حل تجميعة أسئلة متوقعة ليلة الامتحان

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

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

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

إعداد: Mostafa Mohamed

التواصل الاجتماعي بحسب الصف التاسع المتقدم

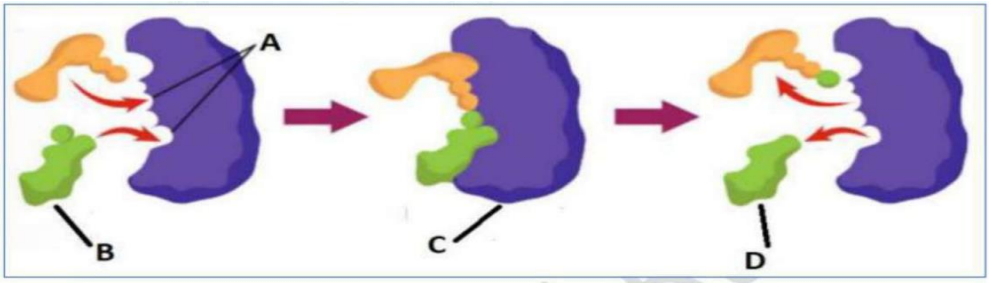
صفحة المناهج الإماراتية على فيسبوك					
المواد على تلغرام	التربية الاسلامية	اللغة العربية	اللغة الانجليزية	الرياضيات	

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

1	حل مراجعة وحدة الخلية والنبات من أسئلة امتحانات سابقة
2	أسئلة الامتحان النهائي القسم الورقي منهج انسباير للعام 2023-2024
3	حل نموذج اختبار تجريبي منهج انسباير
4	نموذج اختبار تجريبي منهج انسباير
5	مراجعة نهائية للمقرر وفق الهيكل الوزاري منهج بريدج

الامتحان المتوقع

1- Label the following diagram



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

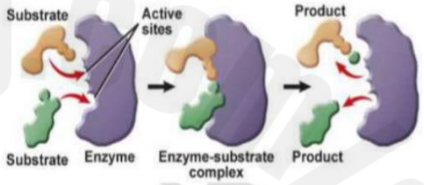
What occurs at the active site in the enzyme substrate complex?

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.



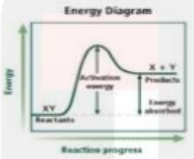
How do enzymes affect a chemical reaction, making it easier to occur?

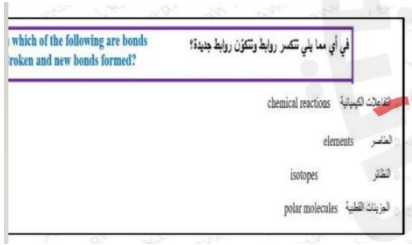
a- They raise the activation energy. **b- They make the reaction exothermic.**

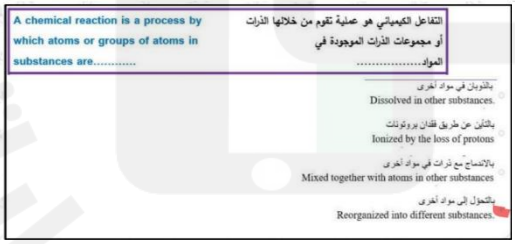
c- They make the reaction endothermic. **d- They reduce the activation energy**

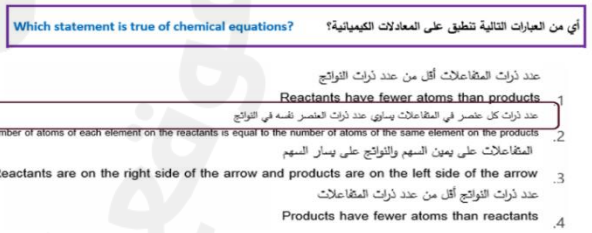
What kind of chemical reaction does this energy diagram show?

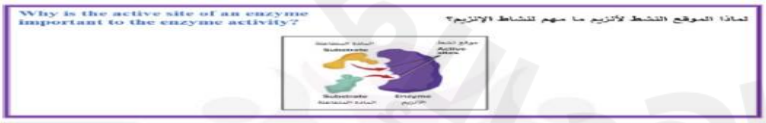
A) Exothermic
B) Endothermic
C) Ionic
D) Mass creating











Learning Outcomes Covered

- BIO.3.1.02.021

a. A- It raises the activation energy of a reaction

b. B- It allows the enzyme to interact with a large variety of substrates

c. C- It allows the enzyme to catalyze very specific reactions

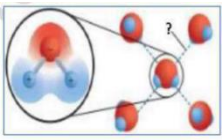
d. D- It allows interaction to continue without stopping

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 proprietary 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.

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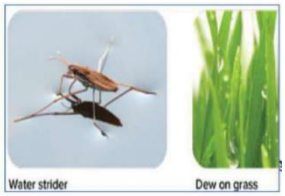


Which of the following is NOT true about pure water?

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 proprietary 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

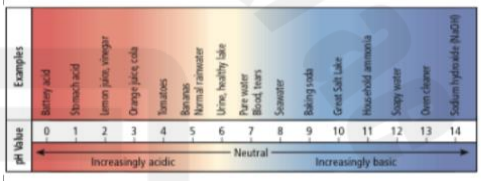
c- Boiling point increases its c- Its acidity increases

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

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.

A(n) base is a substance that produces hydroxide ions (OH^-) in water, while a(n) acid produces hydrogen ions (H^+) in water.

Function groups:

Group	Example	Function
Carbohydrates		• Store energy • Provide structural support
Lipids		• Store energy • Provide barriers

Group	Example	Function
Proteins		• Transport substances • Speed reactions • Provide structural support • Control cell growth
Nucleic Acids		• Store and communicate genetic information

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

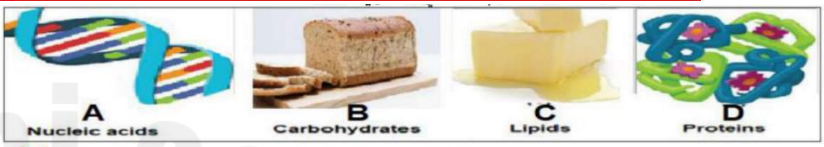
a- Structural support b- Chemical signaling between cells

c- Energy storge 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.



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?

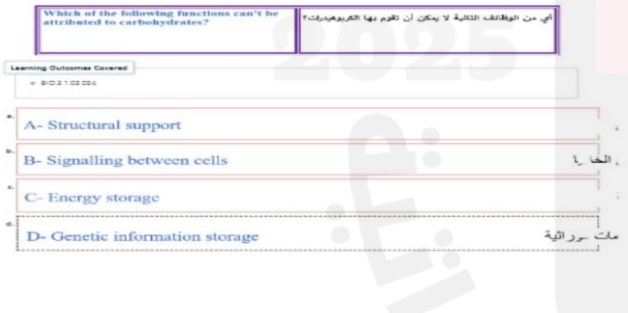
1) A 2) B 3) C 4) D

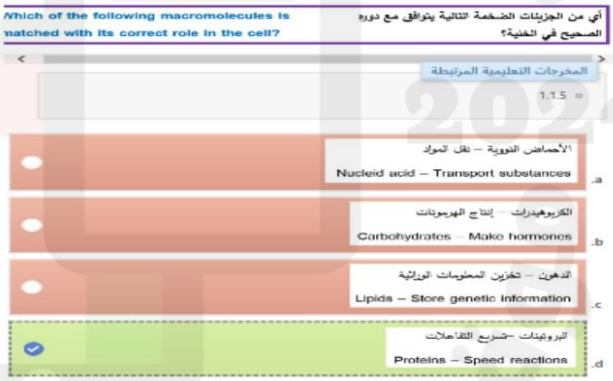
35) Which of the following functions can be attributed to carbohydrates?

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

Correct Answer

all of the above





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

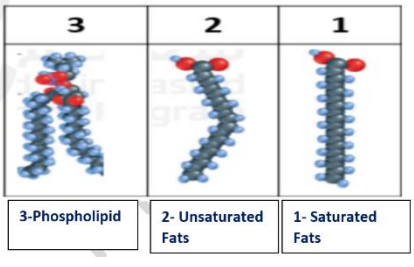
genetic information storage and transmission

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

- ○ lipid
- ○ protein
- ○ carbohydrate
- ○ nucleic acid

Correct Answer

protein



3-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

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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?

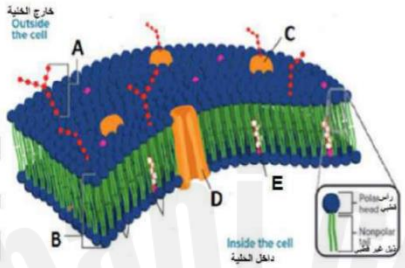
A B C D

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

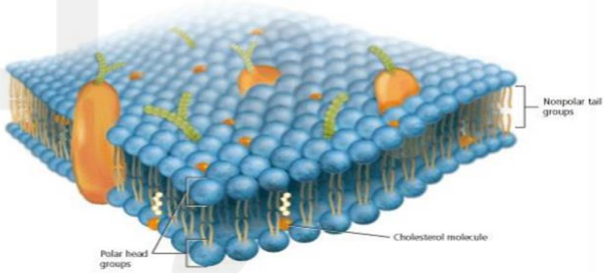


Q4.	Which of the following orientations of phospholipids best represents the phospholipid bilayer of the plasma membrane?
a.	
b.	
c.	
d.	

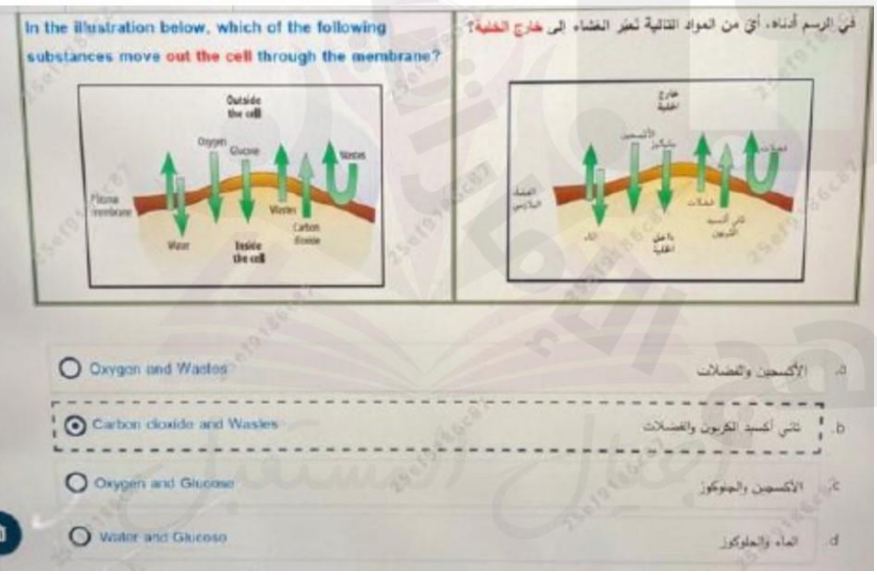
	Use the illustration below to answer questions 6 and 7.
Q6.	Which number in the illustration represents the location where you would expect to find water-insoluble substances?
a.	1
b.	2
c.	3
d.	4

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 bylayer. What crucial function do the nonpolar tails of the phospholipids have?

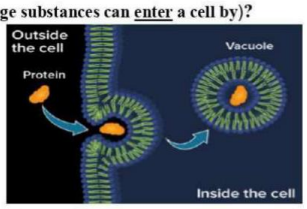


A)	speed chemical reactions with enzymes
B)	keep water-soluble substances from passing easily into the cell
C)	allow water-soluble substances to pass easily into the cell
D)	help encode genetic material



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

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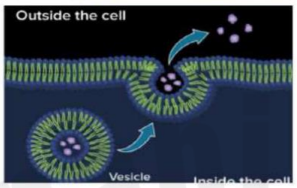
d- Endocytosis

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



a- Osmosis

b- Facilitated diffusion

c- Exocytosis

d- Endocytosis

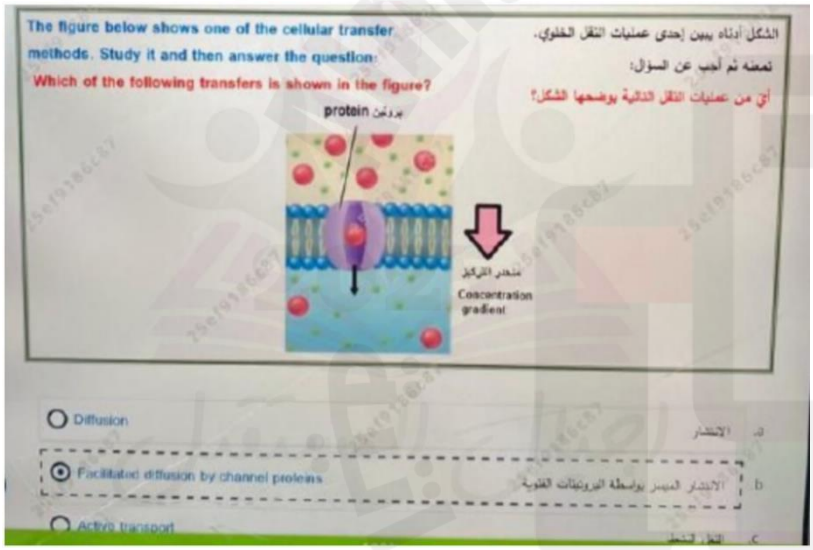
Which of the following statements is not true?

a- Cell maintain homeostasis using passive and active transport.

b- Active transport occurs against the concentration gradient.

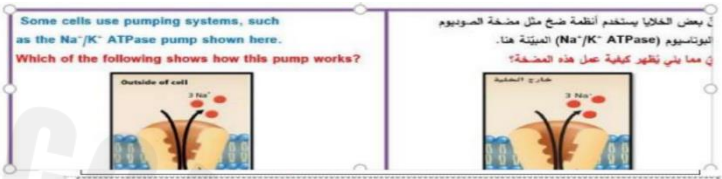
c- The diffusion of water across a selectively permeable membrane is called osmosis.

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.

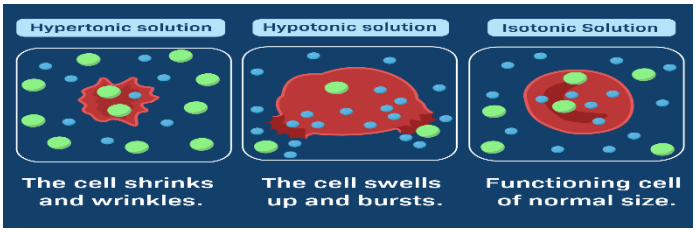


a. Transport 3 ions (Na^+) out of the cell while moving 2 (K^+) ions into the cell

b. Transport 2 ions (Na+) out of the cell while moving 3 (1<+) ions into the cell

c. Transpolt 2 ions (Na+) into the cell while moving 3 (K+) ions out of the cell

Diffusion and osmosis:



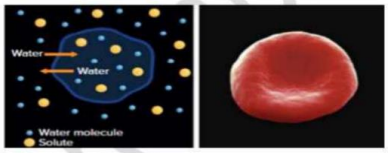
The figure below shows a blood cell placed in a solution. Which of the following is the solution used?

a- Hypotonic solution

b- Isotonic Solution

c- Hypertonic Solution

d- Osmosis



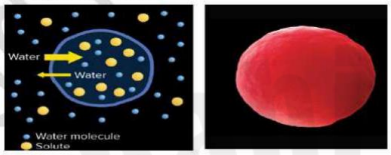
Which type of solution cause an animal cell to burst like the picture below?

a- Hypotonic solution

b- Isotonic Solution

c- Hypertonic Solution

d- No one of these



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

a- Hypotonic solution

b- Isotonic Solution

c- Hypertonic Solution

d- No one of these

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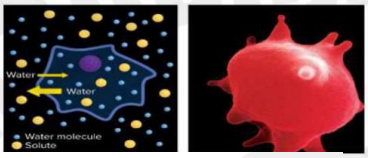
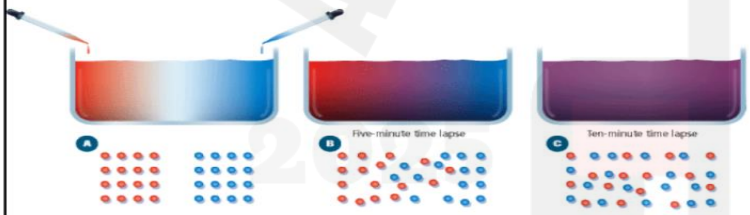


The picture shows the movement of ink molecules in water. Which of the following processes has occurred?



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

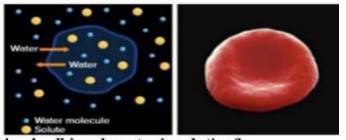
Which of the following describes what will happen to animal cell in a Isotonic Solution?

a- Swell

b- The cells retain their normal shape

c- Burst

d- firmer



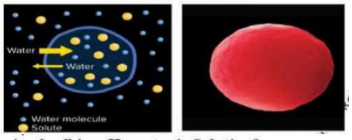
Which of the following describes what will happen to animal cell in a hypotonic solution?

a- Shrink.

b- normal shape

c- Burst (swells)

d- Wilting



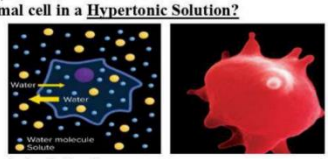
9- Which of the following describes what will happen to animal cell in a Hypertonic Solution?

a- Swell

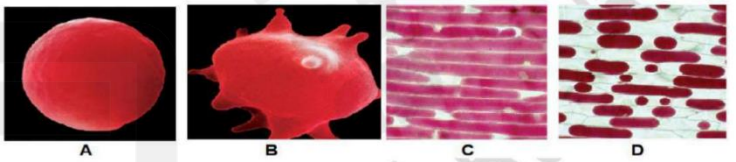
b- Shrivel (shrinks)

c- Burst

d- firmer



0- 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

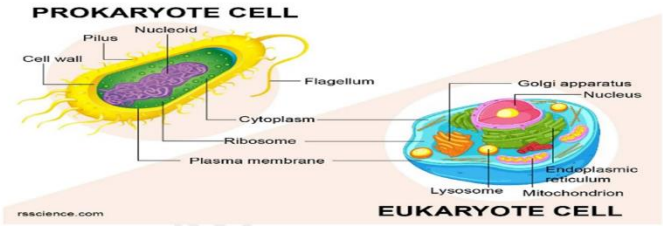
77) The spread of a drop of food dye throughout a glass of milk is called _____.

Correct Answer

Blank 1: diffusion

Compare between cells:

Prokaryotic cell	Eukaryotic
• Simple • Has no nucleus • Has no membrane bounded organelles • Less in number • Most are Unicellular • As bacteria • Earliest types of cells on Earth	• Complex • Has nucleus • Has membrane bounded organelles • Larger in Number • Unicellular or Multicellular • As Yeast(unicellular) , plant and animal cell



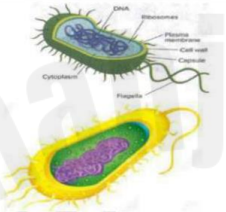
Both of Eukaryotes and prokaryotes has:

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

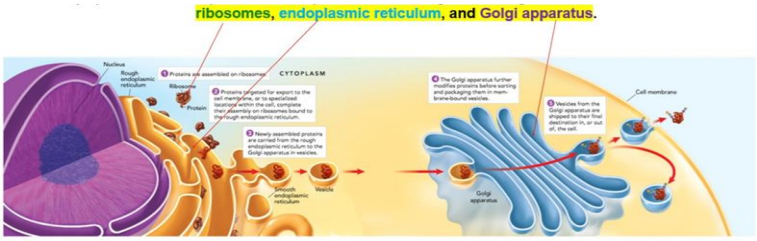
a) Vacuole
b) Chloroplast
c) Ribosome
d) Golgi apparatus

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)

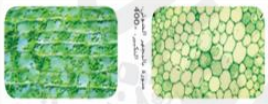
Blank 1 options
- a vacuole
- the rough ER
- the Golgi apparatus
- a vesicle

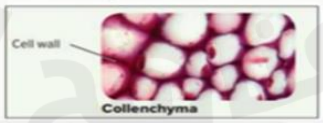
Correct Answer
the Golgi apparatus

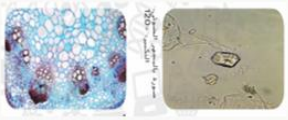
Plants:

Types of plant Cells:

Parenchyma	Collenchyma	Sclerenchyma
Function		
• Storage • Photosynthesis • Gas exchange • Protection • Tissue repair and replacement	• Support for surrounding tissues • Flexibility for plant • Tissue repair and replacement	• Support • Transport of materials



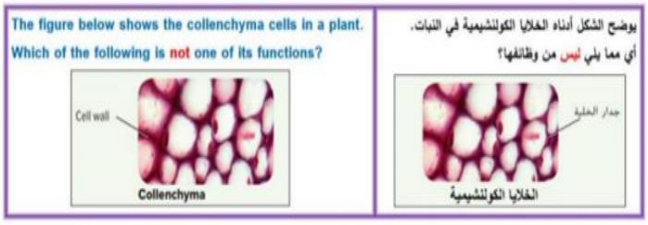


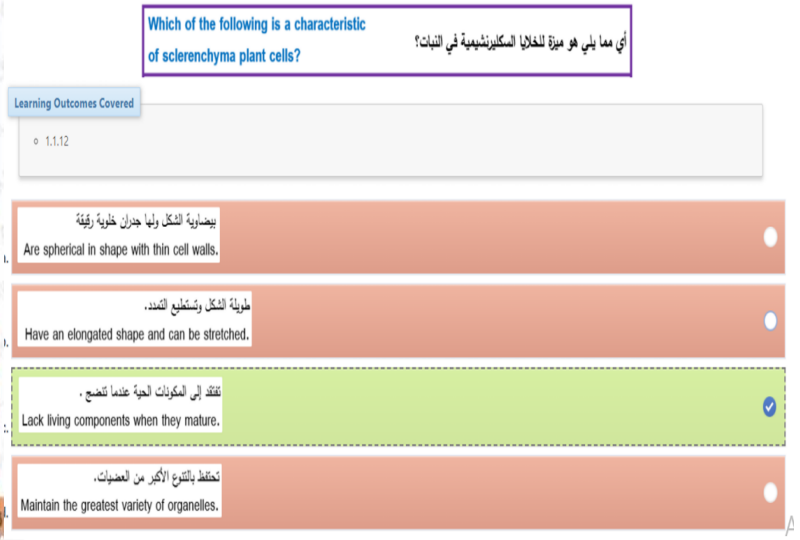


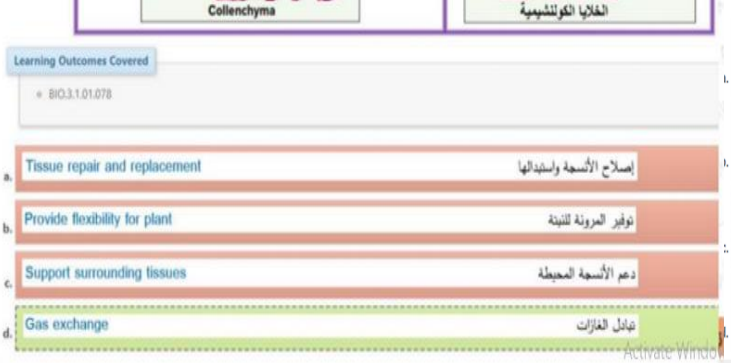
· Which of the following types of plant cells is used to store food in the Taproot?

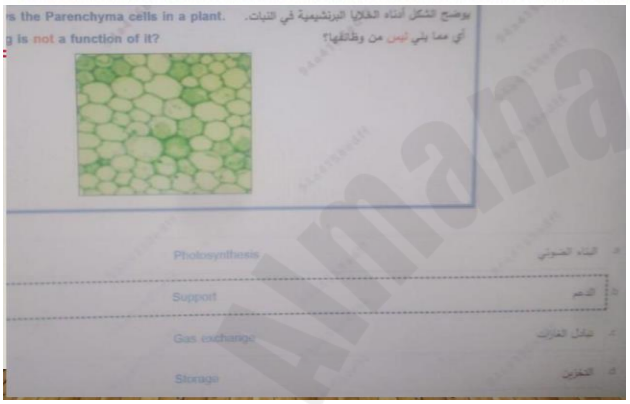
a- Collenchyma cells b- Parenchyma cells

c- Sclerenchyma cells d- Endodermis





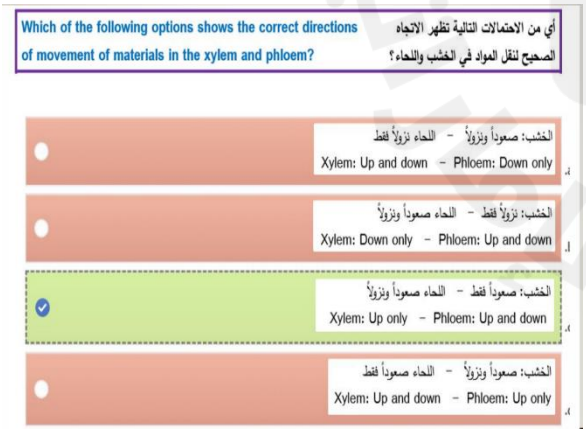


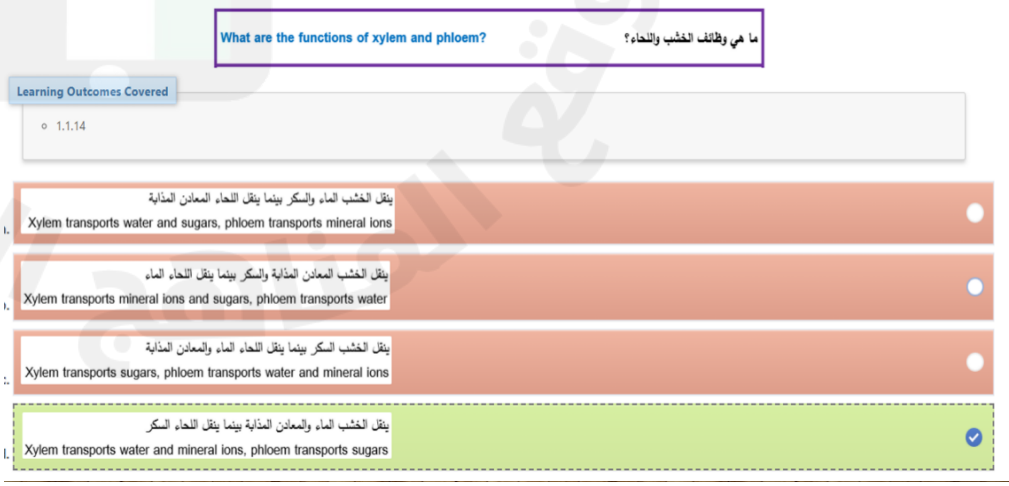


- Two types of vascular tissue:

a) Xylem (Transport water and minerals in one direction from root to leaves)

b) Phloem (Transport food (sugars and organic compounds) in both directions)





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

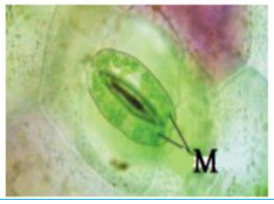
The outer surface of the leaf has a thin waxy covering

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

Which structure helps prevent water loss and protects the leaf?

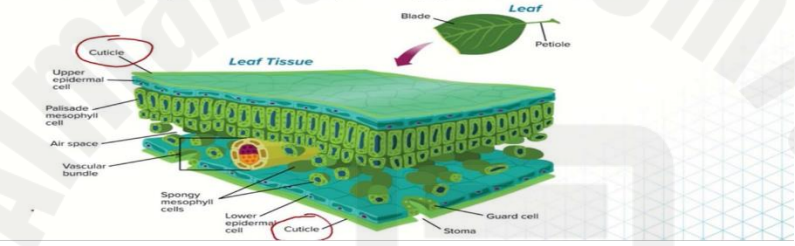
a) Palisades mesophyll
b) Spongy mesophyll
c) Vascular tissue
d) Cuticle

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?

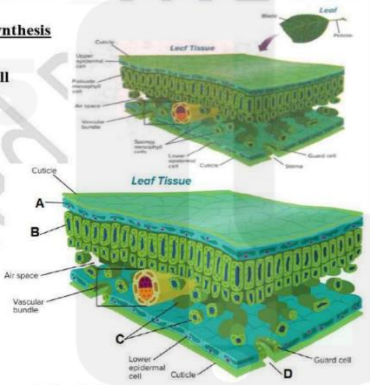
A B
C D

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

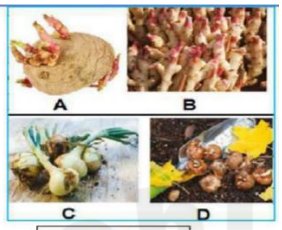
Type	Bulb	Corm
Example	 Narcissus	 Crocus
Function	- Food storage	- Food storage

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

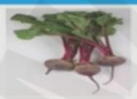


- What is the type of stem shown in the picture below?
a- Tuber b- Runner
c- Rhizome d- Corm

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.


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

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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

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

Phototropism	Gravitropism	Thigmatropism
		
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

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Which stem is exhibiting negative gravitropism?

a- A b- B

c- C d- D

A- positive phototropism

C- negative phototropism

D- No tropism

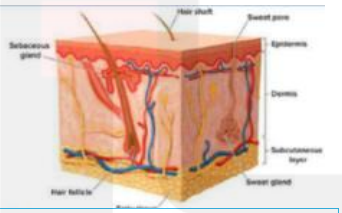
Integumentary system:

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

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

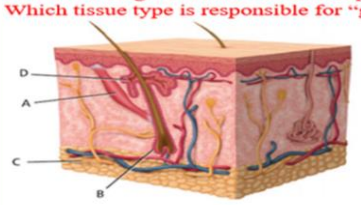
A pigment called _____ (Blank 1) absorbs sunlight to protect the cell.

Blank 1 options
- keratin
- melanin
- melanoma

Correct Answer

melanin

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



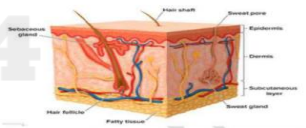
A. A C. C

B. B D. D

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.

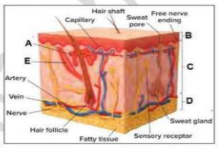
c- fat cells d- nerve cells

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

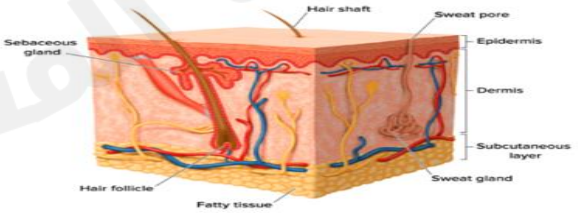
c- Muscle tissue d- Connective tissue

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

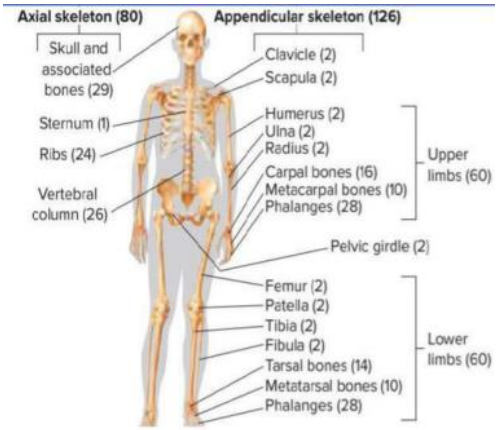
15) What important function does the bottom skin layer in this image have?



- waterproofs skin
- absorbs sunlight
- regulates temperature
- opens pore

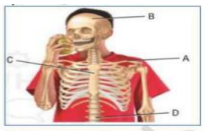
Correct Answer

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?

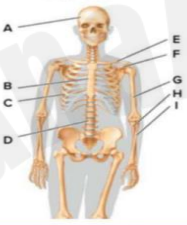
a- A **b- B** **c- G** **d- F**

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?

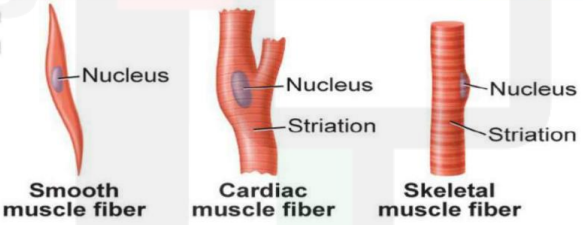
- clavicle
- sternum
- skull
- vertebra

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

.

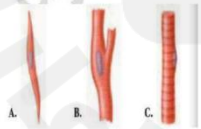


- What muscles shown above are classified as voluntary muscles?

A B C all muscles

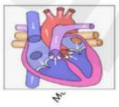
- What muscles shown above are classified as involuntary muscles?

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



- What the type muscles find in your heart?

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



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- What the kind of muscles appears in the figure?

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

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

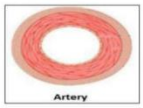
Learning Outcomes Covered

e. BIO.3.1.01.060

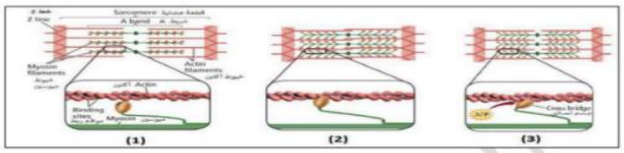
a. A–Smooth muscle عضلة ملساء A
b. B–Cardiac muscle عضلة قلبية B
c. C–Skeletal muscle عضلة هيكلية C
d. D– Voluntary muscle عضلة إرادية D

- What the kind of muscles appears in the figure?

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



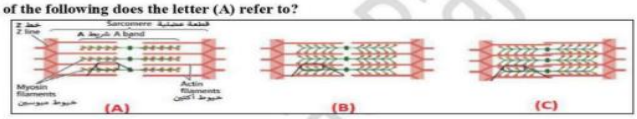
Which of the following number sets represents the correct illustration of muscle contraction in the re below?



a- 1 → 3 → 2 b- 3 → 1 → 2

c- 2 → 3 → 1 d- 3 → 2 → 1

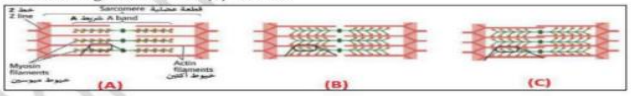
Which of the following does the letter (A) refer to?



a- Relaxed muscle b- Contracting muscle.

c- Fully contracted muscle d- non-striated muscle

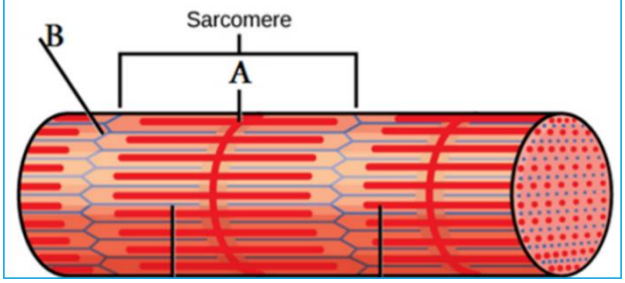
Which of the following does the letter (B) refer to?



a- Relaxed muscle b- Contracting muscle.

c- Fully contracted muscle d- non-striated muscle

Where is the location of the Z line in the figure below?



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