

تم تحميل هذا الملف من موقع المناهج الإماراتية



حل تجميعية أسئلة متوقعة ليلة الامتحان

موقع المناهج ← المناهج الإماراتية ← الصف التاسع المتقدم ← علوم ← الفصل الأول ← حلول ← الملف

تاريخ إضافة الملف على موقع المناهج: 11-12-2024 19:54:25

ملفات اكتب للمعلم اكتب للطالب الاختبارات الكترونية الاختبارات ا حلول اعروض بوربوينت أوراق عمل
منهج انجليزي املخصات وتقارير ا مذكرات وبنوك الامتحان النهائي للمدرس

المزيد من مادة
علوم:

إعداد: Mostafa Mohamed

التواصل الاجتماعي بحسب الصف التاسع المتقدم



الرياضيات



اللغة الانجليزية



اللغة العربية



التربية الاسلامية



المواد على تلغرام

صفحة المناهج
الإماراتية على
فيسبوك

المزيد من الملفات بحسب الصف التاسع المتقدم والمادة علوم في الفصل الأول

حل مراجعة وحدة الخلية والنبات من أسئلة امتحانات سابقة

1

أسئلة الامتحان النهائي القسم الورقي منهج انسابير للعام 2023-2024

2

حل نموذج اختبار تجريبي منهج انسابير

3

نموذج اختبار تجريبي منهج انسابير

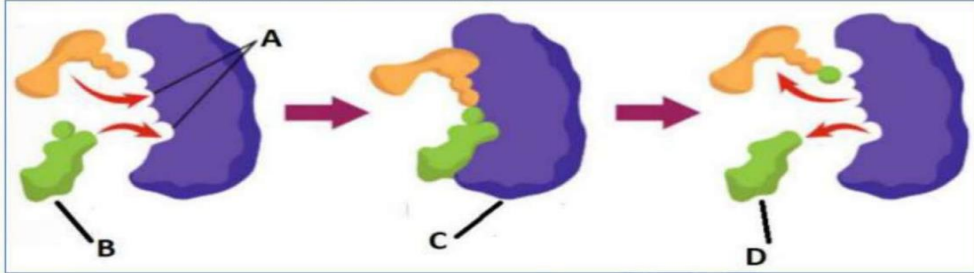
4

مراجعة نهائية للمقرر وفق الهيكل الوزاري منهج بريدج

5

الامتحان المتوقع

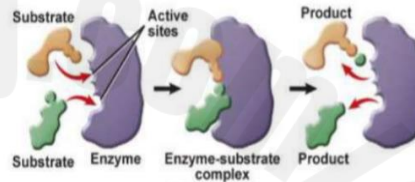
1- Label the following diagram



A- Active site B- substrate c- enzyme substrate complex d- product

What occurs at the active site in the enzyme substrate complex?

- a- An exothermic chemical reaction takes place.
- b- Chemical bonds are broken, and new bonds are formed.
- c- The enzyme gets used up in the reaction.
- d- The substrates provide energy for the enzyme.

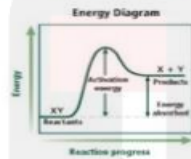


How do enzymes affect a chemical reaction, making it easier to occur?

- a- They raise the activation energy.
- b- They make the reaction exothermic.
- c- They make the reaction endothermic.
- d- They reduce the activation energy.

What kind of chemical reaction does this energy diagram show?

- A) Exothermic
- B) Endothermic
- C) Ionic
- D) Mass creating



Which of the following are bonds broken and new bonds formed?
في أي مما يلي تتكسر روابط وتتكون روابط جديدة؟

chemical reactions التفاعلات الكيميائية
elements العنصر
isotopes النظائر
polar molecules الجزيئات القطبية

A chemical reaction is a process by which atoms or groups of atoms in substances are.....
التفاعل الكيميائي هو عملية تقوم من خلالها الذرات أو مجموعات الذرات الموجودة في المواد.....

بالذوبان في مواد أخرى
Dissolved in other substances.
بالتحلل عن طريق فقدان بروتونات
Ionized by the loss of protons
بالانصاف مع ذرات في مواد أخرى
Mixed together with atoms in other substances
بالتحول إلى مواد أخرى
Reorganized into different substances.

Which statement is true of chemical equations?
أي من العبارات التالية تنطبق على المعادلات الكيميائية؟

عدد ذرات المتفاعلات أقل من عدد ذرات النواتج
1. Reactants have fewer atoms than products
عدد ذرات كل عنصر في المتفاعلات يساوي عدد ذرات العنصر نفسه في النواتج
2. The number of atoms of each element on the reactants is equal to the number of atoms of the same element on the products
المعادلات على يمين السهم والنواتج على يسار السهم
3. Reactants are on the right side of the arrow and products are on the left side of the arrow
عدد ذرات النواتج أقل من عدد ذرات المتفاعلات
4. Products have fewer atoms than reactants

Why is the active site of an enzyme important to the enzyme activity?
لماذا الموقع النشط للإنزيم ما مهم لنشاط الإنزيم؟

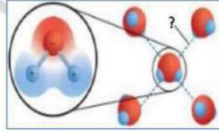
Learning Outcomes Covered
BIO.3.1.02.021

A- It raises the activation energy of a reaction
B- It allows the enzyme to interact with a large variety of substrates
C- It allows the enzyme to catalyze very specific reactions
D- It allows interaction to continue without stopping

Water properties

9- What type of bonds attracts water molecules to each other and to other substances?

- a- covalent bonds
- b- double bonds
- c- hydrogen bonds
- d- ionic bonds



10- Which of the following is a property of water that allows Insects to rest on the surface of water?

- a- It combusts.
- b- Surface tension
- c- Universal solvent.
- d- It is adhesive.

11- Based on the corresponding image, which of the following is a property of water insects to rest on the surface of water?

- a- It is cohesive.
- b- It combusts.
- c- It is good solvent.
- d- It is adhesive.

Mohamad Rajab



Which of the following is NOT true about pure water?

- a- Water is adhesive, it forms hydrogen bonds with molecules on another surface.
- b- Water is cohesive, it forms hydrogen bonds with molecules on another surface.
- c- Capillary action is the result of Adhesion.

12- Based on the corresponding image, which of the following is a property of water, helping Water travels up in the stem of a plant?

- a- It is cohesive.
- b- It combusts.
- c- It is good solvent.
- d- It is adhesive.



Acid

22- What do you expect to happen if the number of positive hydrogen ions released by the substance increases in solution?

- a- Its viscosity increases
- b- Its PH increases
- c- Boiling point increases its
- c- Its acidity increases

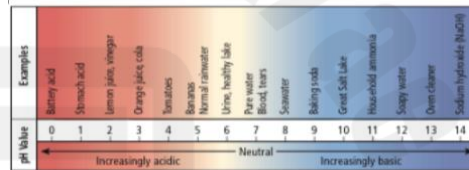
23- What do you expect to happen if the number of Negative hydroxide ions released by the substance increases in solution?

- a- Its viscosity increases
- b- Its PH increases (Acidity decreases)
- c- Boiling point increases its
- c- Its acidity increases

A(n) is a substance that produces hydroxide ions (OH⁻) in water, while a(n)





produces hydrogen ions (H⁺) in water.

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.

Function groups:

Group	Example	Function	Group	Example	Function
Carbohydrates		<ul style="list-style-type: none"> • Store energy • Provide structural support 	Proteins		<ul style="list-style-type: none"> • Transport substances • Speed reactions • Provide structural support • Control cell growth
Lipids		<ul style="list-style-type: none"> • Store energy • Provide barriers 	Nucleic Acids		<ul style="list-style-type: none"> • Store and communicate genetic information

Which of the following function can't be attributed to carbohydrates?

- a- Structural support
- b- Chemical signaling between cells
- c- Energy storage
- d- Genetic information storage

Which of the following function can be attributed to lipids?

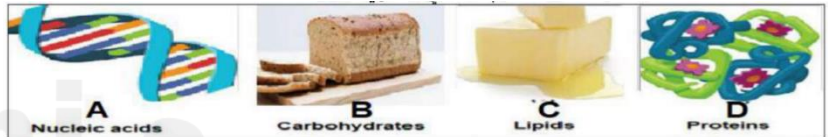
- a- Speed reaction
- b- control cell growth
- c- Energy storage
- d- Genetic information storage.

35) Which of the following functions can be attributed to carbohydrates?

- structural support
- signaling between cells
- energy storage
- all of the above

Correct Answer

all of the above



26- which of the following macromolecules id responsible for energy storage?

- 1) A , C
- 2) A , D
- 3) C , D
- 4) C , B

27- which of the following macromolecules id responsible for Providing structural support?

- 1) A , C
- 2) A , D
- 3) B , D
- 4) C , B

28- Which of the following macromolecules id responsible for storing and communicating genetic information?

- 1) A
- 2) B
- 3) C
- 4) D

Which of the following functions can't be attributed to carbohydrates?
أي من الوظائف التالية لا يمكن أن تقوم بها الكربوهيدرات؟

Learning Outcomes Covered
= B0210204

- A- Structural support
- B- Signalling between cells
- C- Energy storage
- D- Genetic information storage

Which of the following macromolecules is matched with its correct role in the cell?
أي من الجزيئات الضخمة التالية يتوافق مع دوره الصحيح في الخلية؟

المخرجات التعليمية المرتبطة

3,15

- a. الأحماض النووية - نقل المواد
Nucleid acid - Transport substances
- b. الكربوهيدرات - إنتاج الهرمونات
Carbohydratos - Make hormones
- c. الدهون - تخزين المعلومات الوراثية
Lipids - Store genetic information
- d. البروتينات - تسريع التفاعلات
Proteins - Speed reactions

52) Which of the following functions can be attributed to nucleic acids and nucleotides?

- long-term energy storage
- chemical signaling between cells
- genetic information storage and transmission
- barrier in biological membranes

Correct Answer

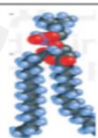
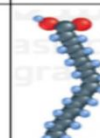
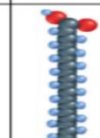
genetic information storage and transmission

62) Which macromolecule is involved in nearly every function in the human body?

- lipid
- protein
- carbohydrate
- nucleic acid

Correct Answer

protein

3	2	1
		
3-Phospholipid	2-Unsaturated Fats	1-Saturated Fats

Cell theory:

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.

Which of the following statement is principle of the cell theory?

- a-The cells are basic unit of life
- b- All living organisms are composed of one cell.
- c-Tissue is the basic unit of life
- d-All Cells contain membrane –bound genetic material

Plasma Membrane:

6- Which of the following letters represents a phospholipid bilayer in the cell membrane?

- A
- B
- C
- D

7- Which of the following letters represents the transport protein in the plasma membrane?

- A
- B
- C
- D

8. Which of the following letters represents the Membrane protein in the plasma membrane?

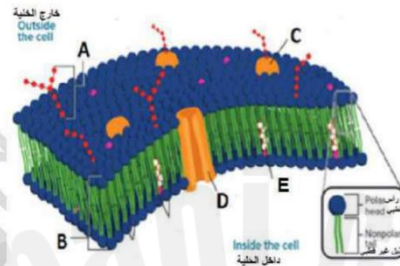
- A
- B
- C
- D

9. Which of the following letters represents a cholesterol?

- A
- B
- D
- E

10- Which of the following letters represents a Carbohydrate chain?

- A
- B
- D
- E



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

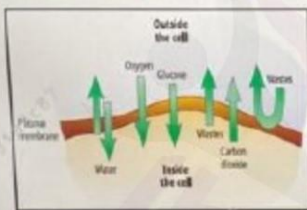
Use the illustration below to answer questions 6 and 7.



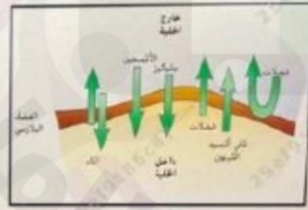
Q6. Which number in the illustration represents the location where you would expect to find water-insoluble substances?

a.	1
b.	2
c.	3
d.	4

In the illustration below, which of the following substances move out the cell through the membrane?



في الرسم أدناه، أتي من المواد التالية تخرج الخلية؟

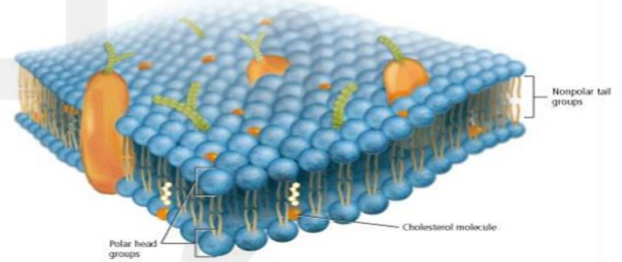


- Oxygen and Water
- Carbon dioxide and Water
- Oxygen and Glucose
- Water and Glucose

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.

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



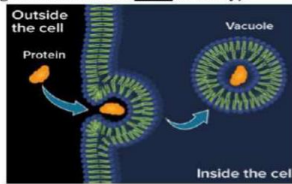
- A) speed chemical reactions with enzymes
- B) keep water-soluble substances from passing easily into the cell
- C) allow water-soluble substances to pass easily into the cell
- D) help encode genetic material

Cellular transport

Which method of cellular transport can you see in the picture (large substances can enter a cell by)?

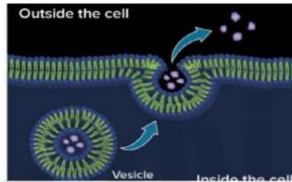
- a- Na⁺/K⁺ ATP Pump
- b- Facilitated diffusion
- c- Exocytosis
- d- Endocytosis

Mohamad Rajab



Which method of cellular transport can you see in the picture?

- a- Osmosis
- b- Facilitated diffusion
- c- Exocytosis
- d- Endocytosis



Which of the following statements is not true?

- a- Cell maintain homeostasis using passive and active transport.
- b- Active transport occurs against the concentration gradient.
- c- The diffusion of water across a selectively permeable membrane is called osmosis.
- d- large molecules are transported into the cell by carrier proteins

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.

Some cells use pumping systems, such as the Na⁺/K⁺ ATPase pump shown here.

Which of the following shows how this pump works?

Transport 3 ions (Na⁺) out of the cell while moving 2 (K⁺) ions into the cell

بعض الخلايا تستخدم أنظمة ضخ مثل مضخة الصوديوم البوتاسيوم (Na⁺/K⁺ ATPase) الميثلة هنا. من مما يلي يظهر كيفية عمل هذه المضخة؟

تقل ثلاثة أيونات (Na⁺) إلى خارج الخلية مقابل تحريك أيوني (K⁺) إلى داخلها

Transport 2 ions (Na⁺) out of the cell while moving 3 (K⁺) ions into the cell

Transport 3 ions (Na⁺) into the cell while moving 2 (K⁺) ions out of the cell

The figure below shows one of the cellular transfer methods. Study it and then answer the question.

Which of the following transfers is shown in the figure?

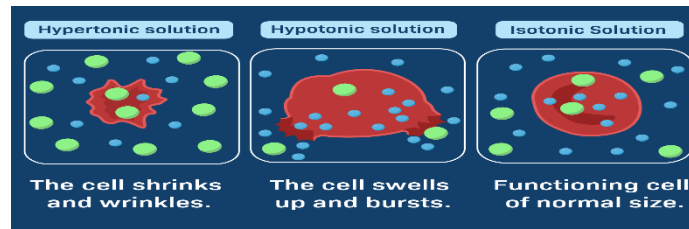
protein بروتين

منحدر التركيز Concentration gradient

الشكل أدناه يبين إحدى عمليات النقل الخلوي. لعدته ثم أجب عن السؤال: أن من عمليات النقل التالية يوضحها الشكل؟

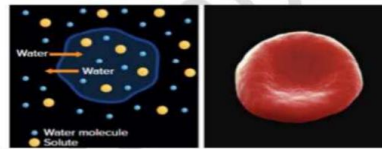
- Diffusion د. الانتشار
- Facilitated diffusion by channel proteins ب. الانتشار الميسر بواسطة البروتينات القوية
- Active transport ج. النقل النشط

Diffusion and osmosis:



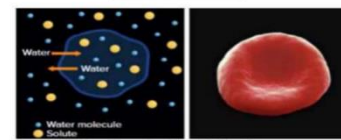
The figure below shows a blood cell placed in a solution. Which of the following is the solution used?

- a- Hypotonic solution
- b- Isotonic Solution
- c- Hypertonic Solution
- d- Osmosis



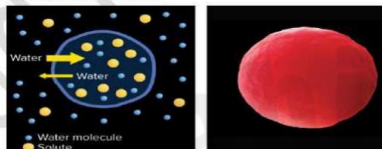
Which of the following describes what will happen to animal cell in a Isotonic Solution?

- a- Swell
- b- The cells retain their normal shape
- c- Burst
- d- firmer



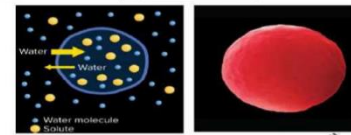
Which type of solution cause an animal cell to burst like the picture below?

- a- Hypotonic solution
- b- Isotonic Solution
- c- Hypertonic Solution
- d- No one of these



Which of the following describes what will happen to animal cell in a hypotonic solution?

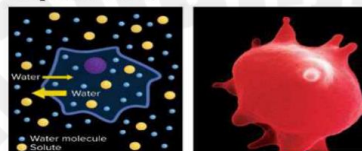
- a- Shrink.
- b- normal shape
- c- Burst (swells)
- d- Wilting



Which type of solution cause an animal cell to Shrivele like the picture below?

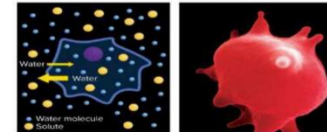
- a- Hypotonic solution
- b- Isotonic Solution
- c- Hypertonic Solution
- d- No one of these

Mohamad Rajab

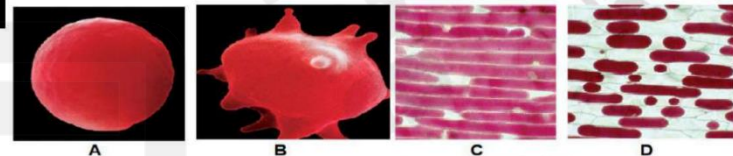


9- Which of the following describes what will happen to animal cell in a Hypertonic Solution?

- a- Swell
- b- Shrivele (shrinks)
- c- Burst
- d- firmer

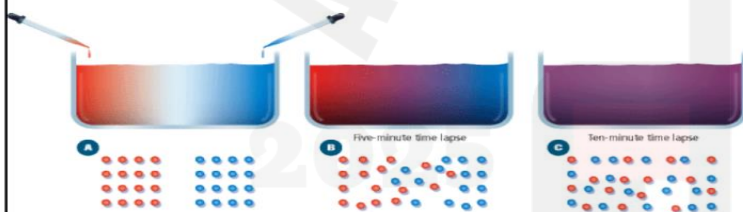


10- Which of the following refers to cells in a highly concentrated solution?



- a- A and D
- b- B and C
- c- A and C
- d- B and D

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



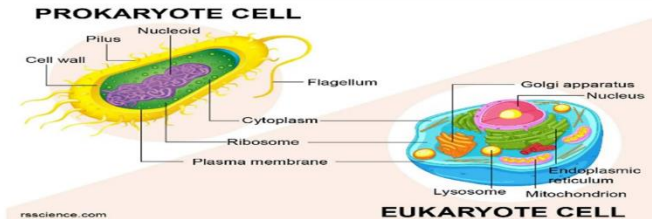
- A) endocytosis
- B) osmosis
- C) diffusion
- D) exocytosis

77) The spread of a drop of food dye throughout a glass of milk is called _____.

Correct Answer
Blank 1: diffusion

Compare between cells:

Prokaryotic cell	Eukaryotic
<ul style="list-style-type: none"> • Simple • Has no nucleus • Has no membrane bounded organelles • Less in number • Most are Unicellular • As bacteria • Earliest types of cells on Earth 	<ul style="list-style-type: none"> • Complex • Has nucleus • Has membrane bounded organelles • Larger in Number • Unicellular or Multicellular • As Yeast(unicellular) , plant and animal cell



Both of Eukaryotes and prokaryotes has:

- 1- Cytoplasm
- 2- Ribosome
- 3- Cell membrane
- 4- DNA

What kind of cell is shown in the picture?

- a- prokaryotic cell
- b- blood cell
- c- Animal cell
- d- plant cell

Which of the following cannot be found in the cell shown in the image?

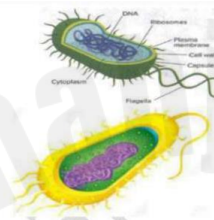
- a- Cytoplasm
- b- DNA
- c- Plasma membrane
- d- Nucleus

The difference between prokaryotic and eukaryotic cells is that

- a- prokaryotic cells have a flagellum.
- b- Prokaryotic cells do not have membrane-bound organelles.
- c- prokaryotic cells have cytoplasm.
- d- prokaryotic cells have no cytoplasm.

A major difference between prokaryotic and eukaryotic cells is that

- a- prokaryotic cells have a flagellum.
- b- Eukaryotic cells have a nucleus.
- c- prokaryotic cells have cytoplasm.
- d- prokaryotic cells have no cytoplasm.



32. During their mission to planet Mars, astronauts have found material that might be a cell. Which of the following must the material have to be considered a cell?

- a- The material must have a nucleus
- b- The material must have a nucleus chloroplast
- c- The material must have a nucleus mitochondrion
- d- The material must have a cell membrane

Which is true of prokaryotic and eukaryotic cells?

- a) Prokaryotic cells are larger than eukaryotic cells.
- b) Eukaryotic cells do not have nuclei, and prokaryotic cells do have nuclei.
- c) Prokaryotic cells lack membrane-bound organelles, and eukaryotic cells contain membrane-bound organelles.
- d) Eukaryotic cells are simpler than prokaryotic cells.

Plant cell has

- 1- Cell wall
- 2- Chloroplast
- 3- Large central vacuole

Plant Cell vs Animal Cell

organelle	Plant Cell	Animal Cell
Cell wall	✓	X
Chloroplast	✓	X
Large central Vacuole	✓	X
Centriole	X	✓
Lysosome	X	✓

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

Which organelle is present in an animal cell but absent in plant cells?

- a- Centriole
- b- Chloroplast
- c- Nucleolus
- d- Vacuole

In which structure would you expect to find a cell wall?

- a- Human skin cell
- b- Cell from an oak tree (leaf cells from a tree)
- c- Blood cell from a cat
- d- liver cell from a mouse

Which organelle is present in plant cells but absent in an animal cell?

- a- Centriole
- b- Chloroplast
- c- Nucleolus
- d- Vacuole

Which organelle is large in plant cells but absent or small in an animal cell?

- a- Centriole
- b- Chloroplast
- c- Nucleolus
- d- Vacuole

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

A rigid layer that lies outside the cell's membrane is...

- a) Cytoskeleton
- b) Cilia
- c) Flagella
- d) Cell wall

1) The _____ stores food, water, wastes, and other materials in both plant and animal cells.

- a) Vacuole
- b) Mitochondria
- c) Ribosomes
- d) Chromatin

2) An organelle in a cell that receives proteins and other newly formed materials from the endoplasmic reticulum packages them and distributes them to other parts of the cell

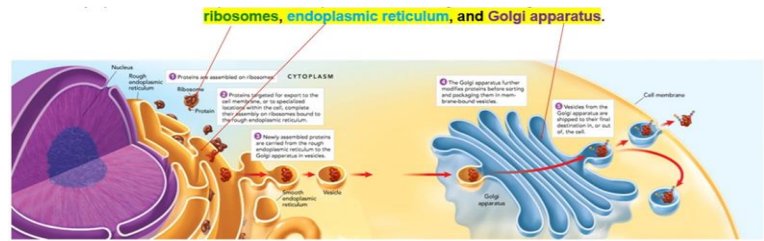
- a) Vacuole
- b) Chloroplast
- c) Ribosome
- d) Golgi apparatus

34) Vesicles that contain digestive enzymes for digest worn-out organelles or food and bacteria or virus are called

- a- lysosomes
- b- centrioles
- c- ribosomes
- d- plasma membranes



The place where the protein and lipids are manufactured in



- A. Chloroplast
- B. Nucleosome
- C. Rough Endoplasmic reticulum
- D. mitochondria

56) Fill in the blanks using the available answer choices.

The main component for processing, transporting, and storing materials is called _____.

Blank 1 options

- a vacuole
- the rough ER
- the Golgi apparatus
- a vesicle

Correct Answer
the Golgi apparatus

Plants:

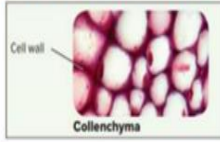
Types of plant Cells:

Parenchyma	Collenchyma	Sclerenchyma
<p>Function</p> <ul style="list-style-type: none"> • Storage • Photosynthesis • Gas exchange • Protection • Tissue repair and replacement 	<ul style="list-style-type: none"> • Support for surrounding tissues • Flexibility for plant • Tissue repair and replacement 	<ul style="list-style-type: none"> • Support • Transport of materials

Which of the following types of plant cells is used to store food in the Taproot?

- a- Collenchyma cells
- b- Parenchyma cells
- c- Sclerenchyma cells
- d- Endodermis

The figure below shows the collenchyma cells in a plant. Which of the following is **not** one of its functions?



Cell wall

Collenchyma

يوضح الشكل أدناه الخلايا الكولنشيمية في النبات. أي مما يلي **ليس** من وظائفها؟



جدار الخلية

الخلايا الكولنشيمية

Which of the following is a characteristic of sclerenchyma plant cells?

أي مما يلي هو ميزة للخلايا السكلرينشيمية في النبات؟

Learning Outcomes Covered

1.1.12

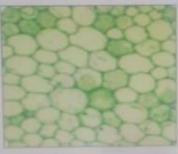
Learning Outcomes Covered

BIO.3.1.01.078

- a. Tissue repair and replacement إصلاح الأنسجة واستبدالها
- b. Provide flexibility for plant توفير المرونة للنبات
- c. Support surrounding tissues دعم الأنسجة المحيطة
- d. Gas exchange تبادل الغازات

- 1. **بيضاوية الشكل ولها جدران خلية رقيقة**
Are spherical in shape with thin cell walls.
- 2. **طويلة الشكل وتستطيع التمدد.**
Have an elongated shape and can be stretched.
- 3. **تفتقد إلى المكونات الحية عندما تنضج.**
Lack living components when they mature.
- 4. **تحتفظ بالتنوع الأكبر من العضيات.**
Maintain the greatest variety of organelles.

is the Parenchyma cells in a plant. Which of the following is **not** a function of it?



Photosynthesis

Support

Gas exchange

Storage

يوضح الشكل أدناه الخلايا البرنشيمية في النبات. أي مما يلي **ليس** من وظائفها؟

البناء الضوئي

الدعم

تبادل الغازات

التخزين

- Two types of vascular tissue:

- a) Xylem (Transport **water and minerals** in **one direction** from root to leaves)
- b) Phloem (Transport **food (sugars and organic compounds)** in **both** directions)

Which of the following options shows the correct directions of movement of materials in the xylem and phloem?

أي من الاحتمالات التالية تظهر الاتجاه الصحيح لنقل المواد في الخشب واللحاء؟

- 1. **الخشب: صعوداً ونزولاً - اللحاء نزولاً فقط**
Xylem: Up and down - Phloem: Down only
- 2. **الخشب: نزولاً فقط - اللحاء صعوداً ونزولاً**
Xylem: Down only - Phloem: Up and down
- 3. **الخشب: صعوداً فقط - اللحاء صعوداً ونزولاً**
Xylem: Up only - Phloem: Up and down
- 4. **الخشب: صعوداً ونزولاً - اللحاء صعوداً فقط**
Xylem: Up and down - Phloem: Up only

What are the functions of xylem and phloem?

ما هي وظائف الخشب واللحاء؟

Learning Outcomes Covered

1.1.14

- 1. **ينقل الخشب الماء والسكر بينما ينقل اللحاء المعادن المناعية**
Xylem transports water and sugars, phloem transports mineral ions
- 2. **ينقل الخشب المعادن المناعية والسكر بينما ينقل اللحاء الماء**
Xylem transports mineral ions and sugars, phloem transports water
- 3. **ينقل الخشب السكر بينما ينقل اللحاء الماء والمعادن المناعية**
Xylem transports sugars, phloem transports water and mineral ions
- 4. **ينقل الخشب الماء والمعادن المناعية بينما ينقل اللحاء السكر**
Xylem transports water and mineral ions, phloem transports sugars

Stomata and cuticle:

12) Which control(s) the movement of water vapor through the stomata?

- pericycle
- bark
- vascular tissues
- guard cells

Correct Answer

guard cells

11) Which of the following enables exchange of gases?

- parenchyma
- phloem
- stomata
- xylem

Correct Answer

stomata

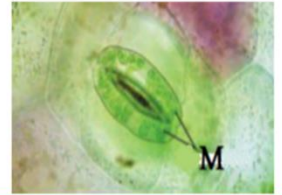
The outer surface of the leaf has a thin waxy covering

- a) blade
- b) cuticle
- c) petiole
- d) epidermis

Which structure helps prevent water loss and protects the leaf?

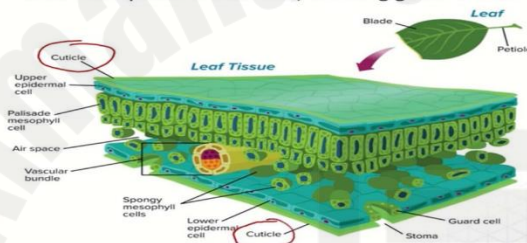
- a) Palisades mesophyll
- b) Spongy mesophyll
- c) Vascular tissue
- d) Cuticle

Which of the answer represent the M letter in the picture below?



Leaf Structure

- The internal structure of most leaves is well-adapted for photosynthesis.
- The **palisade mesophyll** is composed of tightly packed cells, column-shaped cells with many chloroplasts for photosynthesis.
- The **spongy mesophyll** consists of irregularly shaped cells, loosely packed cells with spaces in between, allowing gases to move between the spaces.



8- Which leaf structure is the site where the **most photosynthesis** takes place?

- a- Cuticle
- b- Palisade mesophyll cell
- c- Stoma
- d- Spongy mesophyll cell

9- What letter indicates the Palisade mesophyll cell?

- A
- B
- C
- D

10- What letter indicates the Spongy mesophyll cell?

- A
- B
- C
- D

32- What letter indicates the Stoma?

- A
- B
- C
- D

2- Which of the following fill the space between spongy mesophyll cells?

- a- Cells
- b- Vascular tissue
- c- chlorophyll
- d- gases

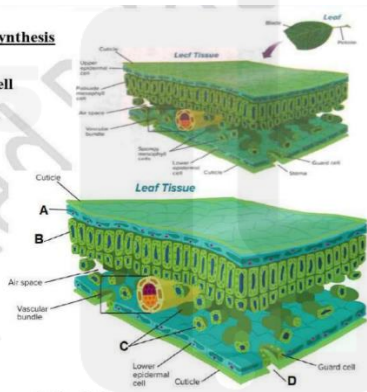







Table 6 Types of Stems

Type	Tuber	Rhizome	Runner
Example	 White potato	 Iris	 Spider plant
Function	• Food storage	• Food storage • Asexual reproduction	• Asexual reproduction
Type	Bulb	Corm	
Example	 Narcissus	 Crocus	
Function	• Food storage	• Food storage	

Which letter of the following indicates a **Rhizome stem**?

- 1- A 2- B 3- C 4- D

Which letter of the following indicates a **Corm stem**?

- 1- A 2- B 3- C 4- D

Which letter of the following indicates a **Tuber stem**?

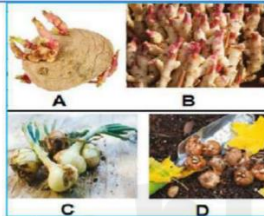
- 1- A 2- B 3- C 4- D

Which letter of the following indicates a **Bulb stem**?

- 1- A 2- B 3- C 4- D

- What is the type of stem shown in the picture below?

- a- Tuber b- Runner
c- Rhizome d- Corm



What is the type of stem shown in the picture below?

- a- Tuber b- Runner
c- Rhizome d- Corm


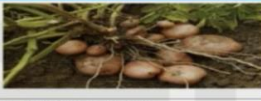




What is the type of stem shown in the picture below?

- a- Tuber b- Runner
c- Rhizome d- Corm



White potato

Type	Taproot system	Fibrous root system	Modified root
Example			
Function	• Anchors plant • Food and water storage	• Anchors plant • Rapid water storage	• Anchors plant
Type	Modified roots—pneumatophores	Adventitious—prop roots	
Example			
Function	• Supplies oxygen to submerged roots	• Supports plant stems	

Note that:

- ✓ Taproot is the only root that can store food and water.
- ✓ Modified roots – pneumatophores can supply oxygen to other roots.

Which of the following helps mangrove trees increase their oxygen supply?

- a- Fibrous roots b- Adventitious roots
c- Pneumatophores roots d- Taproots

Which of the following consists of a thick root with a few smaller, lateral-branching roots?

- a- Fibrous roots b- Adventitious roots
c- Pneumatophores roots d- Taproots

Which of the following supports plant stems?

- a- Fibrous roots b- Adventitious-prop roots
c- Pneumatophores roots d- Taproots



Pneumatophores - Adventitious-prop roots- Taproots - Modified roots - Fibrous roots

39- What is the type of root showing in the picture?

- a- Fibrous roots b- prop root
c- Modified roots d- Taproots

Mohamad Rajab

40- What is the type of root showing in the picture?




- a- Fibrous roots b- prop root
c- Modified roots d- Taproots



41- Which number of the following refers to Modified roots- pneumatophores?

- a- A
b- B
c- C
d- D



Phototropism	Gravitropism	Thigmotropism
		
Stimulus: Light Response: • Growth toward light source	Stimulus: Gravity Response: • Positive downward growth • Negative upward growth	Stimulus: Mechanical Response: • Growth toward point of contact

What of tropism are roots showing in the picture?

- a- phototropism b- Thigmotropism
 c- Positive gravitropism d- Negative gravitropism

What of tropism are stem showing in the picture?

- a- phototropism b- Thigmotropism
 c- Positive gravitropism d- Negative gravitropism

What type of tropism is shown in the image?

- a- Phototropism
 b- Positive gravitropism
 c- Thigmotropism
 d- Negative gravitropism

What type of tropism is shown in the image?

- a- Phototropism
 b- Positive gravitropism
 c- Thigmotropism
 d- Negative gravitropism

Which stem is exhibiting negative gravitropism?

- a- A b- B
 c- C d- D

- A- positive phototropism
 C- negative phototropism
 D- No tropism



Mohamad Rajab



Integumentary system:

1. The image below represents the skin layers. Which of the following contains the keratin layer (Melanin layer)?

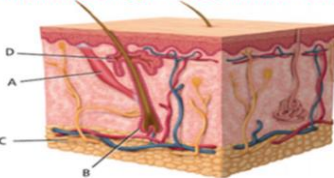
2. The image below represents the skin layers. Which of the following consist of epithelial cells?

- a- Epidermis b- Dermis
 c- Sweat gland d- fatty tissue

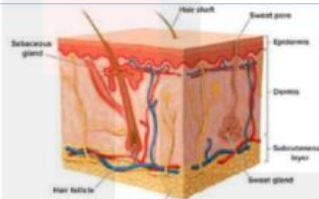
16) What structure produces oil?

- sebaceous gland
 acne
 hair
 hair follicle

9. Use the diagram below to answer question
 Which tissue type is responsible for "goose bump" formation?



- A. A C. C
 B. B D. D



17) Fill in the blanks using the available answer choices.
 A pigment called (Blank 1) absorbs sunlight to protect the cell.

- Blank 1 options
 • keratin
 • melanin
 • melanoma

Correct Answer
 melanin

3. The image below represents the skin layers. Which of the following consist of Connective tissue?

- a- Epidermis b- Dermis
 c- Sweat gland d- fatty tissue

4. Which are not found in dermis?

- a- Muscles b- sweat and oil glands.
 c- fat cells d- nerve cells

5. Which of the following Dermis layer?

- a- A b- B c- C d- D

6. Which of the following contains Keratin and Melanin pigment?

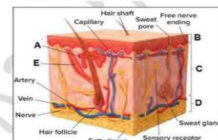
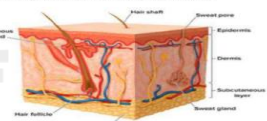
- a- A b- B c- C d- D

7. Which of the following is the type of tissue that provides support and protection in human skin?

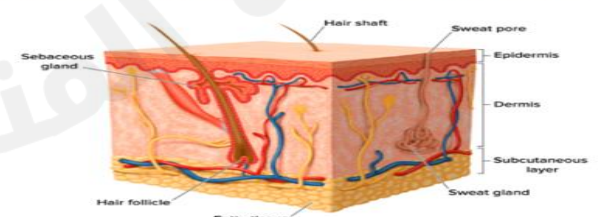
- a- Epithelial tissue b- Nerve tissue
 c- Muscle tissue d- Connective tissue

8. Which of the following is found in both the epidermis and dermis layers?

- a- Sweat gland, hair b- Sebaceous gland, nerve tissue.
 b- Epithelial cells, keratin c- Connective tissue, hair follicles

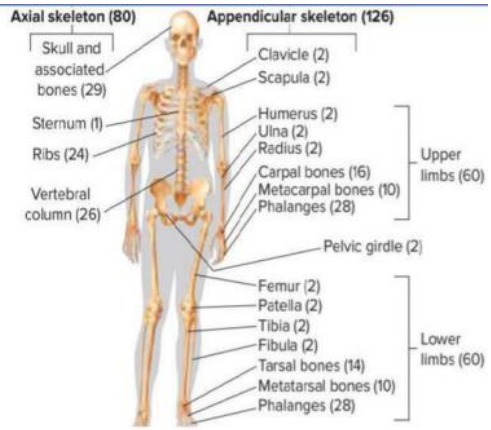


15) What important function does the bottom skin layer in this image have?



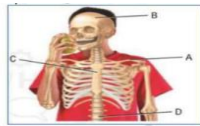
- waterproofs skin
 absorbs sunlight
 regulates temperature
 opens pore

Correct Answer
 regulates temperature



Which is part of the appendicular skeleton?

- a- A
- b- B
- c- C
- d- D



Which of the following letters represents the clavicle in skeleton picture?

- a- A
- b- D
- c- E
- d- I

Which is the letter representing the ribs in the skeleton picture?

- a- A
- b- C
- c- G
- d- F

Which is the letter representing the sternum in the skeleton picture?

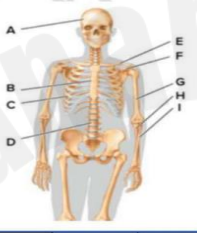
- a- A
- b- B
- c- G
- d- F

Which is the letter representing the Scapula in the skeleton picture?

- a- A
- b- C
- c- D
- d- F

Which is part of the axial skeleton?

- a- A
- b- C
- c- D
- d- F

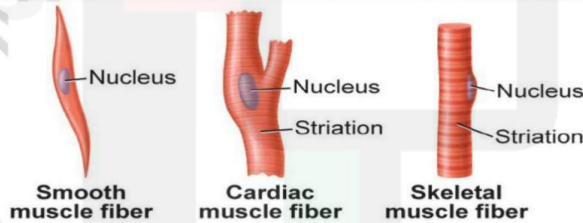


50) Which is part of the appendicular skeleton?

- clavicle
- sternum
- skull
- vertebra

Correct Answer
clavicle

Types of muscles	control	striated	Number of nuclei	Presence(location)
Smooth muscle	Involuntary	No	1	Internal organs: stomach, intestines, Artry- veins
Cardiac muscle	Involuntary	Yes	more	In heart
Skeletal muscle	Voluntary	Yes	more	Attached to bones

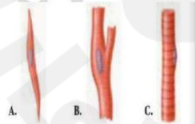


- What muscles shown above are classified as voluntary muscles?

- A
- B
- C
- all muscles

What muscles shown above are classified as involuntary muscles?

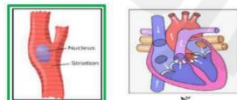
- a- A and B
- b- B and C
- c- A and C
- d- all muscles



What kind of muscle appears the figure?
ما نوع العضلة التي تظهر في الشكل؟

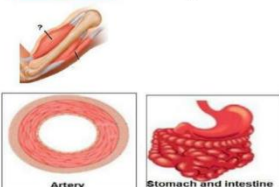
- What the type muscles find in your heart?

- a- Voluntary muscles
- b- Smooth muscle
- c- Cardiac muscle
- d- Skeletal muscle



- What the kind of muscles appears in the figure?

- a- involuntary muscles
- b- Smooth muscle
- c- Cardiac muscle
- d- Skeletal muscle



What the kind of muscles appears in the figure?

- a- voluntary muscles
- b- Smooth muscle
- c- Cardiac muscle
- d- Skeletal muscle

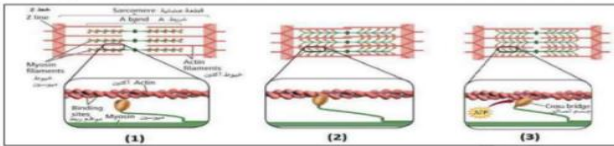
Learning Outcomes Covered

- BOJ.181.000

A- Smooth muscle	عضلة ناعمة A
B- Cardiac muscle	عضلة قلبية B
C- Skeletal muscle	عضلة هيكلية C
D- Voluntary muscle	عضلة إرادية D

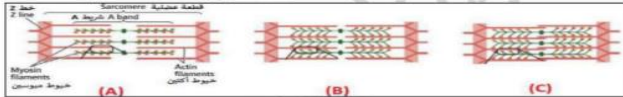
Which of the following number sets represents the correct illustration of muscle contraction in the figure below?

asad Rajab



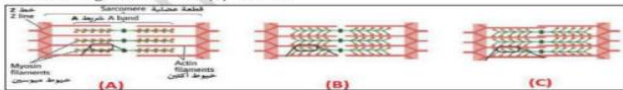
- a- 1 → 3 → 2 b- 3 → 1 → 2
 c- 2 → 3 → 1 d- 3 → 2 → 1

Which of the following does the letter (A) refer to?

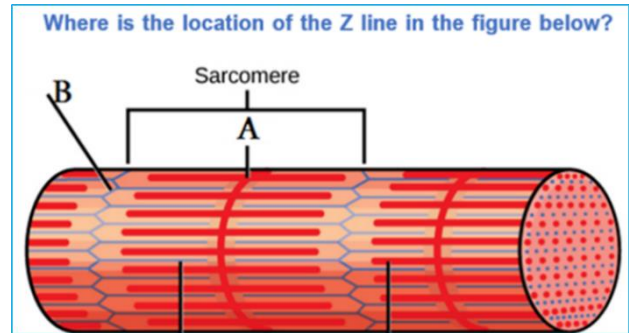


- a- Relaxed muscle b- Contracting muscle.
 c- Fully contracted muscle d- non-striated muscle

Which of the following does the letter (B) refer to?



- a- Relaxed muscle b- Contracting muscle.
 c- Fully contracted muscle d- non-striated muscle



65) Which of the following best describes myofibrils?

- muscle fibers composed of myosin and actin
- muscles' functional units that contract
- groups of antagonistic muscles
- protein filaments that are the smallest units of muscle fibers

Correct Answer

muscle fibers composed of myosin and actin

رَبِّ اشْرَحْ لِي صَدْرِي , وَيَسِّرْ لِي أَمْرِي , وَاحْلُلْ عُقْدَةً مِّن لِّسَانِي , يَفْقَهُوا قَوْلِي

By/ Mr. Mohamed Mostafa