تم تحميل هذا الملف من موقع المناهج الإماراتية

مراجعة نهائية للمقرر وفق الهيكل الوزاري منهج انسباير

موقع المناهج ⇦ المناهج الإماراتية ⇦ الصف العاشر العام ⇦ علوم ⇦ الفصل الأول ⇦ ملفات متنوعة ⇦ الملف

تاريخ إضافة الملف على موقع المناهج: 2024-12-11 14:30:49

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

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التواصل الاجتماعي بحسب الصف العاشر العام

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

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

1	حل أسئلة الامتحان النهائي القسم الالكتروني منهج بريدج
2	حل تجميعة أسئلة مراجعة وفق الهيكل الوزاري منهج بريدج
3	تجميعة أسئلة مراجعة وفق الهيكل الوزاري منهج بريدج
4	مراجعة حل إسئلة امتحانات سابقة وفق الهيكل الوزاري
5	حل مراجعة اختيار من متعدد منهج بريدج

1. Which of the following correctly describes why water is considered a polar molecule?
A. It contains only hydrogen and oxygen atoms
B. It has a linear molecular structure
C. It has an unequal sharing of electrons between hydrogen and oxygen
D. It lacks electronegativity

2. Which of the following correctly describes why hydrogen bonds between water molecules are formed?
A. Hydrogen atoms in different water molecules tend to clump together
B. Oxygen atoms share unpaired electrons with hydrogens atoms in other water molecules
C. Positively charged hydrogen atoms and negatively charged oxygen atoms are attracted to each other
D. The presence of carbon atoms in water molecules creates a point of attraction

3. Which property of water allows it to form droplets on surfaces and create surface tension?
A. Adhesion
B. Cohesion
C. Heat Capacity
D. Solubility

4. Which of the following statements correctly describes the heat capacity of water?
A. Water's heat capacity is lower than that of air, making it less effective at storing heat
B. Water's heat capacity is the same as that of most metals
C. Water has a high heat capacity, which means it can absorb a lot of heat without a significant change in temperature
D. Water has a low heat capacity, which means it heats up and cools down quickly

5. Which of the following substances cannot dissolve in water?
A. Alcohol
B. Carbon dioxide
C. Oil
D. Salt

6. Which of the following correctly describes how buffers work?
A. They increase the concentration of H+ ions in a solution
B. They neutralize acids and bases by forming water
C. They release hydrogen ions to decrease pH
D. They resist changes in pH by absorbing excess H+ or OH- ions

7- What kind of molecule is water?
A. Ionic
B. Polar Covalent
C. Nonpolar Covalent
D. Metallic

8- Which of the following can water NOT dissolve?
A. Salt
B. Sugar
C. Oil
D. Baking Soda

9- Which of the following can water NOT dissolve?
A. Ionic Compounds
B. Polar Compounds
C. Nonpolar Compounds

10- Which of the following is an example of COHESION?
A. water sticking to water
B. water sticking to glass
C. oil sticking to plastic
D. hydrogen sticking to oxygen

11- Water is polar. What does that mean?
A. it is a molecule with opposite charges on opposite ends
B. it is a molecule with no charge
C. it is a molecule with identical charges on opposite ends
D. it is a molecule with too many protons

12- Water sticks well to many materials. What term relates to this property of water?
A. cohesion
B. adhesion
C. density
D. surface tension

13- What is the term for water's ability to defy gravity and climb up a tube?
A. Capillary Action
B. Specific Heat
C. Universal Solvent
D. Magic

14- A water strider can skate along the top of a pond because:
A. covalent bonds result in water cohesion (surface tension)
B. hydrogen bonds result in water cohesion (surface tension)
C. water striders have adapted to take advantage of water cohesion
D. water striders are afraid of water and avoid it

15- What is adhesion?
A. Water's ability to stick to itself
B. Water's ability to stick to other substances
C. The strength of the cohesion of all the water molecules combined
D. Tape, glue and other adhesives

16- Why does ice float?
A. water expands when it freezes, making ice less dense than water
B. water compacts when it freezes, making ice denser than water
C. hydrogen bonds in water push the ice to the surface
D. ice is afraid of water, and avoids it

17- What is cohesion?
A. Water's ability to stick to itself
B. Water's ability to stick to other substances
C. The strength of the cohesion of all the water molecules combined
D. Tape, glue and other adhesives

18- Large bodies of water do not quickly fluctuate in temperature. Why?
A. Water is a solvent.
B. Water has a high heat capacity.
C. Water acts as a buffer.
D. Water is non-polar.

19- Water is a universal solvent because it...
A. It can be found anywhere
B. It freezes when it gets cold
C. floats when frozen
D. Dissolves most substances

20- The tightness across the surface of water that enables paper clips to float is _____.
A. adhesion
B. capillary action
C. surface tension
D. polarity

21- Which statement explains why water molecules stick together?
A. both sides are negative
B. one side has a positive charge and the other side has a negative charge
C. one side has a negative charge and the other side has a neutral charge
D. both sides are positive

1- What unique property of carbon allows it to form diverse organic compounds?
A. It can form up to four covalent bonds with many other elements
B. It has a high atomic number compared to other elements nonmetals
C. It has a strong ionic bonding capacity
D. It has a very high electronegativity

2- Which of the following statements correctly describes how polymers are formed?
A. Polymers are formed by the dissolving of monomers in a solvent
B. Polymers are formed by the combustion of monomers
C. Polymers are formed by the condensation of small molecules with the release of energy
D. Polymers are formed by the repeated addition of monomers through chemical bonds

3- Which of the following is NOT a major group of macromolecules in living things?
A. Lipids
B. Nucleic acids
C. Proteins
D. Vitamins

4- Which macromolecule is primarily composed of amino acids?
A. Carbohydrates
B. Lipids
C. Nucleic acids
D. Proteins

5- Which macromolecule serves as a long-term energy storage molecule in plants?
A. Carbohydrates
B. Lipids
C. Nucleic acids
D. Proteins

6- Proteins are made of monomers called _____
A. Nucleotides
B. Monosaccharides
C. Amino Acids
D. Glycerol and fatty acids

1- The element _____is found in all of the organic compounds.
A. Iron
B. Nitrogen
C. Carbon
D. Oxygen

2- DNA and RNA are examples of
A. Carbohydrates
B. Lipids
C. Proteins
D. Nucleic Acids

3- Which macromolecule is made of simple and complex sugars?
A. lipids
B. proteins
C. carbohydrates
D. nucleic acids

4- Which macromolecule stores energy, insulates us, and makes up the cell membrane?
A. lipids
B. proteins
C. carbohydrates
D. nucleic acids

5- This is one job proteins do NOT have in the body
A. storing genetic information
B. structure
C. speed up chemical reactions
D. transport things through cell membrane

6- DNA and RNA are examples of...
A. proteins
B. nucleic acids
C. carbohydrates
D. lipids

7- Unsatured fats are healthier for you. Which is an example of an unsaturated fat?
A. butter
B. bacon
C. olive oil
D. eggs

8- Another name for fats and oils
A. proteins
B. sugar
C. lipids
D. nucleic acids

9- How carbohydrates and lipids similar?
A. both contain C, H, O, N, P and store energy
B. both contain C, H, O, N and give energy
C. both contain C, H, O, N, S and store energy
D. both contain C, H, O and give energy

10- What is the key role (function) of carbohydrates?
A. energy storage
B. immunity, muscles, structure for tissues, cell metabolism
C. instant energy for cells and body functions
D. genetic information (heredity)

11- What elements (monomers) make up a protein?
A. C, H, O
B. C, H, O, N, (S)
C. C, H, O, N, P

12- Which biomolecule is found in pasta and bread?
A. Lipid
B. Protein
C. Nucleic Acid
D. Carbohydrate

13- Which biomolecule is a main source of quick energy?
A. Nucleic Acid
B. Protein
C. Lipid
D. Carbohydrate

14- Which biomolecule is found in fats, oils, and waxes and is a source of long-term energy?
A. Proteins
B. Nucleic Acid
C. Lipids
D. Carbohydrate

15- What are the single sugars that are the building blocks of carbohydrates?
A. monosaccharides
B. disaccharides
C. polysaccharides
D. amino acid

16- What is the function of nucleic acids?
A. store genetic information
B. store energy (long-term)
C. store energy (short-term)
D. build skin, hair, nails, muscles

17- Lipids can be digested into what smaller subunits?
A. nucleic acids
B. amino acids
C. fatty acids
D. glucose

18- All polymers are made up of...
A. monosaccharides
B. monomers
C. proteins
D. None of these

19- How many sugar units make up polysaccharides?
A. one
B. two
C. more than two
D. zero

20- Macromolecules are formed by a process called polymerization, in which large compounds are built by joining smaller ones together. The smaller units, or _____, join together to form _____.
A. polymers, monomers
B. monomers, polymers
C. molecules, atoms
D. cells, molecules

21- Large macromolecules formed from monosaccharides are called _____.
A. disaccharides
B. triglycerides
C. polysaccharides
D. glucose

22- Each protein has a specific role. Some proteins... (choose all answers that apply)
A. control the rate of reactions and regulate cell processes
B. form bones and muscles
C. transport substances into or out of cells
D. help to fight disease

23- Which of the following elements is found in proteins but not found in carbohydrates or lipids?
A. Oxygen
B. Nitrogen
C. Hydrogen
D. Carbon

24- Select ALL the correct answers: Which of the following are examples of lipids?
A. Phospholipids
B. Enzymes
C. Triglycerides
D. Amylose

1- A process that involves rearrangement of the molecular structure of a substance
A. Chemical change
B. Physical change
C. Activation change
D. Reactant change

2- Crushing a can is an example of
A. Chemical change
B. Physical change
C. Activation change
D. Reactant change

3- What are the products of the chemical reaction?$CH_4 + 2O_2 \rightarrow CO_2 + 2H_2O$
A. $CH_4 + 2O_2$
B. $2H_2O + 2O_2$
C. $CO_2 + 2H_2O$
D. $CH_4 + CO_2$

4- An enzyme is a
A. Protein
B. Carbohydrate
C. Lipid
D. Nucleic Acid

5- An enzyme's _____ determines its function.
A. Structure
B. Name
C. Concentration
D. pH

6- Which of the following correctly describes enzymes?
A. They are lipids.
B. They are reusable.
C. They all work at the same pH.
D. They work best when they are denatured.

7- An enzyme fits its substrate like
A. a lock and key
B. peas and carrots
C. a product and reactant

8- A solution has a pH of 3. It is
A. a base
B. an acid
C. neutral

9- Water is _____ meaning neighboring water molecules stick to each other.
A. Adhesive
B. Cohesive
C. Polar
D. Neutral

10-Water is considered the universal solvent because it can dissolve many types of substances. This is because it's polar--it has a negative end and a positive end.

A. Adhesive
B. Cohesive
C. Polar
D. Neutral

11-Because water is polar, it forms weak _____ bonds--the hydrogen in one water molecule is attracted to the oxygen in another water molecule.

A. Nitrogen
B. Peptide
C. Hydrogen
D. Covalent

12-Bases will release _____ ions when in water.

A. hydrogen (H+)
B. hydroxide (OH-)
C. H_2O

13-Which of the following will NOT denature enzymes?

A. heat
B. radiation
C. strong chemicals
D. optimum pH

14-What is a common example of a chemical reaction that releases a lot of heat and light?

A. Freezing water
B. Boiling water
C. Thermite reaction
D. Mixing salt and water

15-What is not considered a chemical reaction?

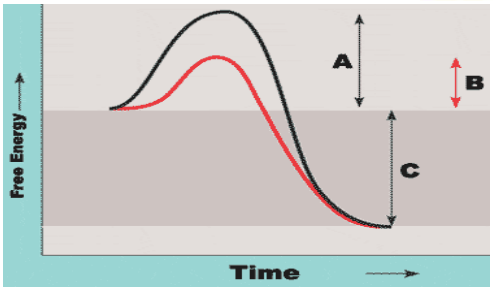
A. Burning wood
B. Boiling water
C. Digesting food
D. Rusting iron

16-What principle states that mass is conserved in chemical reactions?

A. Conservation of energy
B. Conservation of mass
C. Newton's First Law
D. Theory of Relativity

17-What happens to atoms in a chemical reaction?

A. They disappear
B. They are created
C. They become inert
D. They are rearranged



18-What increases the likelihood of chemical reactions according to collision theory?

A. Decreasing temperature
B. Increasing pressure
C. Increasing molecular motion
D. Reducing reactant concentration

19-What classroom demonstration explains the effect of temperature on molecular motion?

A. Mixing oil and water
B. None of the above
C. Boiling water
D. Freezing water into ice

20-In the classroom experiment with vinegar and baking soda, what should the mass measurement show?

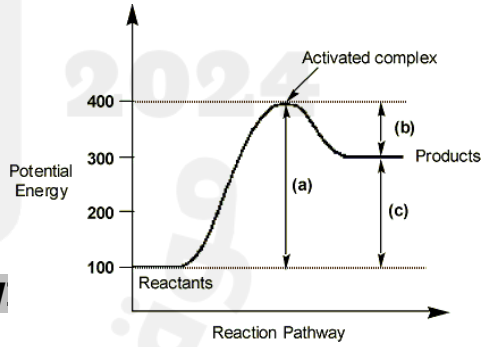
A. Mass increases
B. Mass decreases
C. Mass remains the same
D. Mass is irrelevant

21-What is demonstrated by the reaction of vinegar and baking soda in terms of mass?

A. Mass can vanish
B. Mass is doubled
C. Mass is transferred
D. Mass is conserved

22- Does the energy diagram show an exothermic reaction of an endothermic reaction?

A. Endothermic
B. Exothermic

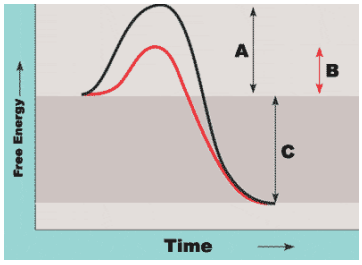


23- Which line shows the energy of the reaction W

A. Black
B. Red
C. Both

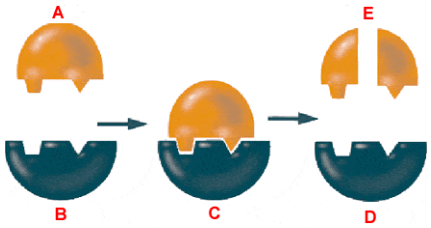
24- Which letter shows the activation energy required WITHOUT enzyme?

A
B
C



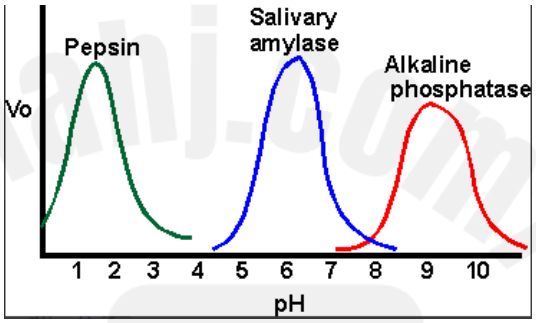
25- Which letter represents the enzyme?

A
B
C
E

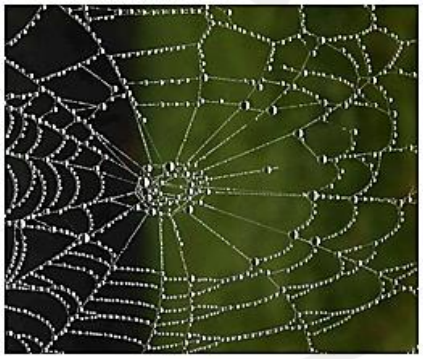


26- The pH of the stomach is between 1.5 and 3. Which enzyme would most likely be found in the stomach?

A. pepsin
B. salivary amylase
C. alkaline phosphatase



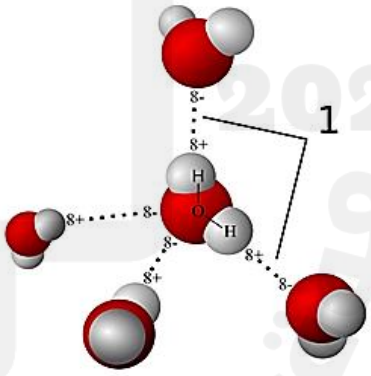
1.



What word describes when water is attracted to other substances?

a) surface tension
b) adhesion
c) capillary action
d) cohesion

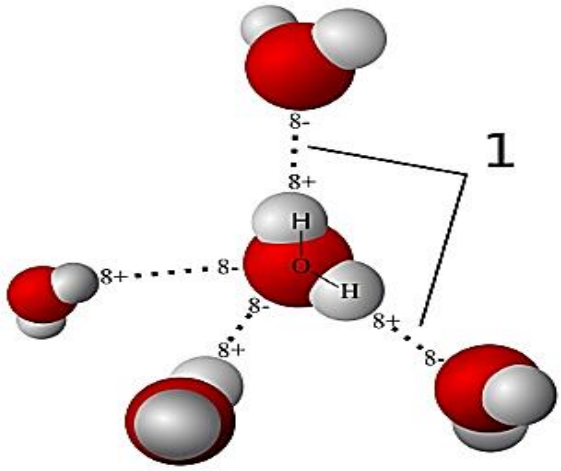
2.



Attractions between water molecules are called

a) Hydrogen bonds
b) Covalent bonds
c) Polar bonds
d) Ionic bonds

3.



Attractions between water molecules are called

a) Polar bonds
b) Covalent bonds
c) Ionic bonds
d) Hydrogen bonds

5. Which of the following word pairs correctly completes the sentence below?

_____ are corrosive substances characterized as having a strong smell, a sour taste, and a _____.

a) Bases; pH less than 7
b) Bases; pH greater than 7
c) Acids; pH less than 7
d) Acids; pH greater than 7

6. If an acid is combined with a base of equal strength, the result will most likely be

a) impossible to tell without testing the pH.
b) a neutral solution.
c) a stronger base
d) a stronger acid.

7. A solution with a pH of 7 is_____

a) increasing
b) neutral
c) apple juice
d) decreasing

8. What do carbohydrates provide for the body?

a) Helps vital processes
b) Provides your body's main source of energy
c) Helps hydrate your body
d) Helps build and repair body tissue

9. What is created by photosynthesis?

a) Galactose
b) Fiber
c) Glucose
d) Lactose

10. How do lipids function for cells?

a) store information
b) breakdown wastes
c) store energy
d) join with substrates

11. What is the monomer of proteins?

a) monosaccharides
b) polypeptides
c) nucleotides
d) amino acids

12. Most enzymes:

a) keep the rate of the chemical reaction the same
b) have no effect on the rate of the chemical reaction
c) speed up the chemical reaction
d) slow the rate of the chemical reaction

13. Which is the monomer (building block) for lipids?

a) fatty acids & glycerol
b) nucleotide
c) amino acids
d) monosaccharide

14. Subunit is to Macrocolecule like ___ is to ____

a) Building is to Carpenter.
b) Brick is to Building.
c) Carpenter is to Building.
d) Building is to Bricks.

15. What is the function of nucleic acids?

a) store energy (long-term)
b) build skin, hair, nails, muscles
c) store genetic information
d) store energy (short-term)

15. What is the function of nucleic acids?

a) store energy (long-term)
b) build skin, hair, nails, muscles
c) store genetic information
d) store energy (short-term)

16. The organic compounds that have many structural purposes and are used in many processes within the cell are called _____.

a) Lipids
b) Carbohydrates
c) Nucleic Acids
d) Proteins

17. What type of macromolecule are enzymes?

a) Protein
b) Nucleic Acid
c) Carbohydrate
d) Lipid

18. The part of the enzyme that the substrate bonds to is called the _____.

a) peptide bond
b) bond site
c) activation energy
d) active site

19. Which of these is NOT true?

a) Enzymes speed up chemical reactions.
b) Enzymes can only be used once in a chemical reaction.
c) Enzymes can denature when the pH changes.
d) Enzymes can denature (change shape) when the temperature gets too high.

20. A monosaccharide is a:

a) protein
b) lipid
c) carbohydrate
d) nucleic acid

21. Which element listed below is not found in lipids?

a) hydrogen
b) carbon
c) nitrogen
d) oxygen

1. A substance that speeds up the rate of a chemical reaction is called

a) an element
b) a lipid
c) a catalyst
d) a molecule

2. Which macromolecule stores energy and makes up the cell membrane?

a) proteins
b) carbohydrates
c) lipids
d) nucleic acids

3. This is one job proteins do NOT have in the body

a) structure
b) speed up chemical reactions
c) transport things through cell membrane
d) storing genetic information

4. DNA and RNA are examples of...

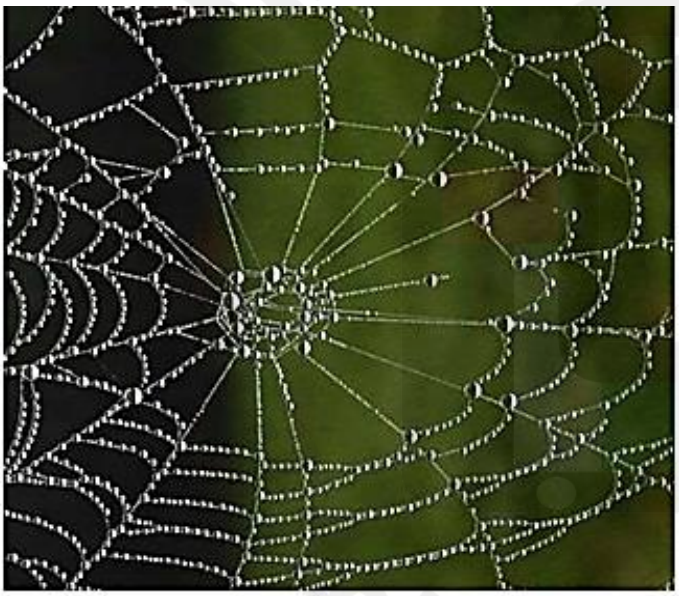
a) carbohydrates
b) nucleic acids
c) lipids
d) proteins

5. What is the monomer of nucleic acids?

a) Glycerol
b) Amino Acids
c) Monosaccharides
d) Nucleotides

6. Storing genetic information is a function belonging to which macromolecule?

a) Nucleic Acids
b) Proteins
c) Carbohydrates
d) Lipids

7. 

What word describes when water is attracted to other substances?

a) cohesion
b) capillary action
c) adhesion
d) surface tension

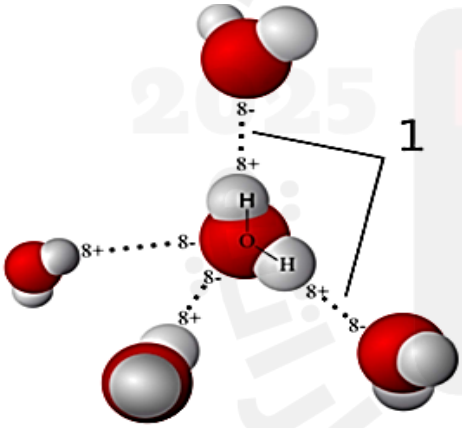
8. 

The attraction that causes water and other liquids to form drops on thin films is called _____. This is also water's ability to be attraction to other water molecules.

a) surface tension
b) capillary action
c) adhesion
d) cohesion

9. Which property of water will cause water to bead up on glass?

a) Cohesion
b) High specific heat
c) Ability to dissolve substances
d) Adhesion

10. 

Bond created by the weak attraction of a slightly positive hydrogen atom to a slightly negative portion of another molecule

a) solution
b) polar molecule
c) adhesion
d) hydrogen bond

11. What is the monomer of carbohydrates?

a) fatty acid
b) protein
c) monosaccharide
d) amino acid

12. What elements are found in proteins?

a) C H O
b) C H O N
c) C H O N P
d) C H O P

13. Isotopes are atoms of the same element that differ in the number of

a) neutrons
b) protons
c) electrons

14. What subatomic particle is negatively charged?

a) solution
b) electrons
c) protons
d) neutrons

15. The energy needed to get a reaction started is the

a) chemical energy
b) activation energy
c) cohesion energy
d) adhesion energy

16. When salt is dissolved in water, water is the

a) solvent
b) reactant
c) solution
d) solute

17. The three particles that make up atoms are

a) protons, neutrons, solvents
b) protons, neutrons, and electrons
c) protons, neutrons, soltuions
d) protons, electrons, solutions

18. A covalent bond is formed as the result of

a) sharing protons
b) transferring protons
c) transferring electrons
d) sharing electrons

19. True or False. Enzymes are used up during a chemical reaction.

a) False b) True

20. Which two macromolecules are made up only of C, H , and O?

a) Carbohydrates & Lipids b) Lipids & Nucleic Acids

c) Lipids & Proteins d) Carbohydrates & Proteins

21. Neutrons and protons make up the atom's _____.

a) electrons b) solution

c) solvent d) nucleus

23. Compounds that form hydrogen ions in solution is

a) a solution b) a proton

c) a base d) an acid

24. The function of carbohydrates is

a) makes up cell membrane. b) to transports substances in the body.

c) main source of energy. d) store genetic information.

25. Which macromolecule basic unit is glycerol and fatty acids?

a) lipids b) nucleic acids

c) carbohydrates d) proteins

1. The pH scale is a range from:

a) 1-14 b) 1-7

c) 0-14 d) 1-20

2. A(n) _____ is a substance with a pH less than 7

a) Base b) Acid

c) Alkaline d) Buffer

3. A(n) _____ is a substance with a pH greater than 7.

a) Acid b) Base

c) Buffer d) Water

4. The 4 macromolecules are

a) Carbohydrates, Lipids, Proteins, Nucleic Acids b) micronutrients, macronutrients, water, vitamins

c) vitamins, lipids, water, micronutrients d) Lipids, Waxes, Vitamin A, Water

5. What are proteins made of?

a) amino acids b) monosaccharides

c) fatty acids d) nucleic acids

6. Which biomolecule has sugars and starches?

a) Carbohydrates b) Lipids

c) Nucleic Acid d) Proteins

7. Lipids are made up of which of the following?

a) glycerol and fatty acids tails
b) glycerol and monolipids
c) amino acids and nucleotides
d) fatty acids and phosolipids

8. The waxy, organic substances used by aquatic birds to coat their feathers, when analyzed consists mostly of

a) carbohydrates
b) lipids
c) nucleic acids
d) proteins

9. Which macromolecule is used as our main source of energy?

a) Carbohydrates
b) Lipids/Fats
c) Proteins
d) Nucleic Acids

10. This macromolecule breaks down into sugars such as glucose.

a) Protein
b) Lipids/Fats
c) Carbohydrates
d) Nucleic Acids

11. DNA and RNA are examples of

a) Nucleic Acids
b) Lipids
c) Proteins
d) Carbohydrates

12. Nucleotides are monomers of

a) Lipids
b) Nucleic Acids
c) Proteins
d) Carbohydrates

13. What is the function of nucleic acids?

a) store energy (long-term)
b) build skin, hair, nails, muscles
c) store energy (short-term)
d) store genetic information

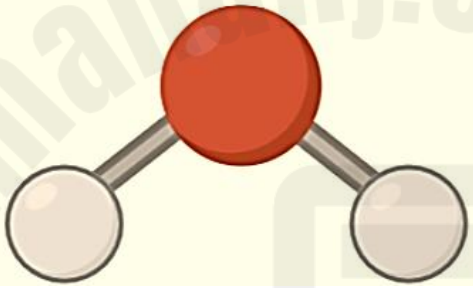
14. Which macromolecule stores energy, insulates us, and makes up the cell membrane?

a) proteins
b) carbohydrates
c) lipids
d) nucleic acids

15. All polymers are made up of...

a) None of these
b) monosaccharides
c) proteins
d) monomers

7. The diagram below represents a water molecule. **Label** the atoms and indicate the partial charges on each atom. **Explain** how the polarity of water molecules arises based on this diagram.



8. Consider droplets of water on the surface of a cool glass. **Describe** the processes of cohesion and adhesion and **explain** how these properties contribute to water's behavior on the surface of the glass.

Use the pH scale below to answer questions **9** and **10**.

9. **Identify** the ranges corresponding to acids and bases and explain the relationship between pH values and hydrogen ions (H^+) concentration in a solution.

10. **Complete** the table below to identify the type of each listed solution based on its acidity.

Solution	Type (Acidic, basic, neutral)
Milk	
Stomach acid	
Normal rainfall	
Pure water	
Ammonia solution	

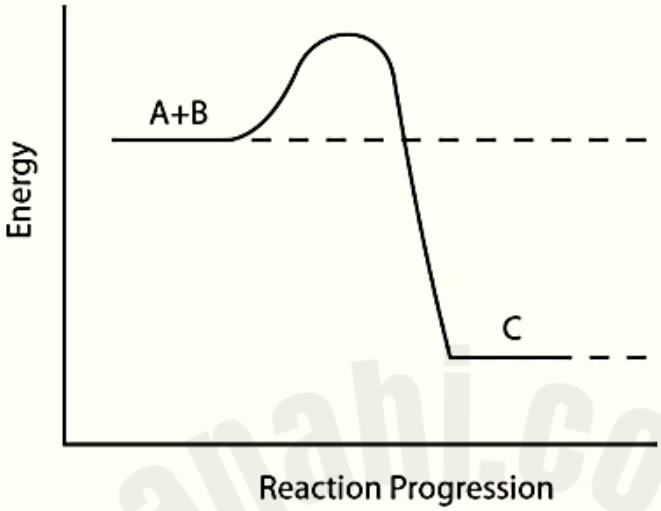
18. **List** the properties of carbon that allow it to form a wide variety of compounds.

19. **Describe** the different levels of protein structure.

20. **Complete** the table below to compare and contrast the four key macromolecules.

Criteria	Carbohydrates	Proteins	Lipids	Nucleic Acids
Building Blocks/Monomers				
Functions				
Examples				

A student conducts an experiment to investigate a chemical reaction and the graph below shows the results of this reaction. Use the diagram below to answer questions **28-30**.



29. After a few minutes of combining reactants, the student noticed that the beaker containing the reaction was increasing in temperature. **Explain** this observation.

30. **Give one** example of a reaction that occurs in living cells that is the same type as the reaction represented by the graph and is catalyzed by an enzyme.

1- Cells are often called "the ____ of life."
A. bread
B. road map
C. building blocks
D. meaning

2- Why are microscopes important when studying most cells?
A. Most cells are very large.
B. Most cells are very small.
C. Most cells move very quickly.
D. Most cells are dead.

3- Robert Hook discovered cells in ____.
A. 2015
B. 1861
C. 1492
D. 1665

4- Which of the following is NOT one of the basic points of Cell Theory?
A. All living things are made of cells.
B. The cell is the smallest living thing that can perform all the functions of life.
C. Cells are too small to see without a microscope.
D. All cells must come from pre-existing cells.

5- Eukaryotic cells contain a _____.
A. cell
B. nucleus
C. city hall
D. electron

6- Plants, animals, and fungus are all examples of _____.
A. prokaryotes
B. unicellular organisms
C. bacteria
D. eukaryotes

7- Which of the following is an example of a prokaryote?
A. dog
B. tree
C. mushroom
D. bacteria

8- Despite differences in size and shape, all cells must have cytoplasm and a . . .
A. cell wall
B. cell membrane
C. mitochondrion
D. nucleus

9- All living things are made up of _____
A. organelles
B. atoms
C. mr. sauter
D. cells

10-Eukaryotic cells do not have a nucleus
A. True
B. False

11-Cell Theory
A. all 3
B. all living things are made up of cells
C. cells are the basic units of structure
D. cells are produced from existing cells

12-How are prokaryotes and eukaryotes different?
A. prokaryotes are larger
B. eukaryotes have a nucleus
C. eukaryotes are simpler
D. prokaryotes are more complex

13-What type of cell does not have a nucleus?
A. eukaryotic
B. prokaryotic

14-Plants and animal cells are examples of ___ cells
A. prokaryotic cells
B. eukaryotic cells

15-It is correct to say that eukaryotic cells have tiny organs that perform life functions. True or False
True False

16-Are prokaryotes multicellular or unicellular?
A. Multicellular
B. Unicellular

17-Organisms are composed by many cells
A. Unicellular
B. Multicellular
C. Heterotroph
D. Reproduce

18-The invention of the _____ made the discovery of cells possible.
A. telescope
B. horoscope
C. microscope
D. gyroscope

19-Robert Hooke used the name _____ to refer to the tiny chambers he saw when he observed magnified cork.
A. corpuscle
B. cell
C. cubicle
D. unit

20-Who was the first (recorded) scientist to observe cells?
A. Matthias Schleiden
B. Anton van Leeuwenhoek
C. Robert Hooke
D. Theodor Schwann

21-Cell Membrane
A. rigid structure that surrounds the cell
B. thin flexible barrier that surrounds the cell
C. the basic unit of life
D. a membrane bound organelle that houses DNA

22-Choose the answer that is most correct about Light microscopes
A. uses only two lenses to magnify an object
B. can only view nonliving specimens
C. can only view living specimens
D. use light focused by two lenses to magnify images

23-Choose the answer that is most correct about Electron microscopes

A. uses beams of electrons focused by a magnetic field to magnify image
B. uses light to magnify image
C. Uses light and two glass lenses to magnify image
D. shows only one dimensional image of specimen

24-Which describes a eukaryotic cell, but not a prokaryotic cell?

A. uses DNA to control cell activities
B. is surrounded by a cell membrane
C. makes and uses proteins
D. contains DNA in a nucleus

25- Josey wants to look at the cells of an onion under a light microscope. She peels off a thin, transparent layer of onion and places it on a microscope slide. Josey places the sample on the microscope stage, looks through the eyepiece, and adjusts the stage to focus the image. However, she is unable to see any details of the cells. Which of the following solutions will best enable Josey to see the onion cells in detail?

A. Josey should use a thicker piece of onion for her sample.
B. Josey should place her onion sample in a vacuum.
C. Josey should place a drop of water on her sample.
D. Josey should apply a stain, such as iodine, to her sample.

1. Both prokaryotic and eukaryotic cells have all of the following EXCEPT:

a) DNA b) Ribosomes
c) Cell Wall d) Cytoplasm

2. If a cell has a nucleus it must have a:

a) capsid b) cell wall
c) nuclear membrane d) central vacuole

3. Eukaryotic cells are:

a) only multicellular b) only unicellular
c) colonial d) unicellular or multicellular

4. The function of flagella is:

a) Protection b) Movement
c) Make Proteins d) Provide Energy

5. The plant organelle that captures light to make energy is the:

a) Ribosome
b) Mitochondria
c) Chloroplast
d) Cell Wall

6. An organism has a cell membrane, a mitochondria, and many small vacuoles. It is a(n)

a) Animal cell
b) Plant cell
c) Virus
d) Prokaryotic cell

7. If the lysosome were a part of the city it would be the:

a) Farms- synthesizes proteins
b) Mayor - controls the cell
c) Waste management - digests cell waste and cleans up
d) Water tower - stores water

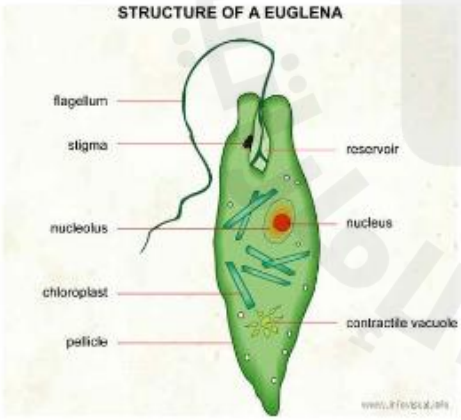
8. Prokaryotic cells have all of the following parts EXCEPT:

a) Cytoplasm
b) Ribosomes
c) Cell membrane
d) Nuclear membrane

9. The cell wall provides

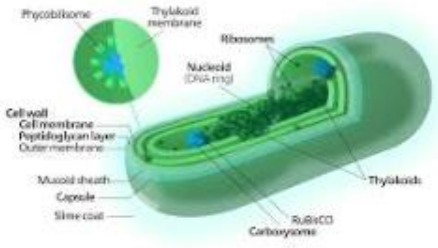
a) Energy
b) Genetic Material
c) Structure
d) Proteins

10.



What kind of cell is Euglena an example of?

a) Prokaryotic cell
b) Bacteria
c) Eukaryotic cell
d) Virus

11. 

What is this organism an example of? (select 2 answers)

a) Bacteria
b) Eukaryotic unicellular organism
c) Virus
d) Prokaryotic unicellular organism

12. The organelle where cellular respiration occurs is the:

a) Mitochondria
b) Lysosome
c) Chloroplast
d) Ribosome

13. Organelles in cells are called membrane-bound because

a) They are surrounded by their own membrane
b) They are attached to the cell membrane

14. The function of the rough ER is to:

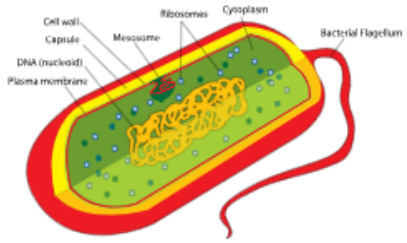
a) Produce and folding carbohydrates
b) Produce and folding lipids
c) Produce and folding Nucleic acids
d) Produce and folding proteins

15. The function of the Golgi apparatus is to

a) Produce RNA
b) Produce lipids
c) Produce proteins
d) Sort, package and modify macromolecules produced by the cell.

16. The function of the smooth ER is to:

a) Make proteins
b) Make lipids
c) Make nucleic acids
d) Make carbohydrates

1. 

What type of cell is this?

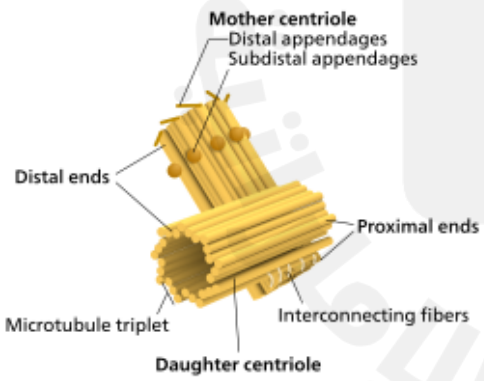
a) Animal Cell
b) Eukaryotic Cell
c) Plant Cell
d) Prokaryotic Cell

2. Select ALL of the following organelles that are in BOTH plant and animal cells.

a) Chloroplast
b) Golgi Apparatus
c) Ribosome
d) Nucleus

3. What is the function of the smooth endoplasmic reticulum?

a) Make lipids and detoxify harmful substances
b) Make protein
c) Package and transport lipids and proteins
d) Store genetic information

4. 

Which organelle is pictured?

a) Cell Membrane
b) Chloroplast
c) Cytoplasm
d) Centriole

5. Select all the components that make up the nucleus:

a) Nucleolus: make ribosomes

b) Nuclear Envelope: the double-membrane barrier surrounding the nucleus

c) Nuclear Pores: holes in the nuclear envelope that allow things to enter and exit the membrane

d) Chromatin: where DNA is stored in the nucleus

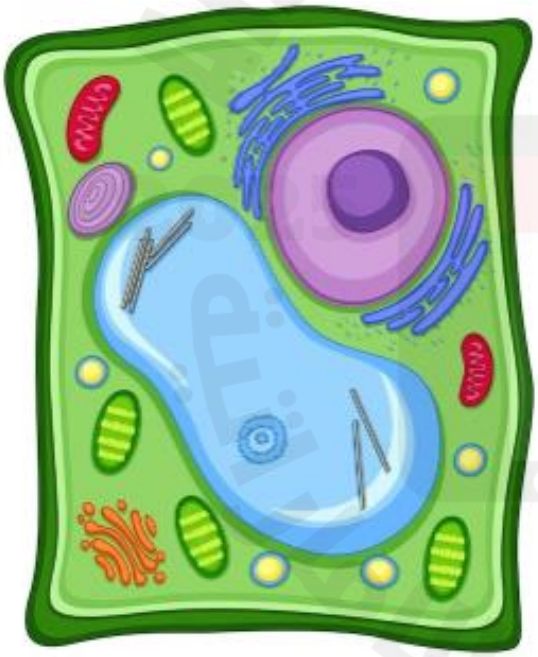
6. What is the function of the Golgi Appartus?

a) Packages and delivers lipids and proteins

b) Makes protein

c) Makes lipids and detoxifies harmful substances

d) Stores genetic material

7. 

What type of cell is pictured?

a) Plant Cell

b) Eukaryotic Cell

c) Prokaryotic Cell

d) Animal Cell

8. Where is DNA found in a eukaryotic cell?

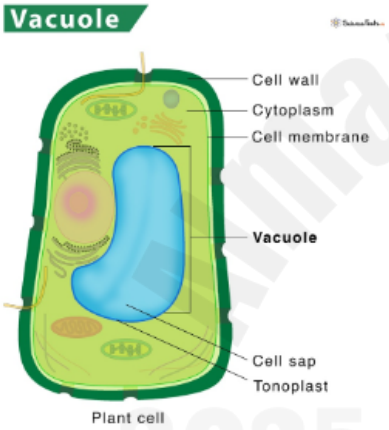
a) Nucleus
b) Ribosome
c) Cytoplasm
d) Rough Endoplasmic Reticulum (RER)

9. Which of the following do NOT contain membrane-bound organelles?

a) Animal Cell
b) Plant Cell
c) Bacterial Cell

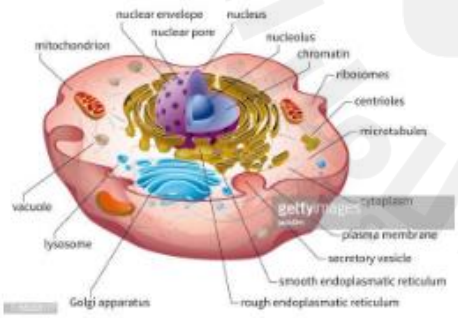
10. What is the function of the Rough Endoplasmic Reticulum (RER)?

a) Make proteins
b) Make lipids and detoxify harmful substances
c) Store genetic information
d) Package and deliver proteins and lipids

11. 

What is the function of the organelle pictured?

a) Synthesize food through photosynthesis
b) Outer layer that protects the cell
c) Organize microtubules during cell division
d) Storage space (water, nutrients, food, waste)

12. 

Which cell type is pictured?

a) Prokaryotic Cell
b) Eukaryotic Cell
c) Plant Cell
d) Animal Cell

13. What is the function of the mitochondia?

a) Make energy (ATP)
b) Make lipids
c) Make DNA
d) Make proteins

14. Select all the examples of a eukaryote:

a) Plant
b) Animal
c) Bacteria
d) Fungi

15. What is the function of a ribosome?

a) Make lipids
b) Make energy (ATP)
c) Make protein
d) Make DNA

16. Which of the following cell parts is the jelly-like liquid that is the interior of the cell, acting as the medium for organelles and chemical reactions.

a) Cell Membrane
b) Nucleus
c) Cell Wall
d) Ctyoplasm

17. Which is the outermost layer of a plant cell that acts as an extra protective layer and provides support to the cell?

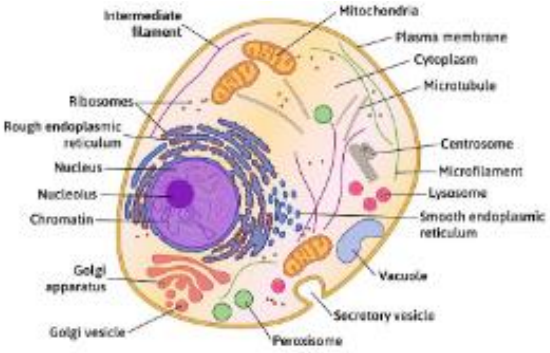
a) Plasma/Cell Membrane
b) Cytoplasm
c) Cytosol
d) Cell Wall

18. Where are ribosomes made?

a) Nuclear Envelope
b) Chromatin
c) Nucleolus
d) Nucleus

19. What is the jelly-like fluid that acts as a medium for organelles and chemical reactions.

a) Cell Wall
b) Cytoplasm
c) Plasma Membrane
d) Nucleus

20. 

What type of cell is pictured?

a) Eukaryotic Cell
b) Plant Cell
c) Animal Cell
d) Prokaryotic Cell

21. What are the examples of prokaryotic cells?

a) Bacterial Cells
b) Plant Cells
c) Archaea Cells
d) Animal Cells

22. What is the main difference between Prokaryotic and Eukaryotic Cells?

a) Eukaryotic cells do NOT have a nucleus and Prokaryotic cells DO have a nucleus.
b) There is no difference between eukaryotic and prokaryotic cells.
c) Eukaryotic cells do NOT have membrane-bound organelles. Prokaryotic cells DO have membrane-bound organelles.
d) Eukaryotic cells DO have a nucleus and Prokaryotic cells do NOT have a nucleus.

23. What is the only organelle is specific to animal cells?

a) Cell Wall
b) Vacuole
c) Chloroplast
d) Centriole

1. This organelle takes food and turns it into ENERGY for plant and animal cells.

a) Chloroplast
b) Mitochondria
c) Lysosome
d) Ribosome

2. The site of photosynthesis

a) ribosome
b) mitochondria
c) chloroplast
d) nucleus

3. 

I am a protein packaging and shipping machine! Who am I?

a) vacuole
b) ribosome
c) mitochondrion
d) golgi apparatus

4. 

Directs all cell activities through the DNA located there.

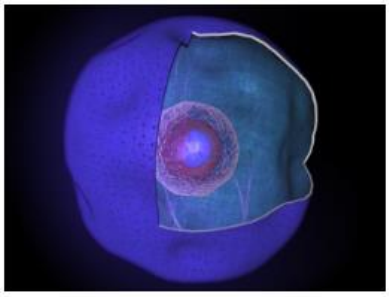
a) Lysosomes
b) Nucleus
c) ribosomes
d) Mitochondria

5. Which organelle is only found in a plant cell?

a) nucleus
b) chloroplast
c) mitochondria
d) cell membrane

6. Which of the following is directly involved in the packaging and transportaton of materials inside/within the cell?

a) Endoplasmic Reticulum
b) Vacuole
c) Lysosome
d) Mitochondria

7. 

Which part of the cell is often called "the brain of the cell"?

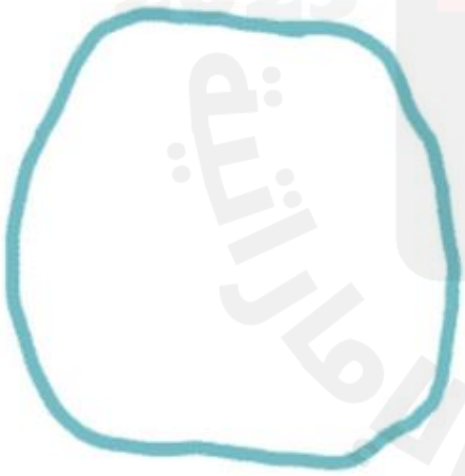
a) nuclear membrane
b) endoplasmic reticulum
c) nucleus
d) mitochondria

8. What is found in both plant and animal cells but is much larger in plant cells?

a) Nucleus
b) Mitochondria
c) Chloroplast
d) Vacuole

9. Where are proteins made?

a) Golgi body
b) Mitochondria
c) Chromosomes
d) Ribosomes

10. 

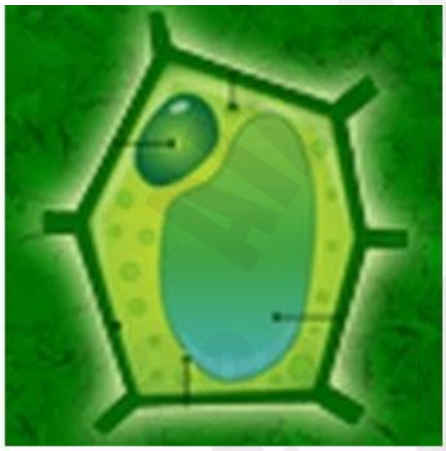
I am the outer most layer of an animal cell. What am I?

a) cell wall
b) nucleus
c) cell membrane
d) cell skin

11. 

What are tiny organelles that convert glucose into ATP (energy)?

a) Ribosomes
b) Vesicles
c) Cytoskeleton
d) Mitochondria

12. 

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

a) Cytoskeleton
b) Cilia
c) Cell Wall
d) Flagella

13. Maintaining a stable internal environment?

a) homologous
b) homoeostasis
c) ribosomes
d) cytoplasm

14. Main producer of ATP in all eukaryotes

a) chloroplast
b) mitochondria
c) lysosome
d) smooth er

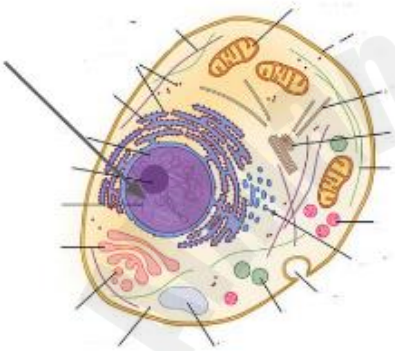
15. Which structures are present in animal and plant cells?

a) Vacuole, nucleus and cell membrane
b) Nucleus, cell wall, cytoplasm
c) Nucleus, cell membrane, cytoplasm
d) Cell membrane, chloroplast, cell wall

16. Sac-like structure which stores water, food, and wastes.

a) lysosomes
b) cell wall
c) cytoplasm
d) vacuoles

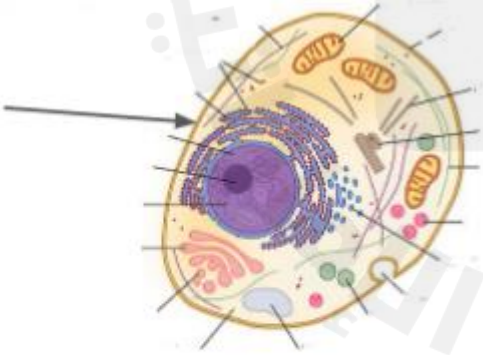
17.



Which cell part stores the DNA, which contains the instructions for the cell?

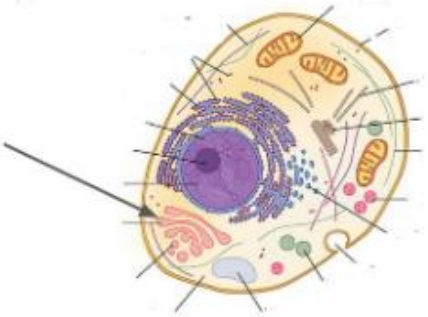
a) Golgi body
b) lysosome
c) nucleus
d) vacuole

18.



Which cell part controls what moves in and out of the cell?

a) cell wall
b) cell membrane
c) cytoplasm
d) mitochondria

19. 

Which cell part is the "post office" of the cell, packaging materials to be secreted?

a) Golgi body
b) chloroplast
c) mitochondria
d) nucleus

20. Plant cells have two structures animal cells do not, they are the

a) cell membrane and chloroplast
b) cell wall and mitochondria
c) cell wall and chloroplast
d) cell membrane and mitochondria

1. Which biomolecules (THREE) are found in the cell membrane?

a) lipids
b) proteins
c) nucleic acids
d) carbohydrates

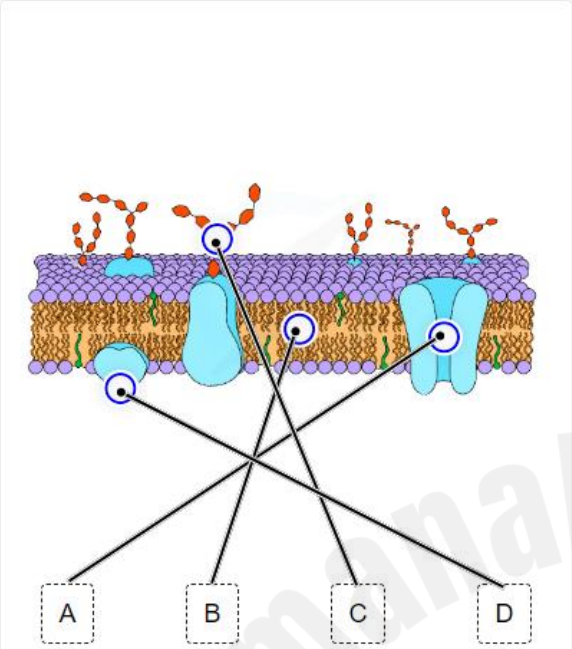
2. Which biomolecule makes up MOST of the cell membrane?

a) proteins
b) carbohydrates
c) phospholipids
d) nucleic acids

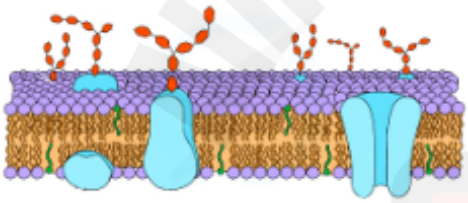
3. Which biomolecule helps LARGE molecules cross the membrane?

a) phospholipids
b) carbohydrates
c) nucleic acids
d) proteins

4. Which TWO parts of the membrane allow molecules to pass through?



6.



Match the following functions to each biomolecule in the cell membrane:

cell recognition	○	○ carbohydrates
transport LARGE/charged molecules through the membrane	○	○ proteins
allow small molecules to pass through the membrane	○	○ phospholipids

7. How does the cell membrane help maintain homeostasis in each cell?

a) The cell membrane allows all substances to pass through freely

b) The cell membrane controls the movement of substances in and out of the cell

c) The cell membrane provides energy for the cell

d) The cell membrane produces proteins necessary for cell function

8. Passive transport (a) _____ require energy because it moves (b) _____ the concentration gradient, from (c) _____ .

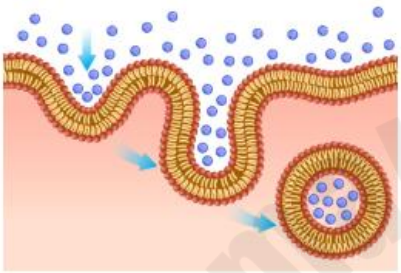
Choose from the below words

Does NOT | Does | With | Against | High To Low | Low To High

9. Active transport (a) _____ require energy because it moves (b) _____ the concentration gradient, from (c) _____ .

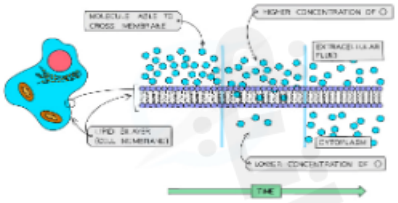
Choose from the below words

Does NOT | Does | With | Against | High To Low | Low To High

10. 

What is the correct description of the transport in the image?

a) small molecules crossing the lipid bilayer (diffusion)
b) large molecules crossing through a protein (facilitated diffusion)
c) many molecules coming into the cell using a membrane vesicle (endocytosis)
d) many molecules coming out of the cell using a vesicle to fuse with the membrane (exocytosis)

11. 

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c) many molecules coming into the cell using a membrane vesicle (endocytosis)
d) many molecules coming out of the cell using a vesicle to fuse with the membrane (exocytosis)

12. Facilitated diffusion and protein pumps are similar because

a) They both require energy to function
b) They both move molecules from high to low concentration
c) They both involve the movement of molecules through proteins
d) They both can only move molecules in one direction

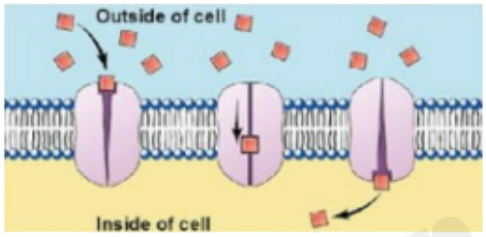
13. Facilitated diffusion and protein pumps are different because

a) Both move movement of molecules from high concentration to low concentration

b) Facilitated diffusion requires energy while protein pumps do not

c) Protein pumps require energy while facilitated diffusion does not

d) Both move molecules from low to high concentration

14. 

Using the image, choose the correct form of transport and explanation of how you know:

a) Active transport, because the molecules are crossing the membrane using a protein

b) Passive transport because the molecules are crossing the membrane using a protein

c) Active transport because the molecules are moving from low to high

d) Passive transport because the molecules are moving from high to low

15. Organize these options into the right type of transport:

Categorize the following

Does NOT Require Energy | Requires Energy

Molecules Move WITH The Gradient | Molecules Move AGAINST The Gradient

Molecules Move From High Concentration To Low

Molecules Move From Low Concentration To High

Passive Transport	Active Transport

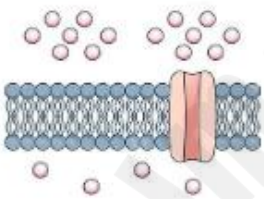
16. What happens during osmosis?

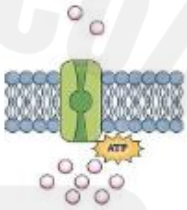
a) Transfer of energy from one place to another
b) Movement of small molecules from high concentration to low concentration
c) Movement of water molecules from an area of high water concentration to an area of low water concentration
d) Process of breaking down food into simpler substances

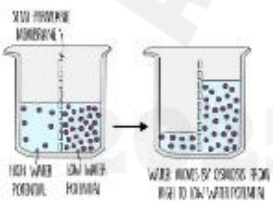
17. Which TWO of the following can be used to identify ACTIVE transport?

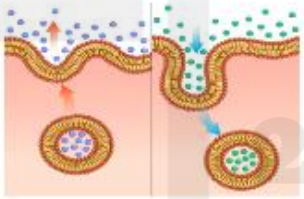
a) Movement of molecules from high to low concentration
b) Movement of molecules from low to high concentration
c) Does not require energy
d) Requires energy (ATP!)

18. Which of the following images show transport that REQUIRES ENERGY? (more than one answer is correct!)

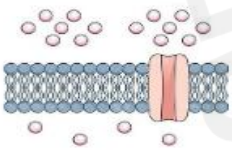
a)


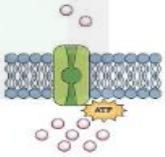
b)


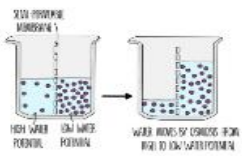
c)


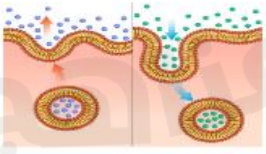
d)


19. Which of the following images show transport that DOES NOT require energy? (more than one answer is correct!)

a)


b)


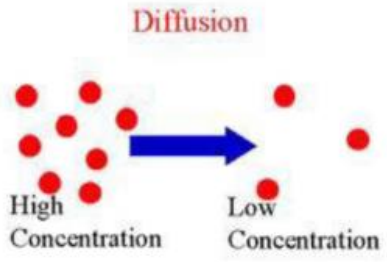
c)


d)


20. The main difference between passive and active transport is that one requires _____, while the other does not.

Ans. _____

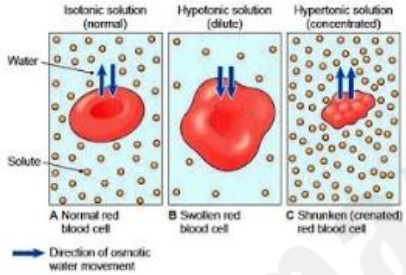
1.



Movement of particles from high to low concentration.

a) Passive Transport b) Active Transport

2.



a) Passive Transport b) Active Transport

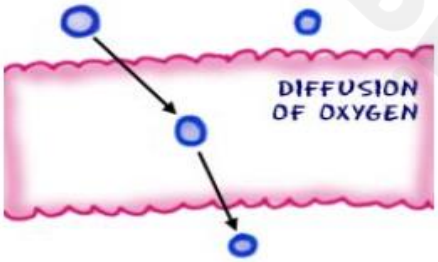
3. Osmosis is a form of _____.

a) Passive Transport b) Active Transport

4.

a) Passive Transport b) Active Transport

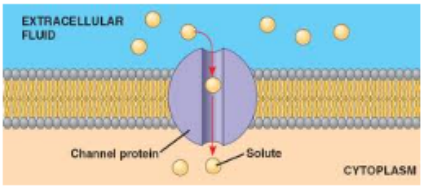
5.



a) Passive Transport b) Active Transport

6. Solutes move with the concentration gradient, therefore no energy is used.

a) Passive Transport b) Active Transport

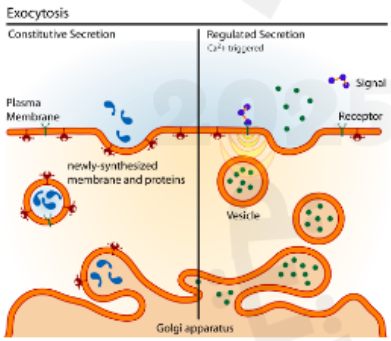
7. 

Movement of materials from high to low concentration through a protein channel.

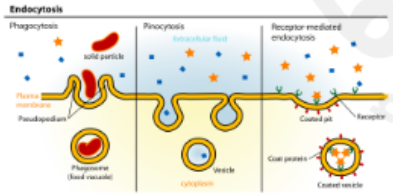
a) Passive Transport b) Active Transport

8. 

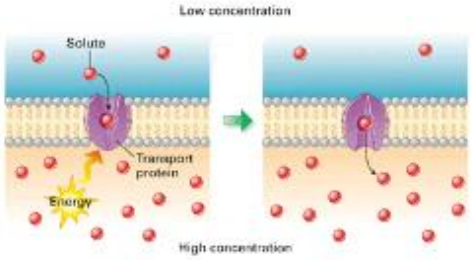
a) Passive Transport b) Active Transport

9. 

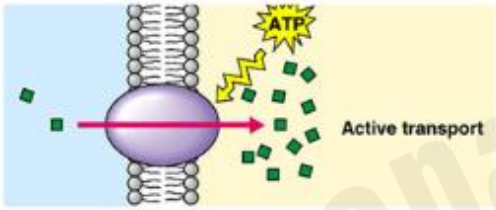
a) Passive Transport b) Active Transport

10. 

a) Passive Transport b) Active Transport

11. 

a) Passive Transport b) Active Transport

12. 

ATP is a form of energy.

a) Passive Transport b) Active Transport

13. Exocytosis

a) Passive Transport b) Active Transport

14. Endocytosis

a) Passive Transport b) Active Transport

15. Low to High

a) Passive Transport b) Active Transport

16. Solutes move against the concentration gradient, therefore energy is needed.

a) Passive Transport b) Active Transport

17. Uses ATP (energy)

a) Passive Transport b) Active Transport

18. This uses energy

a) endocytosis b) exocytosis
c) both

19. This takes substances into a cell

a) endocytosis b) exocytosis
c) both

20. What is it called when molecules move across the cell membrane from an area of high concentration to an area of low concentration through a carrier protein?

a) Diffusion b) Osmosis
c) Active Transport d) Facilitated Diffusion

21. Active transport (a) _____ require energy because it moves (b) _____ the concentration gradient, from (c) _____ .

Choose from the below words

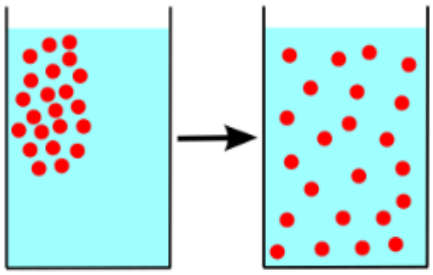
Does NOT | Does | With | Against | High To Low | Low To High

1. Students are observing particles moving against the concentration gradient in a lab investigation. Which type of transport are they observing?

a) osmosis b) active Transport
c) facilitated diffusion d) diffusion

2. Students are observing particles moving with the concentration gradient in a lab investigation. Which type of transport are they observing?

a) using pumps to move things quickly b) passive transport
c) osmosis d) endocytosis

3. 

This picture shows molecules of red dye that have moved. What is this type of movement called?

a) Osmosis; the water molecules are moving from high concentration to low
b) Diffusion; the dye molecules are moving from low to high concentration
c) Diffusion; the dye molecules are moving from high to low concentration.
d) Facilitated diffusion; because the molecules are moving through a protein channel.

4. The cell membrane is responsible for allowing molecules to diffuse into or out of the cell. What type of movement is diffusion?

a) Passive transport
b) Active transport

5. The cell membrane is responsible for allowing molecules to diffuse through a protein channel, from high concentration to low concentration. What type of transport is this?

a) Passive Transport
b) Active transport

6. The cell membrane needs to use energy to move molecules quickly out of the cell through a pump. What type of transport is this?

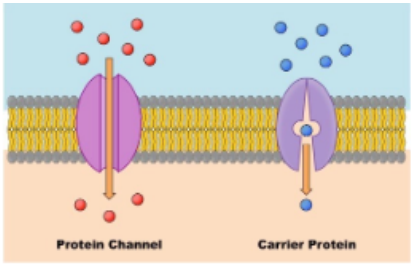
a) Passive transport
b) Active transport

7. Passive transport is when molecules move _____ the concentration gradient.

a) against
b) up
c) down
d) with

8. Active transport is when molecules move _____ the concentration gradient.

a) against
b) up
c) down
d) with

9. 

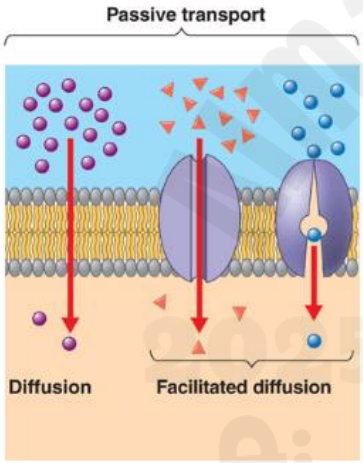
This picture is a representation of what type of transport?

a) Osmosis because it is diffusing through a protein from an area of high concentration to low concentration.

b) Facilitated diffusion because it is diffusing through a protein from an area of high concentration to low concentration.

c) Facilitated diffusion because it is diffusing through a protein from an area of low concentration to high concentration.

d) Simple diffusion because it is diffusing through a protein from an area of high concentration to low concentration.

10. 

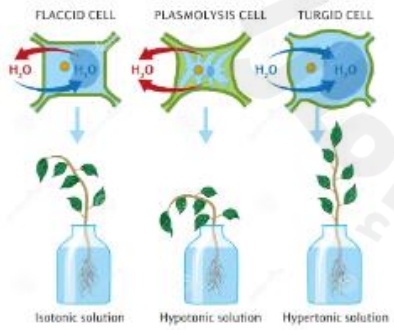
a) Molecules are moving up the concentration gradient.

b) Molecules are moving from an area of low concentration to area of high concentration .

c) Molecules are moving down the concentration gradient.

d) Molecules are moving from an area of high concentration to area of low concentration.

This picture describes the movement of molecules across the cell membrane. Choose 2 answers that correctly describes the movement of the molecules.

11. 

What do you think will not allow the turgid plant cell to burst?

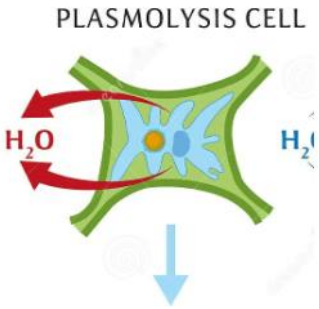
a) chloroplast

b) cell membrane

c) cell wall

d) central vacuole

14.



What type of solution was this plant placed in?

a) hypertonic b) isotonic

c) hypotonic

15.

What type of solution was this plant placed in?

a) hypotonic b) isotonic

c) hypertonic

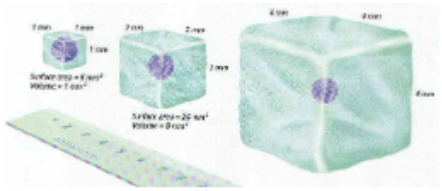
16. A cell with a 10% salt solution; is placed in distilled water with 0% starch concentration. Water can travel across a semipermeable membrane but starch cannot. Would you expect to see after an hour?

a) The solution inside the cell is hypotonic and moves into the cell.

b) The solution inside the cell is hypertonic so the water moves into the cell.

c) The solution inside the cell is hypotonic and moves out of the cell.

d) The solution inside the cell is isotonic so the water doesn't move.

17. 

Which cell do you think would be most ideal for maintaining homeostasis?

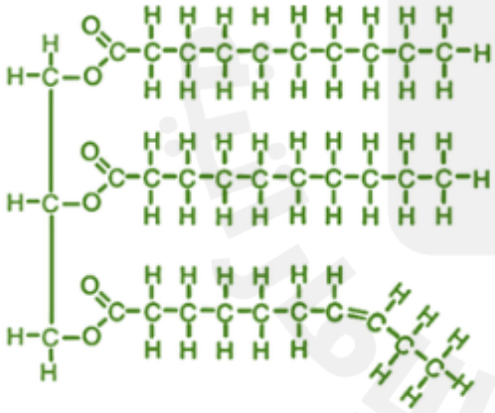
a) The smallest cell because it would be more efficient to remove and obtains molecules
b) The largest one because it would be able to obtain more food and store for longer periods of time.
c) The largest one because it has more room to grow
d) The medium cell because it would be more efficient to remove and obtains molecules

18. What is the monomer for a lipid?

a) monosaccharide
b) glycerol and fatty acid
c) amino acids
d) nucleic acid

18. What is the monomer for a lipid?

a) monosaccharide
b) glycerol and fatty acid
c) amino acids
d) nucleic acid

19. 

What is the name of this macromolecule?

a) protein
b) carbohydrate
c) lipid
d) nucleic acid

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