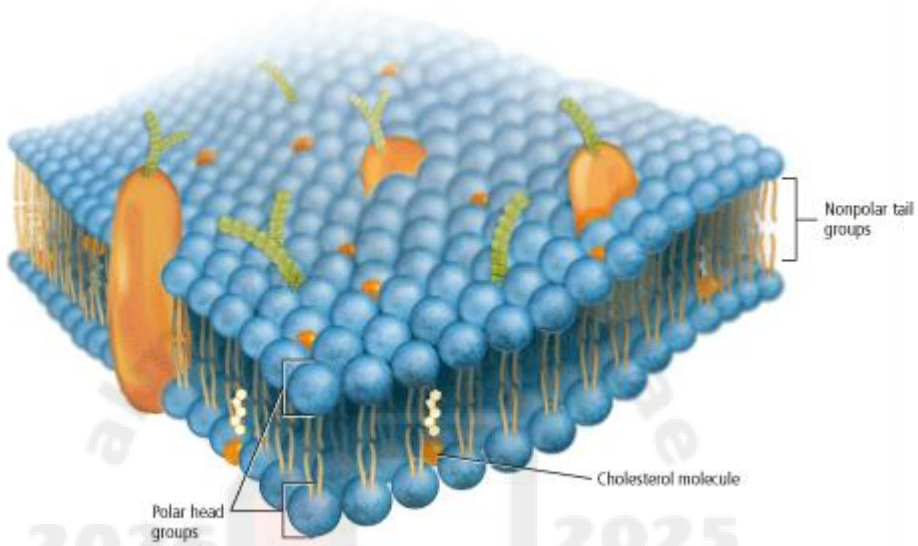
19.		Which of these describes continuous particle movement with no overall change in concentration?	
		A)	selective permeability
		B)	facilitated diffusion
		C)	osmosis
		D)	dynamic equilibrium
20.		Why does misting fruits and vegetables with water help them look fresh?	
		A)	Vacuoles fill with water due to osmosis.
		B)	Plant cells in a hypotonic solution lose water.
		C)	Plants do not have a rigid cell wall.
		D)	Water cannot move through the cell membrane.

Chapter 1: Cellular Structure and Function

Standardized Test Practice

1.		A ____ is the basic structural and functional unit of all living things.	
		A)	eukaryotic cell
		B)	plasma membrane
		C)	nucleus
		D)	cell
2.		Which cellular structure helps control what enters and leaves the cell?	
		A)	cytoplasm
		B)	cytoskeleton
		C)	plasma membrane
		D)	nucleus
3.		Which of the following is not one of the fundamental ideas of cell theory?	
		A)	All cells contain specialized internal structures.
		B)	Cells are the basic unit of structure and organization of all living organisms.
		C)	All living organisms are composed of one or more cells.
		D)	Cells arise only from previously existing cells.
4.		Materials can cross the plasma membrane through tunnels created by ____.	
		A)	organelles
		B)	transport proteins
		C)	water molecules
		D)	glucose molecules

5. This picture shows a phospholipid bylayer. What crucial function do the nonpolar tails of the phospholipids have?



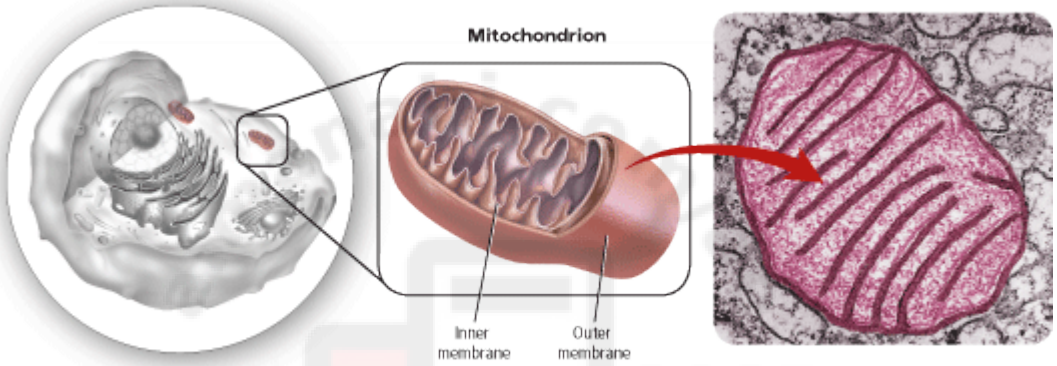
A)	speed chemical reactions with enzymes
B)	keep water-soluble substances from passing easily into the cell
C)	allow water-soluble substances to pass easily into the cell
D)	help encode genetic material

6. Why is the phospholipid bilayer critical to cell function?

A)	It forms a shell around the cell nucleus.
B)	Phospholipids allows water-soluble substances to pass easily into cell.
C)	Transport proteins are blocked from entering plasma membrane.
D)	Arrangement of phospholipids enables selective permeability.

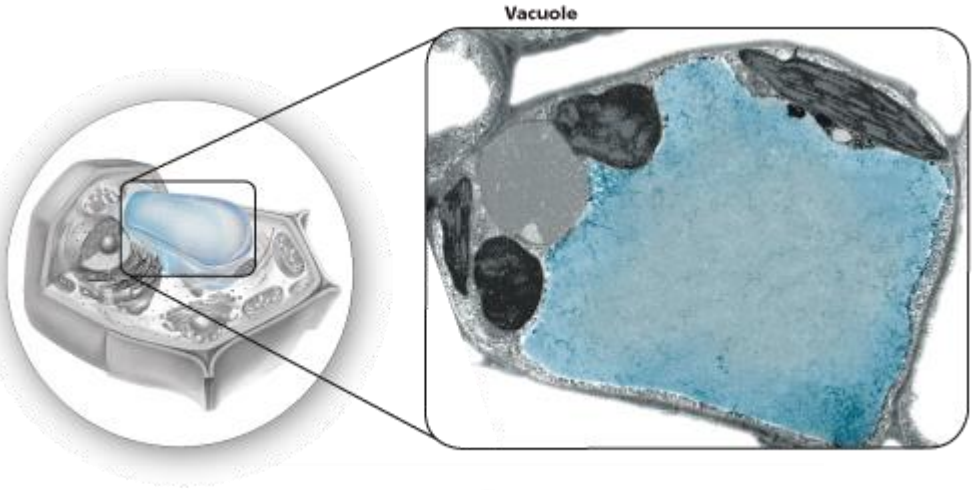
7. The ___ is a network of fibers that form a framework and anchor organelles.

		A)	endoplasmic reticulum
		B)	cytoplasm
		C)	cytoskeleton
		D)	golgi apparatus

8.		Observe the structure of this mitochondrion. Why is its inner membrane crucial for cell functioning? 

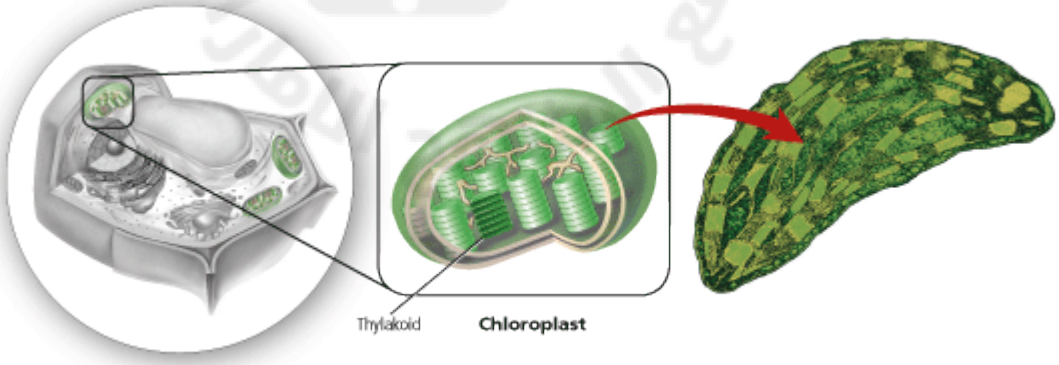
		A)	provides a large surface area
		B)	keeps sunlight from damaging cell
		C)	provides inflexible barrier on cell surface
		D)	promotes photosynthesis

9.		The large compartment shown in the detailed image of this plant cell is a ___.



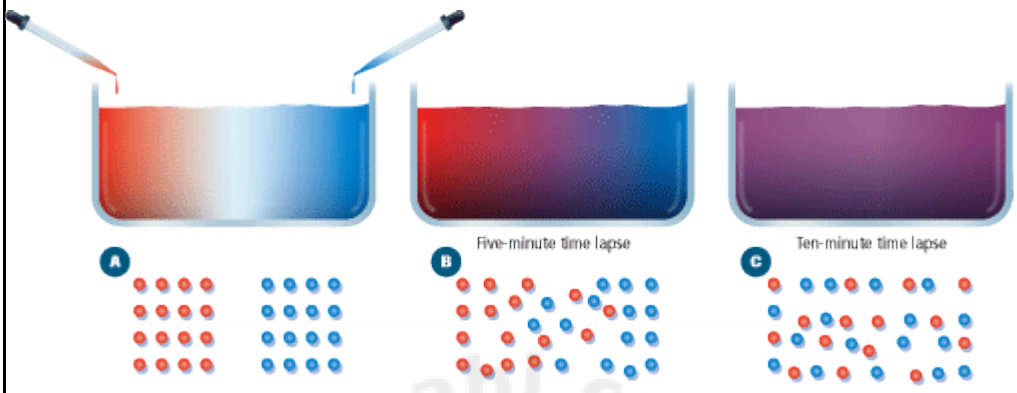
A)	nucleus
B)	vacuole
C)	ribosome
D)	plasma membrane

10. What is the function of the small, disk-shaped thylakoids in this plant cell?



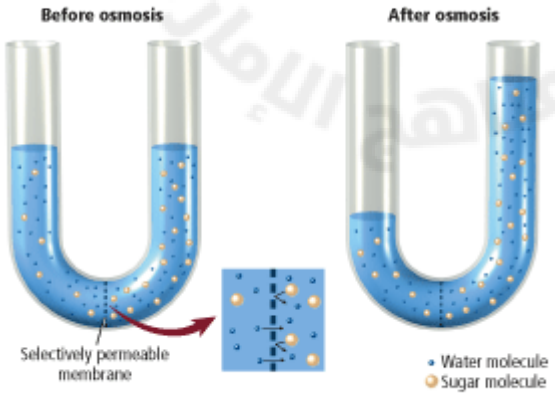
A)	digest enzymes
B)	assist cell movement
C)	store food and enzymes
D)	contain chlorophyll for trapping sunlight

11. The picture shows the movement of ink molecules in water. Which of the following processes has occurred?



A)	endocytosis
B)	osmosis
C)	diffusion
D)	exocytosis

12. This shows a sugar solution with a selectively permeable membrane. What has occurred?



A)	water diffused toward higher sugar concentration
B)	sugar molecules crossed the membrane
C)	water diffused toward lower sugar concentration
D)	water did not cross the membrane

13. How could you prevent cells from bursting in an extremely hypotonic solution?

A)	Allow water to increase osmotic pressure.
B)	Decrease the concentration of solute outside cell.
C)	Increase the concentration of solute outside the cell.
D)	Wait for diffusion to reach equilibrium.

14. How do carrier proteins facilitate active transport?

A)	block the plasma membrane
B)	move substances against a concentration gradient
C)	prevent homeostasis
D)	create an isotonic solution

15. What is a significant difference of endocytosis and exocytosis?

A)	Exocytosis does not require energy input.
B)	Endocytosis does not involve waste secretion.
C)	Endocytosis does not require energy input.
D)	Exocytosis does not maintain homeostasis.

Chapter 2: Chemistry in Biology

Chapter Test Practice

1.		How many different kinds of atoms does an element contain?	
		A)	six
		B)	two
		C)	four
		D)	one
2.		A ____ is a heterogenous mixture in which the particles do not settle.	
		A)	solution
		B)	suspension
		C)	colloid
		D)	solvents
3.		Acid solutions are produced by the release of ____ ions.	
		A)	potassium
		B)	hydrogen
		C)	oxygen
		D)	sodium
4.		Atoms of the same element that have different numbers of neutrons are called ____.	
		A)	isotropes
		B)	compounds
		C)	neutrino elements
		D)	molecules

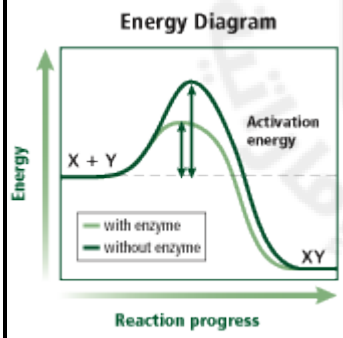
5. How are atoms in molecules held together?

A)	neutron sharing
B)	ionic bonds
C)	proton sharing
D)	covalent bonds

6. How are the water molecules in a raindrop held together?

A)	covalent bonds
B)	van der Waals forces
C)	attraction between positive charges
D)	attraction between negative charges

7. How can enzymes benefit chemical reactions, as shown in this energy diagram?



A)	lowering activation energy
B)	raising activation energy
C)	slowing reactions
D)	increasing the amount of product

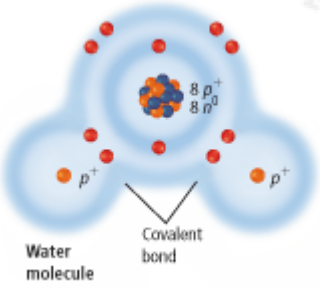
8. How do buffers help maintain homeostasis?

A)	neutralize acids and bases

		B)	raise pH above 9
		C)	lower pH below 4
		D)	remove all hydrogen ions

9.		How do solutes and solvents interact?
	A)	solvents change the properties of solutes
	B)	solvents dissolve in solutes
	C)	solutes change the properties of solvents
	D)	solutes dissolve in solvents

10.		How many electrons does a carbon atom have in its outer energy level?
	A)	four
	B)	two
	C)	six
	D)	eight

11.		In this water molecule, how many electrons does each hydrogen atom share with oxygen? 
	A)	two
	B)	one
	C)	four
	D)	eight

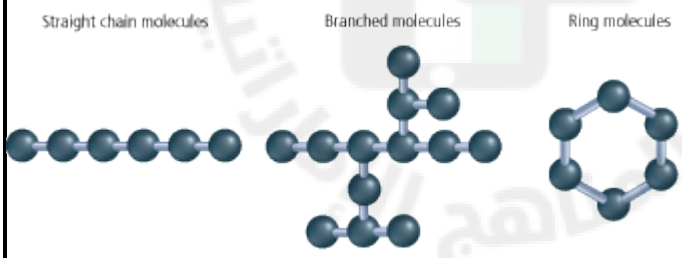
12. Molecules made from units of identical compounds linked by covalent bonds are called ____.

A)	polymers
B)	nucleic acids
C)	elements
D)	atoms

13. The minimum amount of energy needed for a chemical reaction is called ____.

A)	product threshold
B)	absorbent energy
C)	principle mass
D)	activation energy

14. These molecules are formed by ____.



A)	amino acid
B)	phosphorus
C)	carbon
D)	potassium

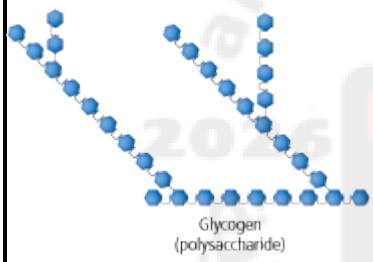
15. What are saturated fats?

A)	lipids with double bonds between carbon atoms

		B)	lipids with single bonds between carbon atoms
		C)	proteins with single bonds between carbon atoms
		D)	proteins with double bonds between carbon atoms

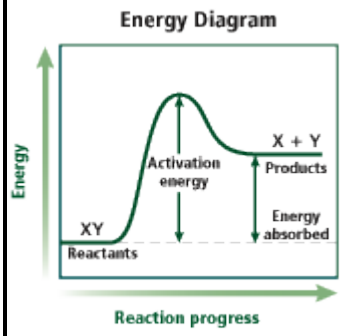
16.		What is the function of the enzyme-substrate complex?

		A)	destroy the enzyme
		B)	prevent bondage at the active site
		C)	stop chemical reactions
		D)	break and forming chemical bonds

17.		What is the structure shown here? 

		A)	elements called carbohydrates
		B)	macromolecules called carbohydrates
		C)	compounds called proteins
		D)	compounds called nucleic acids

18.		What kind of chemical reaction does this energy diagram show?

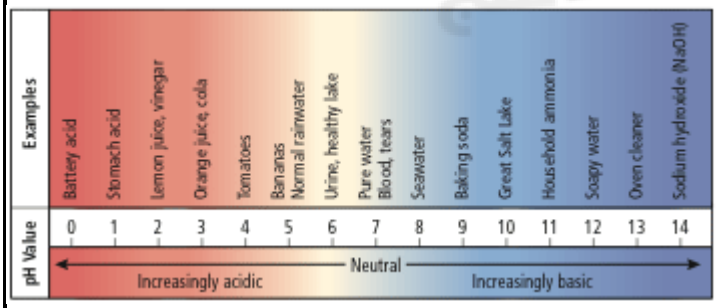


A)	exothermic
B)	endothermic
C)	ionic
D)	mass creating

19. What principle can be applied to all chemical reactions?

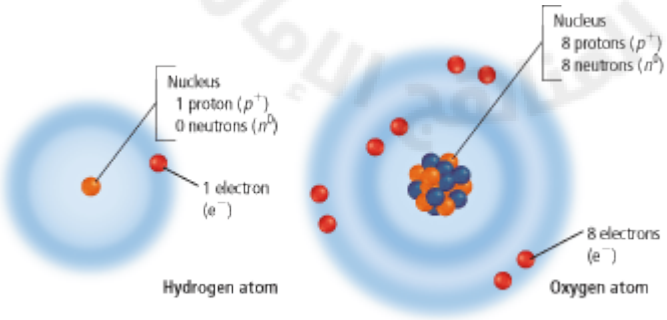
A)	conservation of mass
B)	reactants formed from products
C)	energy loss theory
D)	coefficient principle

20. Which statement is true based on this scale?



A)	Seawater has a higher concentration of hydrogen than tomatoes.
B)	Tomatoes have a higher concentration of hydrogen than seawater.
C)	Blood has no hydrogen ions.
D)	Household ammonia is neutral.

Standardized Test Practice

1.		Matter is composed of tiny particles called ____.	
		A)	oxygen
		B)	atoms
		C)	electrons
		D)	neutrons
2.		Negatively charged particles that move around the nucleus of an atom are called ____.	
		A)	isotopes
		B)	neutrons
		C)	protons
		D)	electrons
3.		Which of the following correctly describes a difference between the two atoms shown here? 	
		A)	Hydrogen has no neutral particles.
		B)	Oxygen has no neutral particles.
		C)	There are no electron-filled energy levels in hydrogen.
		D)	Oxygen has no positively charged particles.

4. Judging from this graph, what are the most abundant elements in living things?

A) nitrogen and calcium
B) hydrogen, carbon, oxygen
C) carbon, sodium, potassium
D) oxygen and sodium

5. How can changing the number of neutrons affect an atom?

A) More neutrons can produce a negative charge.
B) Less neutrons can produce a positive charge.
C) The nucleus can become unstable.
D) Atom can become both positive and negative.

6. A ____ is a special substance that lowers the activation energy needed for a chemical reaction.

A) charged particle
B) nutrient
C) catalyst
D) chemical element

7. The specific location where a substrate binds on an enzyme is called the ____.

A) active site
B) enzyme-substrate complex
C) binding point
D) catalyst

8. What is an important function of the complexes being formed in this picture?

	A)	preventing the formation of chemical bonds
	B)	DNA formation in the active site
	C)	preventing the breakage of chemical bonds
	D)	breaking and formation of chemical bonds

9.		Which statement is true regarding this energy diagram?
	A)	It shows an exothermic reaction.
	B)	It shows an endothermic reaction.
	C)	Product energy is higher than reactant energy.
	D)	Reactant and product energy are equal.

10.		Molecules that have an unequal distribution of charges are called ____.
	A)	enzymes
	B)	polar molecules
	C)	substrate molecules
	D)	solvents

11.		Which of these is not a characteristic of a solution?
	A)	substances retain properties
	B)	homogenous mixture forms
	C)	there is uniform composition
	D)	substances change properties

12.		Fatty molecules containing mostly carbon and hydrogen are called ____.

		A)	enzymes
		B)	proteins
		C)	lipids
		D)	catalysts
13.		Small compounds that form proteins are called ____.	
		A)	amino acids
		B)	lipids
		C)	carbohydrates
		D)	phospholipids
14.		What is significant about this elemental structure?	
		A)	second energy level can hold sixteen electrons
		B)	prevents carbon from forming molecules
		C)	prevents carbon from binding with oxygen
		D)	allows carbon to form three molecular shapes
15.		These molecules are examples of ____.	
		A)	enzymes
		B)	carbohydrates
		C)	proteins
		D)	inorganic substances