

نماذج تدريبية للصف الثالث الثانوي الأحياء باللغة الإنجليزية النموذج (٣)

٢٠٢٥-٢٠٢٦

أولاً : الأسئلة الموضوعية (اختيار من متعدد) "كل سؤال من درجة واحدة"

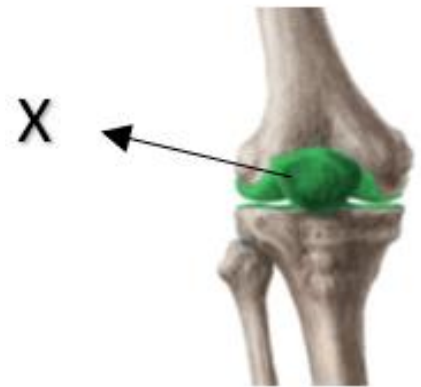
1

Which of the following is considered correct if the ligaments disappeared from the hip joint?

- A) Increase friction between femur bone and pelvis bone
- B) Femur bone moves in wrong direction
- C) Losing ability to move the lower limb
- D) The femur bone may fuse with pelvic bones

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The opposite figure represents one of the joints. Which one of the following is correct about the structure represented by the letter (X)?



- A) Act on decreasing the friction at the joint
- B) Act on protecting the knee joint
- C) Act on facilitating movement of bones
- D) Act on keeping balance of the knee joint

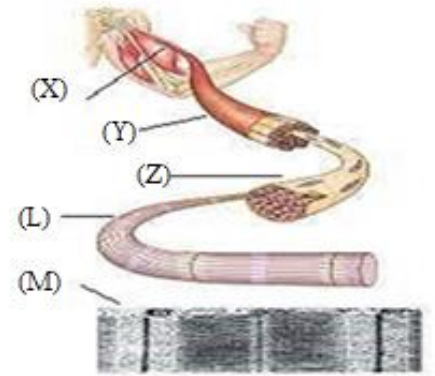
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During inhalation and exhalation in human diaphragm and ribs move. What is the right description for this motion?

- A) Continuous
- B) Cytoplasmic
- C) Positional
- D) Total

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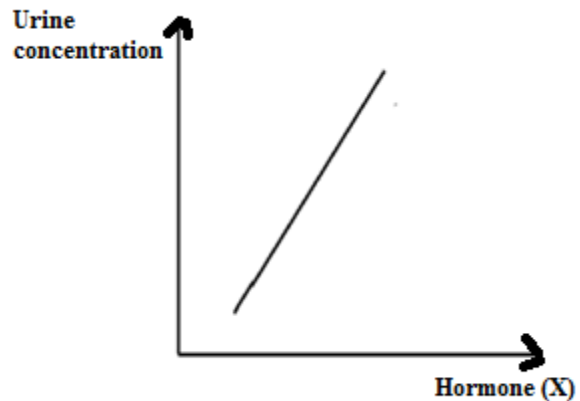
Which of the following represents the arrangement of the skeletal muscle parts in descending order according to size?



- A) (Y-Z- L-X)
- B) (L –Z-Y-X)
- C) (X-Z-Y-M)
- D) (X-Y-Z-M)

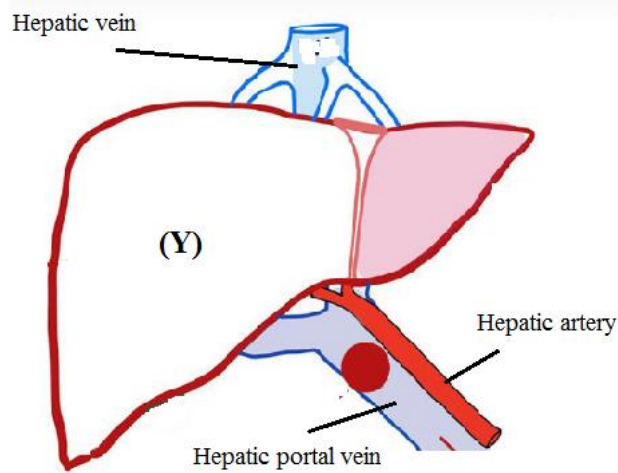
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From the opposite graph,



Which of the following does hormone (X) represent?

- A) Vasopressin hormone
- B) TSH
- C) Aldosterone
- D) Insulin



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Which of the following is correct about the organ (Y)?

- A) One of intestinal hormones affects (Y)
- B) All of intestinal hormones affects (Y)
- C) Secretions of (Y) affect the stomach
- D) Secretions of (Y) affect the pancreas

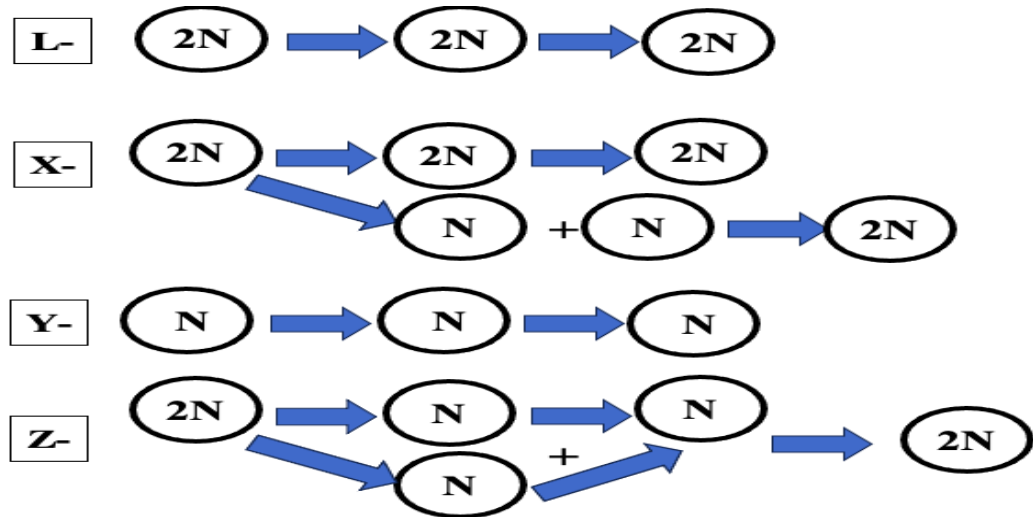
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What is happen in the human body, When the temperature of atmosphere decreases :

- A) Increase of ADH secretion
- B) Decrease of adrenalin secretion
- C) Increase of thyroid gland activity
- D) Increase of insulin secretion

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In the diagram the methods of reproduction of a living organism, study it then answer:



Which of the following represents this living organism and the vital processes?

	L	X	Y	Z
A	Binary fission	Asexual and sexual reproduction in Aphid	Sporogony	Budding
B	Tissue culture	Asexual and sexual reproduction in Aphid	Sporogony	Asexual and sexual reproduction in Honey bee
C	Sporogony	Asexual and sexual reproduction in Honey bee	Budding	Asexual and sexual reproduction in Aphid
D	Binary fission	Asexual and sexual reproduction in Aphid	Regeneration	Asexual and sexual reproduction in Honey bee

9 **Zygote formation during lateral conjugation in spirogyra is different from zygote formation in the gametophyte stage of fern plants in:**

- A) The main method of reproduction used
- B) Number of chromosomes sets in zygote
- C) Type of cells participated
- D) Genetic diversity

10 **Which of the following factors does not directly affect the success of the pollination process in the flower ?**

- A) Number of ovules
- B) Insects
- C) Stigma shape
- D) Wind

11 **What is the number of fruits formed by a flower its ovary consists of 10 carpels?**

- A) One fruit
- B) 5 fruits
- C) 10 fruits
- D) Number of fruits equal the number of ovules in the carpels

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Secretions of accessory glands of male reproductive system are alkaline because the alkaline medium :

- A) Provides the sperm immunity against microbes
- B) Increase the levels of testosterone
- C) Helps sperms to be survived
- D) Feeds the sperms

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Magnetic separation of sperms is a technique used to separate normal sperms from abnormal by a very fine way.

In which of the following this technique can get best results?

- A) Control the sex of embryo
- B) Extra uterine fertilization
- C) Production of identical twins
- D) Production of non - identical twins

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Which biochemical immune mechanisms induce structural immunity?

- A) Glycosides.
- B) Detoxification enzymes.
- C) Receptors.
- D) Canavanine

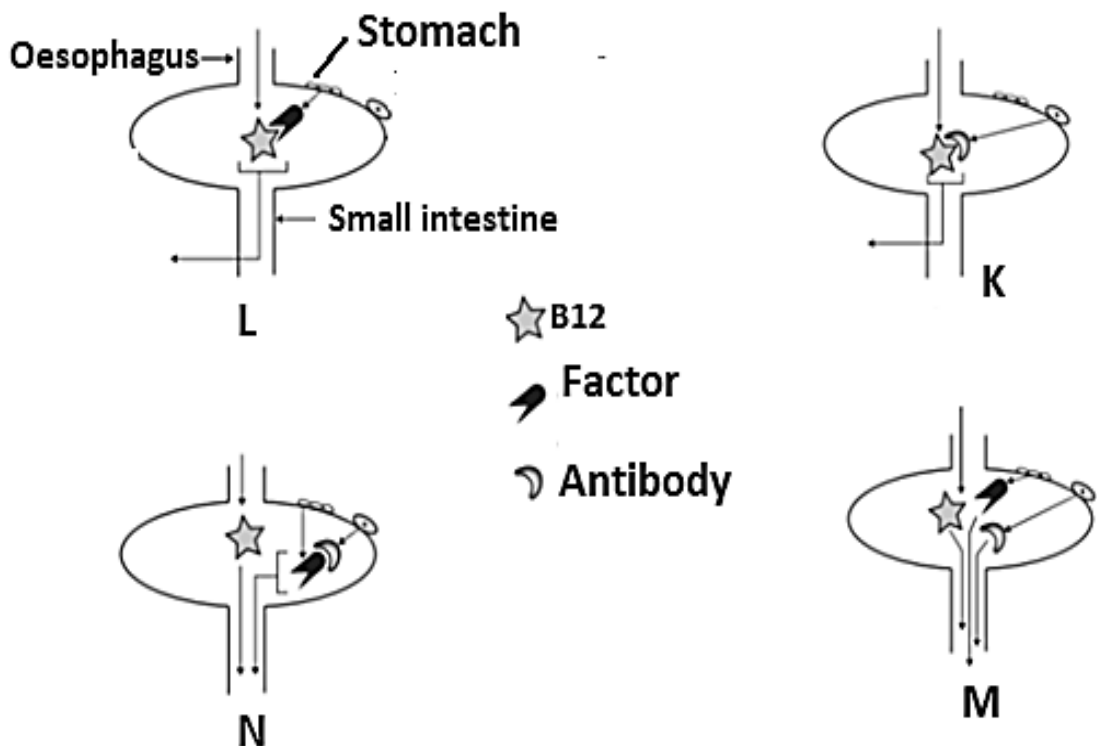
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Which of the following bones produces immune cells?

- A) Phalanges.
- B) Wrist.
- C) Carpal.
- D) Sternum.

16

Normally, vitamin B12 enters the stomach and binds to a factor produced by cells in the stomach wall. The vitamin bound to the factor then travels to the small intestine and passes through the intestinal wall into the bloodstream. In pernicious anemia, plasma cells in the stomach wall produce antibodies to the factor. Antibodies bind to the factor, making it no longer available to bind to the vitamin, and thus the vitamin cannot be absorbed.



From the drawing determine followed pathway when a person is infected with The course of action when a person develops pernicious anemia is...

- A) K
- B) L
- C) M
- D) N

17

A child suffers from a disease called "Cystic Fibrosis "which leads to production of very thick mucus.

Which of the following natural lines of defense will directly affected?

- A) Second line: inflammatory response
- B) First line: all natural barriers
- C) First line : some natural barriers
- D) Second line: Natural killer cells

18

How does the spiral shape of DNA help it perform its function?

- A) It allows the two strands to separate during transcription and replication.
- B) It ensures the accuracy of the information and facilitates the correction of any errors.
- C) It allows for the packing of a huge amount of genetic information
- D) It provides each strand as a template for the construction of a new strand.

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All the following statements describes the action of DNA polymerase Except:

- A) Adding new nucleotides to the 5' end of the new nucleic acid
- B) Forms covalent bonds between adjacent nucleotides in the strand of new nucleic acid
- C) Helps in formation of hydrogen bonds between the strand of new nucleic acid and the template strand
- D) Add the 5' end of new nucleotide to the 3' end of previous nucleotide

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Plasmids in bacteria resemble eukaryotic DNA in the following ways:

- A) Their linear shape and its combination with histone.
- B) Their high content of non-coding genes.
- C) Their location within a nuclear membrane.
- D) Their ability to replicate at the same time with the main DNA.

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Which of the following are characteristics of an antibody?

- A) Belongs to the non-histone proteins.
- B) Always consists of two types of polypeptide chains.
- C) Involved in the construction of specific cellular structures.
- D) Its genetic code is found only in B cells.

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Which of the following distinguish RNA from DNA inside the eukaryotic cell?

- A) Consists of different type of building units
- B) Found inside and outside the nucleus
- C) Carry genetic code permanently
- D) Contain hydrogen bonds in all its type

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What happens if ligation enzymes are not used in a DNA cloning experiment?

- A) The gene and plasmid will fuse when temperature is lowered.
- B) Covalent bonds will be formed between the plasmid and gene, but no hydrogen bonds will be formed
- C) Hydrogen bonds will be formed between the plasmid and gene, but no covalent bonds will be formed
- D) The gene and plasmid will attach spontaneously without need for ligase enzyme

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Many Egyptian scientists and engineers played a major role in the glorious October War of 1973, including geologists who contributed significantly with their expertise in all the following fields except

- A) Physical geology and its role in understanding battlefield studies, field advances, and attack planning
- B) Groundwater geology for drilling wells for soldiers and establishing camps nearby
- C) Engineering geology for constructing tunnels where soldiers can hide
- D) Geophysics for studying vehicle acceleration on sand and wind direction

25

Which of the Earth's layers is primarily responsible for generating the Earth's magnetic field?

- A) Continental crust and mantle
- B) Mantle and oceanic crust
- C) Outer core and mantle
- D) Inner core and outer core

26

The upper surface of a slate block overlain by shale layers is:

- A) Horizontal joint
- B) Angular unconformity
- C) Disconformity
- D) Nonconformity

٢٧

Which of the following minerals is classified as an "elementary mineral" (consisting of only one element)?

- A) Calcite
- B) Graphite
- C) Coal
- D) Quartz

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The hexagonal crystal system differs from the trigonal crystal system in that it has:

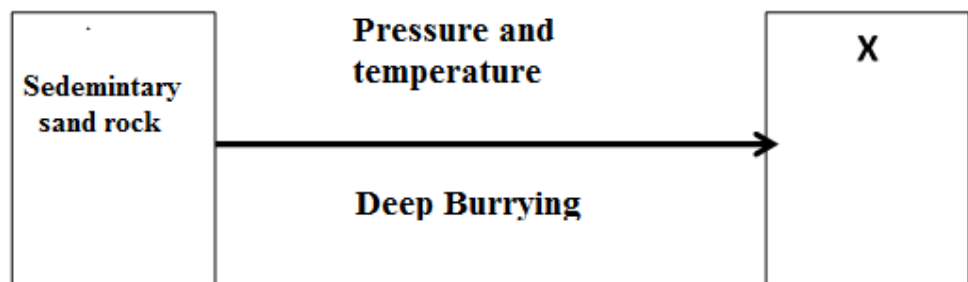
- A) Equal horizontal angles
- B) Equal horizontal axes
- C) Vertical axis of symmetry
- D) Horizontal planes of symmetry

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Mineral (X) scratches limestone but cannot scratch amethyst.

What is its approximate 'Mohs' hardness?

- A) 2
- B) 3
- C) 5
- D) 7



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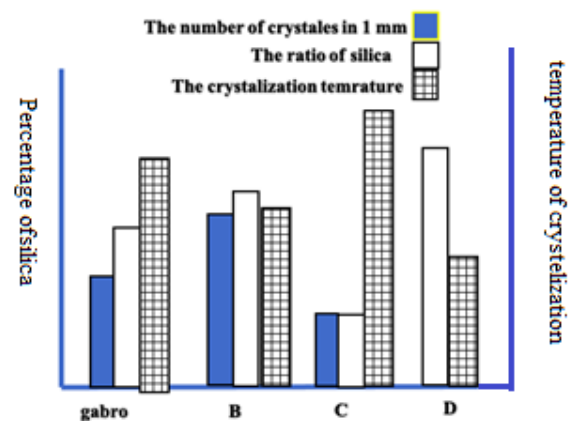
Study the diagram representing part of the rock cycle, then answer:

What is the most probable path of the rock cycle which rock (X) hot through?

- A) It will transform into quartzite, and melting may produce magma.
- B) It will become an igneous rock due to high temperature.
- C) It will melt to form basaltic magma, then cool into a basic igneous rock.
- D) It will melt directly to form granitic magma

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From the chart in front of you,
the following rocks are represented
by the letters B, C, and D respectively.



- A) (B) Basalt – (C) Microgranite – (D) Komatiite
- B) (B) Microgranite – (C) Basalt – (D) Obsidian
- C) (B) Basalt – (C) Komatiite – (D) Granite
- D) (B) Microdiorite – (C) Peridotite – (D) Obsidian

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Silt and clay deposits are found in all the following Except:

- A) Source rocks
- B) Reservoir rocks
- C) Shale
- D) Oil shale

ثانياً : الأسئلة الموضوعية (الاختيار من متعدد) " كل سؤال من درجتين "

33

On measuring the speed of motor response for two brothers some differences appear in their response. Which of the following explain that?

- A) Strength of joints and ligaments
- B) Strength of muscles and elasticity of tendons
- C) Efficiency of nerve impulse transmission the muscles
- D) Efficiency of endocrine glands linked to muscles performance

34

Which of the following occurs when a disturbance occurs in the hormone receptors on Graafian follicles?

- A) Estrogen secretion decreases
- B) FSH secretion decreases
- C) Estrogen secretion increases
- D) FSH secretion increase

35

How much nuclei are present in the pollen tube during its passage through the ovary wall?

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

36

The embryo in most of monocots seeds is characterized by?

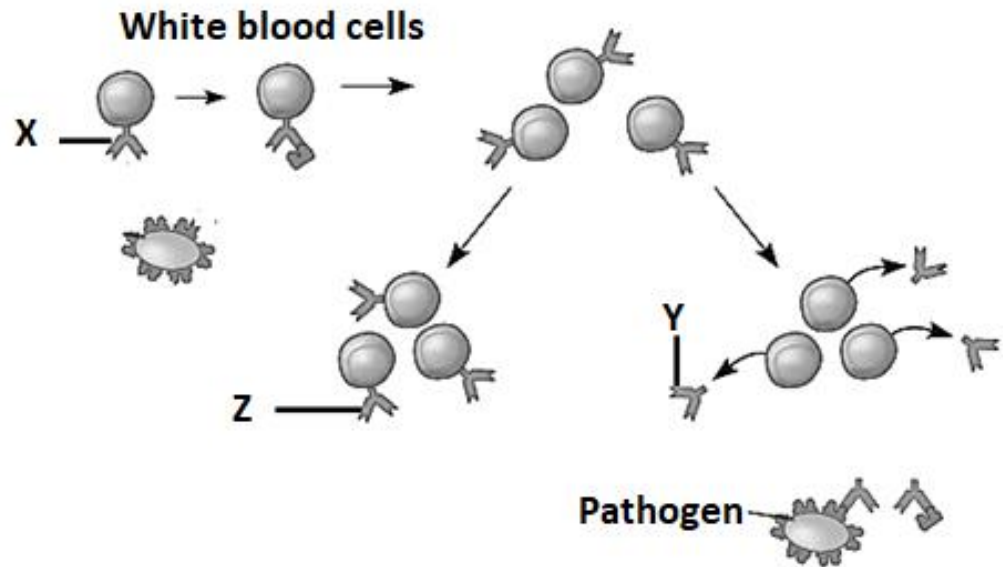
- A) Contains a one cotyledon surrounded by endosperm
- B) Contains one cotyledon containing stored food
- C) Contains one cotyledon containing stored endosperm
- D) Grows slowly during germination

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What is the process that occurs at the formation of ova in female and not occurs at formation of sperms in male

- A) Occurrence of first prophase
- B) Production of four nuclei
- C) First meiosis division
- D) Stop of second meiosis till fertilization

38



The opposite figure shows the steps of humoral immunity. Which of the following is true regarding (X), (Y), and (Z)?

- A) They have the same chemical composition.
- B) They are specialized for different antigens.
- C) They are produced at the same time.
- D) They have different antigen binding sites.

39

A person infected with malaria after his skin being bitten by a female Anopheles mosquito infected with the parasite, and Symptoms of the disease appeared on him Which of the following has occurred?

- A) The innate immune system fought the parasite and failed.
- B) The adaptive system fought the parasite and failed.
- C) Both the innate and adaptive immune systems fought the parasite and failed.
- D) The human immune system was not stimulated.

40

Which of the following explain the percentage matching of bases in DNA molecules of two different tissues in the same living organism?

- A) All the cells of one living organism carry the same gene content.
- B) Each tissue has its own genome
- C) Structure of DNA changes according to the type of cell
- D) The arrangement of bases is different from one tissue to the other

41

The chromosomal number may duplicate in the cell and this is due to each of the following Except:

- A) Formation of the membrane between two daughter cells is failed
- B) Non separation of chromatids after centromere division
- C) Fail of spindle fibers in working correctly during cell division
- D) Absence of centrosome from the plant cell

42

How does r- RNA differ from other types of RNA?

- A) Some its parts can combine with each other by hydrogen bonds
- B) Carry code of building of polypeptide chains
- C) Not combine with other types of RNA by hydrogen bonds
- D) Combine with amino acid during translation process

43

Sedimentary layers affected by the intrusion of viscous magma forming a dome, followed by compression causing one limb to move horizontally over the other. Expected result:

- A) Anticline fold and thrust fault
- B) Anticline fold and normal fault
- C) Syncline fold and reverse fault
- D) Syncline fold and thrust fault

44

Deep intrusive igneous masses such as batholiths form when:

- A) Magma intrudes between pre-existing layers.
- B)) Magma crystallizes at great depth within the crust
- C) Magma erupts and solidifies at the surface
- D) Magma intrudes vertically forming wall-like structures

ثالثاً: الأسئلة المقالية " كل سؤال من درجتين "

45

Answer the following:

a) Meiosis differ in “conjugation” from Meiosis in “gametes formation in term of timing of occurrence and the aim of it. Explain

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b) Determine which one of the two types of cell division (meiosis and mitosis) has a role in maintaining the genetic traits, and which one has a role in living organism evolution. With explanation

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46

Which is more danger for the living organism’s life, occurrence of mistake during DNA replication or occurrence of mistake during translation process. Explain your answer

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إنتهت الأسئلة