

1. Membrane is made of _____

- phospholipids and proteins and carbohydrate
- two layers of phospholipids

2. The tail of phospholipids is _____ .

- Hydrophobic

2. The head of phospholipids is _____

- Hydrophilic

3. Which of the following is a function of plasma Membrane ?

- Enzymatic activity
- Protective barrier
- signal transduction
- transport

4. In a sugar solution, the sugar is considered to be _____

- the solute
- goes from low concentration to high concentration

4. Passive transport across cell membranes _____

- goes from high concentration to low concentration
- Does not requires ATP
- does not require energy

4. Active transport across cell membranes _____ .

- requires energy
- goes from low concentration to high concentration
- requires ATP

4. In a sugar solution, the water is considered to be _____

- goes from low concentration to high concentration
- the solvent

5. Facilitated Active transport _____ .

- requires ATP
- requires energy
- goes from low concentration to high concentration

5. Facilitated Passive transport _____ .

- Does not requires ATP
- goes from high concentration to low concentration
- requires carrier

6. The processing of Moving Big Stuff outside the cell is called

_____ .

- Exocytosis

6. The processing of Moving Big Stuff inside the cell is called

_____ .

- Endocytosis

7. Diffusion of water across a membrane is knowon as _____

- Osmosis

7. Osmosis is _____ .

- the diffusion of water across a membrane

8. Hypotonic _____

- indicates a higher concentration of solute inside the cell

8. _____ indicates a higher concentration of solute inside the cell

- Hypotonic

8. Isotonic _____

- indicates that the concentration of a solute is the same on both sides

8. _____ indicates that the concentration of solute is higher outside the cell

- Hypertonic

9. Placing Red Blood Cell in sea water will cause the cell to

- Shriveled

- shrink

9. Placing Red Blood Cell in distilled water will cause the cell to

- burst

- Lysed

10. Which of the followin is true?

- Potential energy is energy that an object possesses as a result of its position

- Light is an example of Kinetic energy

- Heat is an example of Kinetic energy

- Gasoline is an example of Potential energy

- Kinetic energy is the energy of motion

- food is an example of Potential energy

11. Chemical reaction that releases energy is known as

- Exothermic Reaction

11. Exergonic Reaction _____

- is known as Exothermic Reaction

- is a Chemical reaction that releases energy

11. Endergonic Reaction _____

- is a Chemical reaction that requires a net input of energy

- is known as Endothermic Reaction

12. Metabolic reaction that releases energy is _____

- Exergonic Reaction
- Catabolic Reaction

12. Metabolic Reaction that requires input of energy is _____

- Anabolic Reaction
- Endergonic Reaction
- Endothermic Reaction

13. ATP is _____

- the energy currency
- Adenosine Triphosphate
- composed of adenine, ribose , and three phosphate groups

14. Enzyme _____

- has a particular target molecule called the substrate
- is not consumed in the reaction
- is a protein
- is specific for substrate
- speeds up the cell chemical reactions

15. Heat will cause Enzymes _____

- inactivation

15. Conditions at which Enzymes work best is called _____ conditions

- optimal

16. Inorganic Enzyme Helper is called _____

- Co-facto

16. Organic Enzyme Helper is called _____

- Co-Enzyme

17. Competitive Enzyme Inhibitor _____

- block substrates from entering the active site
- binds to active site
- act directly with the active site

17. Noncompetitive Enzyme Inhibitor _____

- changes the active site shape
- does not act directly with the active site
- binds to a site other than the active site

18. Plant cells harvest energy from the sun by a process called

- photosynthesis

18. Our cells harvest chemical energy from our food by a process called

- cellular respiration

18. The energy for photosynthesis is _____

- sunlight

19. Cellular respiration is _____ reaction

- exergonic

19. During cellular respiration _____

- oxygen is consumed
- carbon dioxide is produced
- glucose is used
- ATP is produced
- energy is produced
- Glucose loses its hydrogen atoms

- oxygen gains hydrogen atoms

- Glucose is oxidized

- oxygen is reduced

20. During cellular respiration, Glucose becomes _____

- Carbon dioxide

20. Chemical energy in organic compounds are stored in

- chemical bonds

20. Final electrons acceptor in Cellular Respiration is _____

- oxygen

21. Dehydrogenase uses _____ as coenzyme

- NAD

21. The enzyme that removes hydrogen from an organic molecule is called

- dehydrogenase

22. The first stage of acellular respiration is _____

- Glycolysis

22. The second stage of acellular respiration is _____

- citric acid cycle

- the Krebs Cycle

22. The third stage of acellular respiration is _____

- the Electron Transport Chain

22. _____ occurs in the mitochondria inner membrane

- Oxidation phosphorylation

- the Electron Transport Chain

22. _____ occurs in the mitochondria matrix

- citric acid cycle

22. _____ occurs in the Cytoplasm

- Glycolysis

22. Glycolysis occurs in the _____

- Cytoplasm

23. During Glycolysis Glucose is converted to _____

- two Pyruvate

24. During citric acid cycle pyruvate is converted to _____

- two carbon dioxide

25. During Oxidative phosphorylation _____

- oxygen is reduced

- NADH is oxidized

- ATP is generated

26. In absence of Oxygen, Yeasts Cells Respiration is called

- anaerobic respiration

- Fermentation

- Alcohol Fermentation

26. In absence of Oxygen, animal Cellular Respiration is called

- Lactic Acid Fermentation

- anaerobic respiration

- Fermentation

≡ *aerobic respiration* هذي غلط

27. Amino acids undergo _____ before used as fuel

- deamination

27. Fats undergo hydrolysis to _____ before used as fuel

- glycerol and fatty acids

28. During Photosynthesis, _____

- carbon dioxide is consumed
- Light energy is converted to chemical energy
- Hydrogens from water reduced carbon dioxide
- water oxidized to oxygen
- oxygen is released
- glucose is produced

29. Autotrophic organisms _____

- use the energy of light to produce organic molecules

29. Plants _____

- are autotrophic organisms
- are photoautotrophic organisms
- are producers

29. The Chlorophyll in plants _____

- is responsible for absorbing light
- is responsible for converting light energy to chemical energy
- is responsible for green color of plants
- is concentrated in the mesophyll

29. Pigment that is responsible for green colour is _____

- Chlorophyll

29. Organelle responsible for Photosynthesis is _____

- chloroplasts

29. Photosynthesis in plant _____

- inside the leaf
- occurs in chloroplasts
- in mesophyll cells

30. Stomata are pores in the leaf that allow _____

- carbon dioxide to enter

30. _____ are pores in the leaf that allow carbon dioxide to enter and oxygen to exit

- Stomata

31. Stroma _____

- found in the Chloroplast
- has double membranes
- encloses dense fluid
- contains the Granum
- contains the Thylakoid

31. Stacks of Thylakoids is called _____

- grana

32. During photosynthesis light Reactions, _____

- light energy is converted to chemical energy and oxygen
- H^+ ions reduce $NADP^+$ to NADPH
- ATP is generated
- Water is split to provide oxygen

32. Photosynthesis Reactions include _____

- Carbon fixation reaction
- light reaction
- light dependent reaction
- light independent reaction
- two reactions

32. Photosynthesis dark Reactions, _____

- light dependent reaction

33. During Calvin cycle, _____

- one CO₂ is incorporated at a time
- glyceraldehyde 3-phosphate (G3P) leaves the cycle as a product.
- three CO₂ are fixed

34. During photorespiration , _____

- oxygen from the light reaction builds up
- no ATP is produced
- no sugar is produced
- Rubisco adds oxygen instead of carbon dioxide to RuBP

Rubisco adds carbon dioxide to RuBP = غلط

35. c4 plants _____

- first fix carbon dioxide into a four-carbon compound
- similar to CAM plants

similar to C3 plants = غلط

1. The scientific name of an organism is _____

- a two-part name formed from the genus with Capital letter and species categories with small letter.

2. The scientific name of an human is _____

- Homo sapiens - المايله

3. _____ is a domian of life

- Bacteria

- Eukarya

- Archaea

4. prokaryotes _____

- lacked organelles

- are Earth's first organisms

- are Earth's predominant form of life

- include Bacteria and Archaea

5. Bacteria and Archaea differ in _____

- Bacterial cells contain molecules of the polymer peptidoglyca

- the structure and composition of the plasma membrane

- the structure and composition of the ribosomes

- the processes of transcription and translation

6. endospore _____

- allows some bacteria to withstand adverse conditions

- contains genetic material

- contains a few enzymes encased in a thick protective coat

- forms within the bacterium

- are protective

7. Many Prokaryotes play important roles in animal nutrition _____

- digest cellulose
- some bacteria in human intestine can synthesize nutrients
- it can be used to produce food
- some bacteria in human intestine can synthesize vitamin K and vitamin B12

8. Some anaerobic bacteria are dangerous to human, where they produce _____

- botulinum that causes botulism
- toxins that attack the nervous system
- Clostridium tetani that causes tetanus

9. Eukarya Domains include _____

- Animals
- Fungi
- Plants
- Protists

10. protists are _____

- eukaryotes that are not a plant
- eukaryotes that are not a fungus
- eukaryotes that are not an animal
- Animals

11. protists are _____

- small
- single-celled
- incredibly diverse in their structural and physiological innovations
- incredibly diverse in their modes of reproduction

12. protists effect human by _____

- food source of large organism
- many human diseases caused
- ecological roles

13. example Of Protists is _____

- Ciliates
- Green algae
- Alveolates (Dinoflagellates)

14. Vascular plant _____

- requires swimming sperm and water for reproduction
- include the seed plants

14. Nonvascular plant _____

- include liverworts
- has limited Body size
- have rhizoids that anchor the plant and bring water

15. Fungi have distinctive adaptations such as: _____

- The mycelium is made up of extensive numbers of filaments called hyphae
- The body of a fungus is called a mycelium and is one-cell thick.
- Fungi feed off dead material

16. Fungi affect humans and other organisms such as: _____

- Fungi play a major role in the destruction of dead plant tissue
- The activities of fungi and bacteria [return] nutrients and minerals to the environment
- Some antibiotics are made from fungi to combat bacterial diseases

take up = غلط

17. Animals have characteristics such as _____

- Animals are mobile.
- Animals are multicellular
- Animals get their energy by consuming other organisms
- Animals react [rapidly] to external stimuli

18. Sponges _____

- are colonies of single-celled organisms
- have a simple body plan
- lack tissues or organs

19. Arthropods include _____

- Insects
- Arachnids.
- Crustaceans

20. Chordates many features such as: _____

- A post-anal tail
- The notochord
- have asexual and sexual Reproduction.
- The nerve cord

21. Amphibians many features such as: _____

- Lungs are poorly developed
- They straddle the boundary between aquatic and terrestrial existence.
- They reproduce in water
- They have a three-chambered heart

22. Mammals _____

- in most of them, fur protects and insulates the warm body
- divided into three groups: monotremes, marsupials, and placentals
- are named for the milk-producing mammary glands

1. Nutrition _____

- includes nutrients action
- includes nutrients interaction
- includes nutrients balance in relation to health and disease

2. Substances that we must have in our diets in order for our cells to function properly include

- Vitamins
- Minerals
- Water

3. Herbivores _____

- one Example of them is sea urchin
- are plant-eaters
- one Example of them is cattle

4. Carnivores _____

- are meat-eaters
- one Example of them is lion
- one Example of them is hawk
- one Example of them is spider

5. Omnivores _____

- one Example of them is roache

6. _____ are examples of Herbivores

- Sea urchins

6. _____ are examples of Omnivores.

- Humans
- Rows

7. A mosquito is an example of animals that use _____ to obtain and ingest their food

- Fluid feeding

7. A _____ is an example of animals that use Suspension feeding to obtain and ingest their food

- tube worm

7. A _____ is an example of animals that use Fluid feeding to obtain and ingest their food.

- mosquito

8. The fourth stage of food processing is _____

- Elimination

8. The second stage of food processing is _____

Digestion

8. The Absorption is the _____ stage of food processing

- third

8. The Elimination is the _____ stage of food processing

- fourth

9. Which of the following statements are true ?

- There are two types of digestion

- Mechanical digestion breaks food down into smaller pieces

- Chemical digestion is enzymatic break down of large organic molecules into their components

10. The _____ is broken down by enzymes into Amino acids

- protein

10. The _____ is broken down by enzymes into Nucleotides

- Nucleic acid

11. The Chewing and mixing of food occurs in the _____

- mouth and stomach

11. The _____ tastes, shapes the bolus of food, and moves it toward the pharynx

- tongue

12. The function of salivary glands is the production of _____

- salivary amylase

13. The _____ makes a minor contribution to immunity

- appendix

14. HDL is a cholesterol, _____

- its level increases by exercise
- its level decreases by smoking
- tends to reduce blocked blood vessels

15. In intracellular route _____

- water transported from cell to cell through plasmodesmata

15. In the extracellular route _____

- water and solutes pass into the root in the porous cell walls of root cells
- water and solutes do not enter any cell plasma membrane until they reach the root endodermis
- The Casparian strip regulates uptake of minerals that enter the root

16. A sugar sink is a plant organ that _____

- store the starch

16. A sugar source is a plant organ that _____

- breakdown the starch

17. The macronutrients are _____

- elements that make up 98% of plant dry weight
- components of organic molecules
- often act as cofactors

18. In A horizon soil the _____

- topsoil subject to weathering
- layer contains humus (decayed organic matter)

18. In B horizon soil the _____

- layer contains dissolved elements

19. Nitrification is the conversion of _____

- ammonium to nitrates, the form most often taken up by plants

19. Amonification is the conversion of _____

- organic matter into ammonium

19. Nitrogen fixation is the conversion of _____.

- N₂ to ammonia

20. Epiphytes _____

- absorb water and minerals from rain

20. Parasites _____

- roots tap into the host plant's vascular system

20. Carnivorous plants _____

- trap and digest small animals such as insects
- absorb inorganic elements from prey

21. The function of the liver is the production of _____

- bile

22. Stomata open _____

- as a result of bowing of the guard cells
- as a result of a rise in potassium
- at day time