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## حل مراجعة اختيار من متعدد منهج بريدج

موقع المناهج ← المناهج الإماراتية ← الصف العاشر العام ← علوم ← الفصل الأول ← حلول ← الملف

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المزيد من مادة  
علوم:

## التواصل الاجتماعي بحسب الصف العاشر العام



صفحة المناهج  
الإماراتية على  
فيسبوك

الرياضيات

اللغة الانجليزية

اللغة العربية

التربية الاسلامية

المواد على تلغرام

## المزيد من الملفات بحسب الصف العاشر العام والمادة علوم في الفصل الأول

الهيكل الوزاري الجديد المسار العام منهج بريدج

1

ملخص وشرح الدرس الثالث التراكيب والعضيات من الوحدة الأولى

2

ملخص وشرح الدرس الثاني الغشاء البلازمي من الوحدة الأولى

3

ملخص وشرح الدرس الأول اكتشاف الخلية ونظرية الخلية من الوحدة الأولى


4

عرض بوربوينت درس الأوراق

5

# BIOLOGY REVISION-TERM 1

## CHAPTER 1

Q1.	What does the image above show? 
A	A covalent bond
B	A physical property
C	A chemical reaction
D	Van der Waals forces

Q2	Which of these is a pure substance that cannot be broken down by a chemical reaction?
A	A neutron
B	An element
C	A mixture
D	A compound


Q3	Which of the following is a substance that lowers the activation energy?
A	A substrate
B	A catalyst
C	A reactant
D	An anion

Q4	In which of the following are bonds broken and new bonds formed?
A	Chemical reactions
B	Elements
C	Isotopes
D	Polar molecules

Q5	Which statement is true of chemical reactions?
A	Reactants are on the right
B	Products are on the right
C	Products have fewer atoms than reactants
D	Reactants have fewer atoms than products

Q6	What does the image below show? 
A	A heterogeneous mixture
B	A homogeneous mixture
C	A solution
D	A suspension

Q7	Which statement is not true about pure water?
A	It has a pH of 7.0
B	It is composed of polar molecules
C	It is composed of ionic bonds
D	It is a good solvent

Q8	Which is a substance that produces OH <sup>-</sup> ions when it is dissolved in water?
A	A base
B	An acid
C	A buffer
D	A salt

Q9	Which two elements are always found in amino acids?
A	Nitrogen and sulfur
B	Carbon and oxygen
C	Hydrogen and phosphorus
D	Sulfur and oxygen

Q10	Which joins amino acids together?
A	Peptide bonds
B	Hydrogen bonds
C	Van der Waal forces
D	Ionic bonds

Q11	Which substance is not part of a nucleotide?
A	A phosphate
B	A base
C	A sugar
D	Water

Q12	pH is a measure of the concentration of which ions in a solution?
A	Oxygen ions
B	Carbon ions
C	Nitrogen ions
D	Hydrogen ions

Q13	Which of the following are biological catalysts?
A	acids
B	enzymes
C	proteins
D	lipids

Q14	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

Q15	Which statement is true regarding this energy diagram?
A	It shows an exothermic reaction.
B	It shows an endothermic reaction
C	Reactant and product energy are equal
D	Product energy is higher than reactant energy

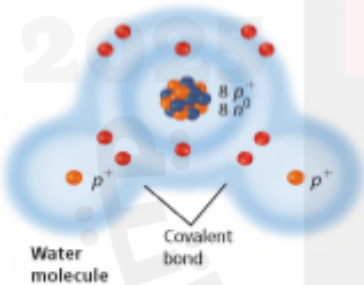
Q16	What is the function of the enzyme-substrate complex?
A	destroy the enzyme
B	prevent bondage at the active site
C	stop chemical reactions
D	break and forming chemical bonds

Q17	What are saturated fats?
A	Lipids with double bonds between carbon atoms
B	proteins with double bonds between carbon atoms
C	lipids with single bonds between carbon atoms
D	proteins with single bonds between carbon atoms

Q18	The minimum amount of energy needed for a chemical reaction is called ____.
A	product threshold
B	absorbent energy
C	principle mass
D	activation energy

Q19	Molecules made from units of identical compounds linked by covalent bonds are called ____.
A	polymers
B	nucleic acids
C	Elements
D	atoms

Q20	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

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

12.	Molecules made from units of identical compounds linked by covalent bonds are called ____.
	A) <b>polymers</b>
	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) <b>activation energy</b>

14.	<p>These molecules are formed by ____.</p> <p style="text-align: center;"> <span style="margin-right: 100px;">Straight chain molecules</span> <span style="margin-right: 100px;">Branched molecules</span> <span>Ring molecules</span> </p> <div style="text-align: center;"> </div>
	A) amino acid
	B) phosphorus
	C) <b>carbon</b>
	D) potassium

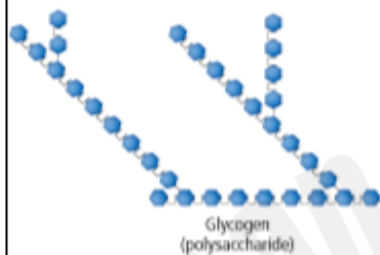
16.

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.

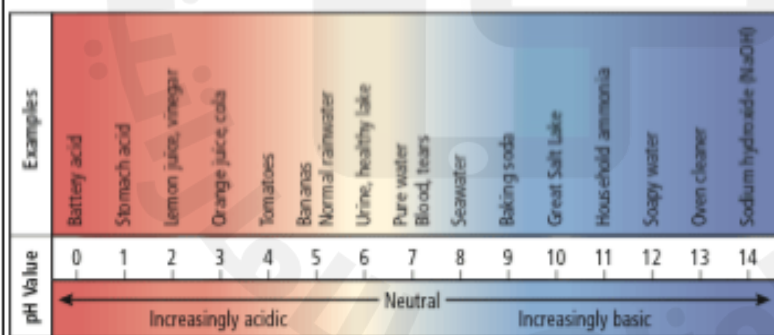
What is the structure shown here?



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

20.

Which statement is true based on this scale?



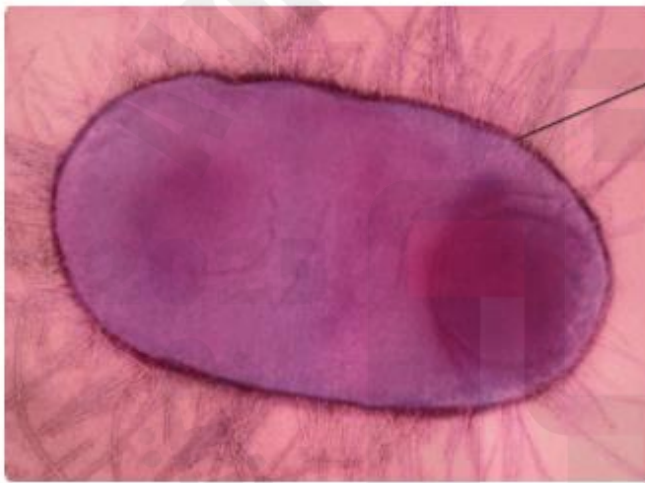
- A) Seawater has a higher concentration of hydrogen than tomatoes.
- B) **Tomatoes have a higher concentration of hydrogen than seawater.**
- C) Blood has no hydrogen ions.
- D) Household ammonia is neutral.

## CHAPTER 2

Q1.	If a microscope has a series of three lenses that magnify individually $5\times$ , $5\times$ , and $7\times$ , what is the total magnification of the microscope?
a.	25x
b.	35x
c.	17x
d.	175x

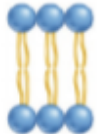
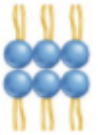
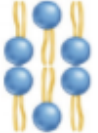

Q2.	Which is not part of the cell theory?
a.	The basic unit of life is the cell.
b.	Cells came from preexisting cells.
c.	All living organisms are composed of cells.
d.	Cells contain membrane-bound organelles.

Use the photo to answer question 3.




Q3.	The photomicrograph shows which kind of cell?
a.	prokaryotic cell
b.	eukaryotic cell
c.	animal cell
d.	plant cell



Q4.	Which of the following orientations of phospholipids best represents the phospholipid bilayer of the plasma membrane?
a.	
b.	
c.	
d.	

Q5.	Which situation would increase the fluidity of a phospholipid bilayer?
a.	decreasing the temperature
b.	increasing the number of proteins
c.	increasing the number of cholesterol molecules
d.	increasing the number of unsaturated fatty acids

	Use the illustration below to answer questions 6 and 7.
	
Q6.	Which number in the illustration represents the location where you would expect to find water-insoluble substances?
a.	1
b.	2
c.	3
d.	4

Q7.	Which is the effect of having the polar and nonpolar ends of phospholipid molecules oriented as they are in the illustration?
a.	It allows transport proteins to move easily through the membrane.
b.	It controls the movement of substances across the membrane.
c.	It helps the cell to maintain its characteristic shape.
d.	It makes more room inside the phospholipid bilayer.

Use the diagram below to answer questions 8 and 9.

The diagram shows a cross-section of a cell nucleus. Labels include: Nuclear pore, Chromatin, Nucleolus, Endoplasmic reticulum, and Ribosome.

Q9.	Which is the site of protein synthesis?
a.	Nuclear pore
b.	Endoplasmic reticulum
c.	chromatin
d.	nucleolus

Q10.	In which structure would you expect to find a cell wall?
a.	Human skin cell
b.	Cell from an oak tree
c.	Blood cell from a cat
d.	Liver cell from a mouse

Q11.	Which is not a factor that effects the rate of diffusion?
a.	conductivity
b.	concentration
c.	pressure
d.	temperature

Q12.	In which type of cell would you find a chloroplast?
a.	prokaryote
b.	animal
c.	plant
d.	fungus

Q13.	Which of the following are called the powerhouses of cells?
a.	Ribosomes
b.	cytoplasm
c.	mitochondria
d.	centrioles

Q14.	How many layers of phospholipid molecules make up the plasma membrane?
a.	3
b.	2
c.	4
d.	1

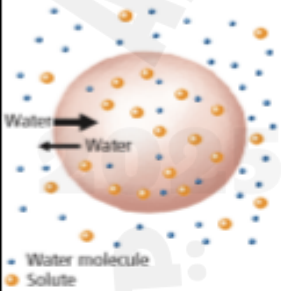
Q15.	Which set of conditions effect the rate of diffusion?
a.	Mass, temperature, and volume
b.	Weight, volume, and pressure
c.	Mass, volume, and concentration
d.	Concentration, temperature, and pressure

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) <b>nucleus</b>
	C) unicellular bacteria
	D) phospholipid bilayer

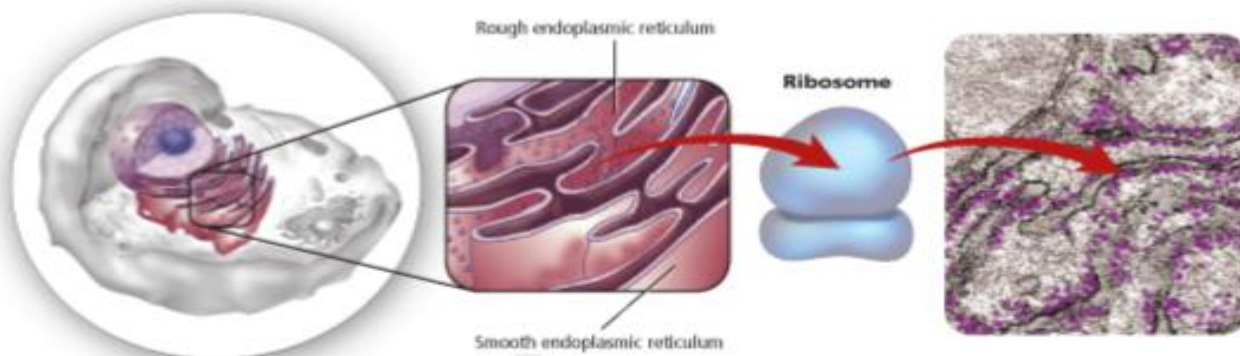
4.	In which cell structure are ribosomes produced?
	A) microtubules
	B) <b>nucleolus</b>
	C) plasma membrane
	D) golgi apparatus

5.	<p>The animal cells below were placed in a hypotonic solution. What happened to the damaged cell?</p> 
	A) Osmosis was prevented in the cell.
	B) Osmosis caused the cell to shrivel.
	C) <b>Osmotic pressure caused the cell to rupture.</b>
	D) The cell was damaged by bacteria.

6.	The semifluid environment inside the plasma membrane is called ____.
	A) endoplasmic reticulum
	B) microtubules
	C) <b>cytoplasm</b>
	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

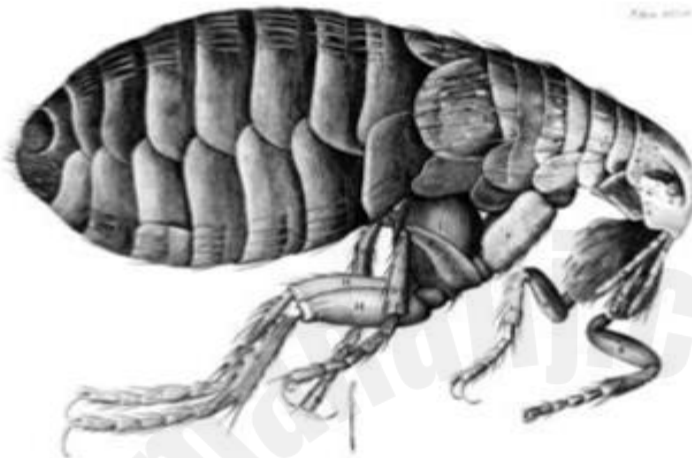
10.

What describes transport proteins moving molecules across the plasma membrane?

	A) diffusion
	B) osmosis
	C) dynamic equilibrium
	D) <b>facilitated diffusion</b>

11.

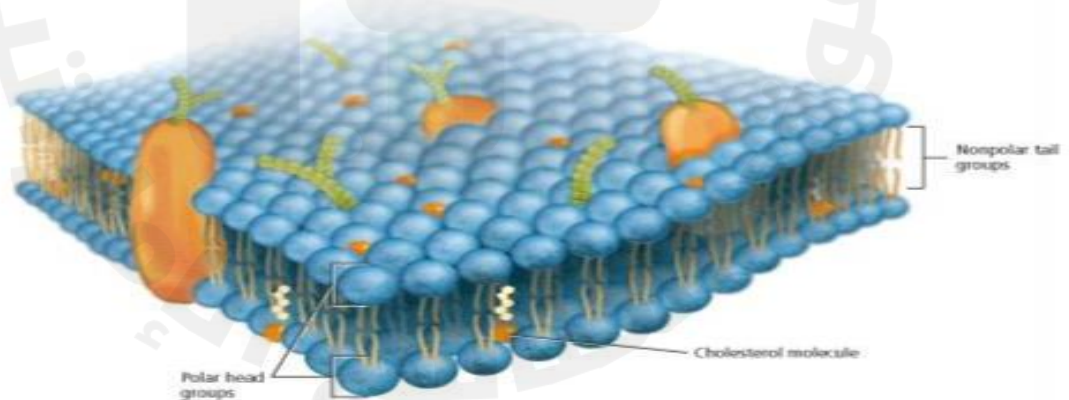
What did Robert Hooke use to study this organism?



	A) <b>light microscope</b>
	B) electron microscope
	C) cork chamber
	D) DNA analysis

12.

What does this depict?



	A) cytoskeleton
	B) <b>fluid mosaic model</b>
	C) impermeable membrane
	D) genetic material

13.	What effect has eukaryotic evolution had on cells?
	A) more simplified structures
	B) <b>greater adaptability</b>
	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) <b>cells die when prepared for viewing</b>

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

16.	What moves needed substances or waste materials through the plasma membrane?
	A) <b>transport proteins</b>
	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) <b>produces proteins</b>
	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) <b>does not require energy input</b>
	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) <b>dynamic equilibrium</b>

20.	Why does misting fruits and vegetables with water help them look fresh?
	A) <b>Vacuoles fill with water due to osmosis.</b>
	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.

1.	A ____ is the basic structural and functional unit of all living things.
	A) eukaryotic cell
	B) plasma membrane
	C) nucleus
	D) <b>cell</b>

2.	Which cellular structure helps control what enters and leaves the cell?
	A) cytoplasm
	B) cytoskeleton
	C) <b>plasma membrane</b>
	D) nucleus



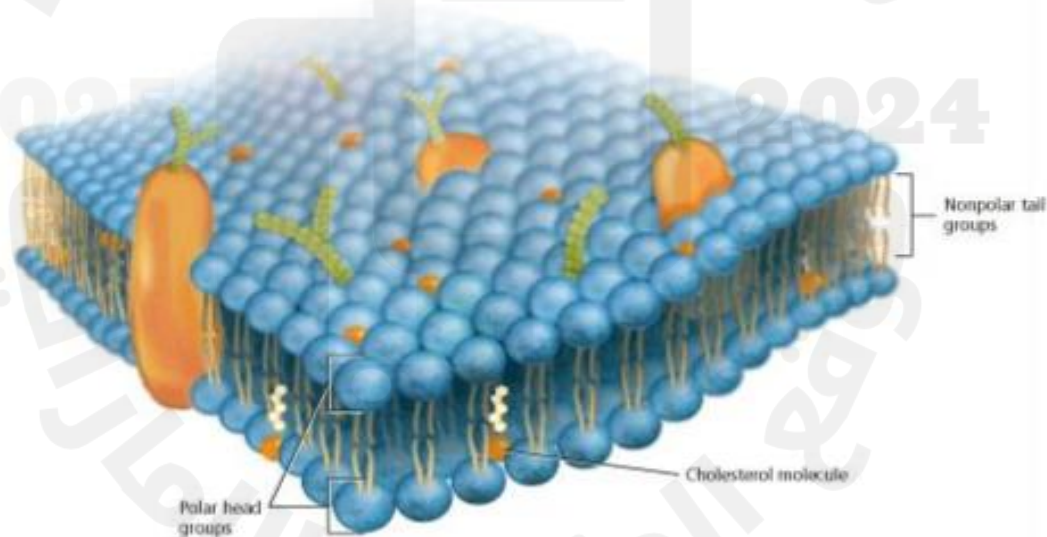
3. Which of the following is not one of the fundamental ideas of cell theory?

- 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 bilayer. 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

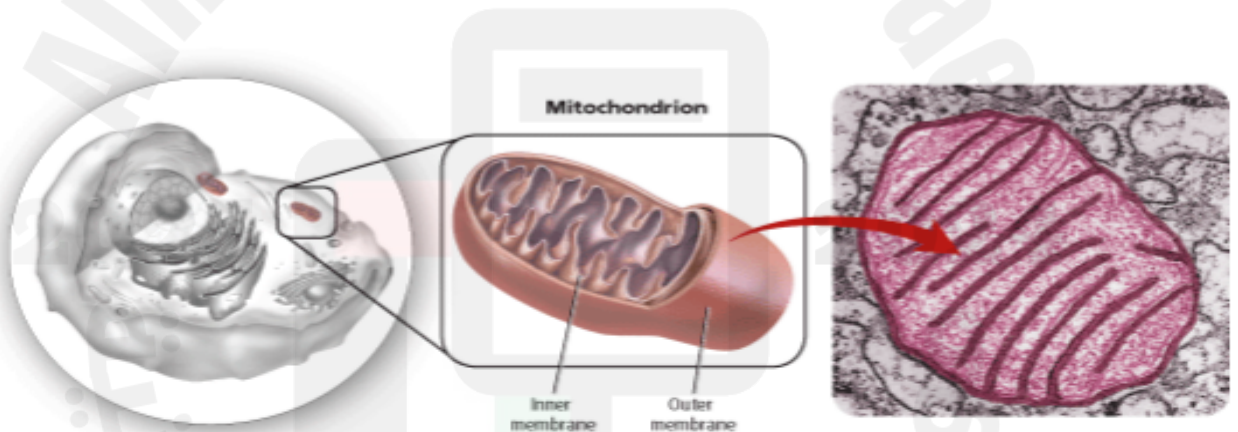
6. Why is the phospholipid bilayer critical to cell function?

- 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.

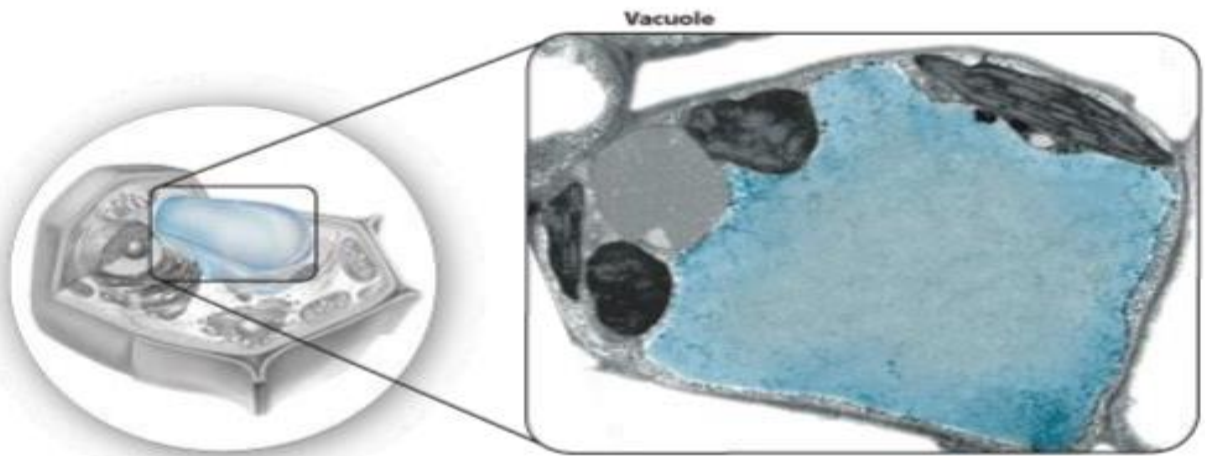
- A) endoplasmic reticulum
- B) cytoplasm
- C) **cytoskeleton**
- D) golgi apparatus

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



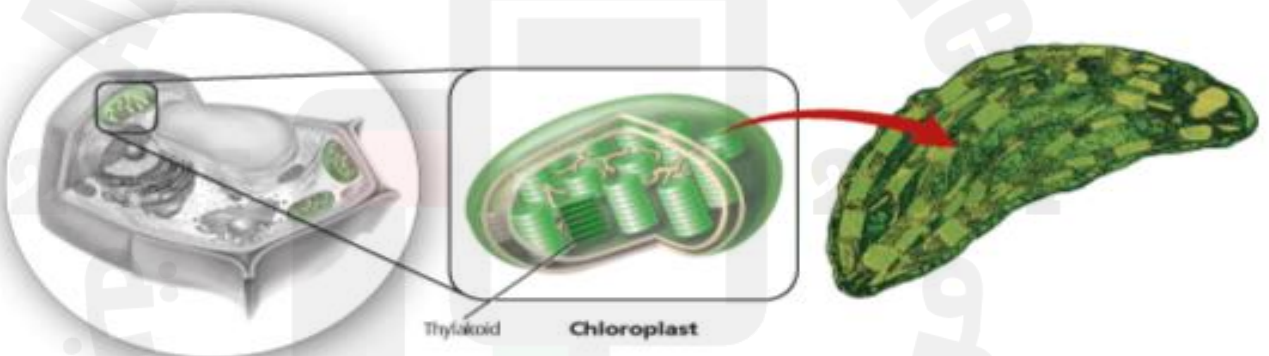
- A) **provides a large surface area**
- B) keeps sunlight from damaging cell
- C) provides inflexible barrier on cell surface
- D) promotes photosynthesis

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



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

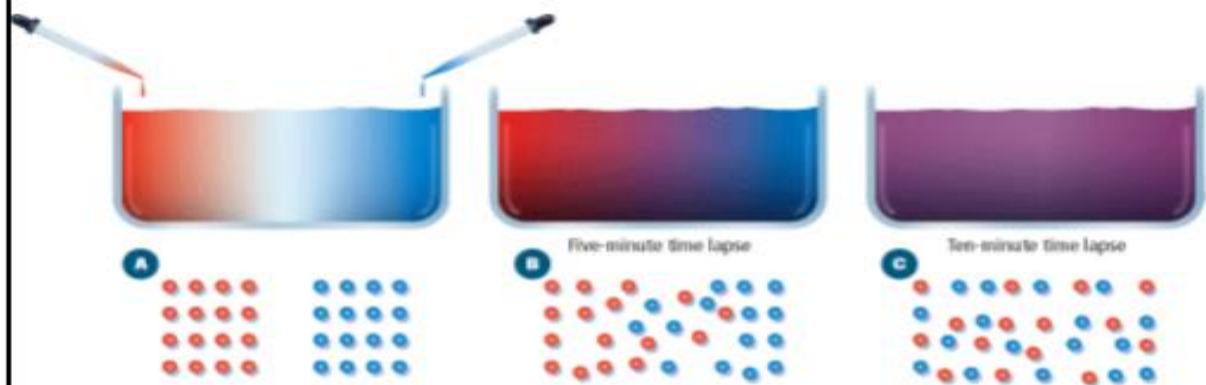
10. What is the function of the small, disk-shaped thylakoids in this plant cell?



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

11.

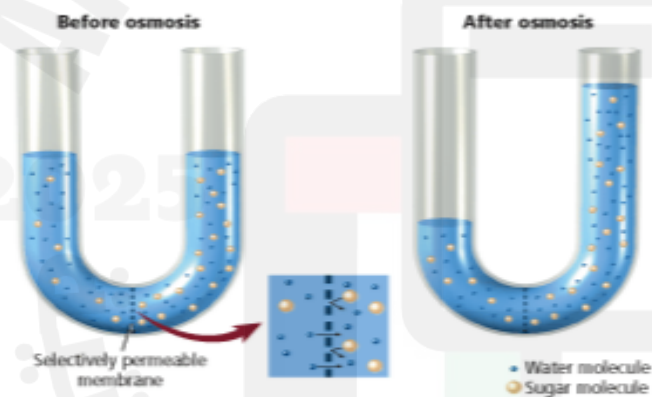
The picture shows the movement of ink molecules in water. Which of the following processes has occurred?



- 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) <b>Increase the concentration of solute outside the cell.</b>
	D) Wait for diffusion to reach equilibrium.
14.	How do carrier proteins facilitate active transport?
	A) block the plasma membrane
	B) <b>move substances against a concentration gradient</b>
	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) <b>Endocytosis does not involve waste secretion.</b>
	C) Endocytosis does not require energy input.
	D) Exocytosis does not maintain homeostasis.