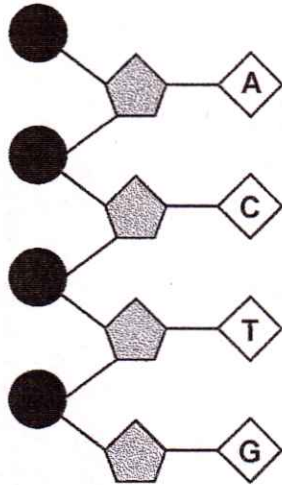


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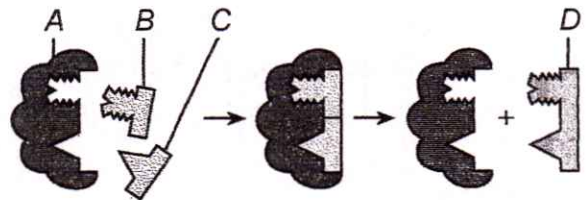
- 1) The way a protein molecule is folded determines the shape of the molecule, which determines the
- type of simple sugars in that protein
 - structure of ATP containing that protein
 - function of that protein
 - amino acids in that protein
- 2) The diagram below represents a portion of a DNA molecule.



The letters represent different types of

- proteins
 - molecular bases
 - enzymes
 - sugar molecules
- 3) In a DNA sample, 15% of the bases are thymine (T). What percentage of the bases in this sample are adenine (A)?
- $A = T$
 $G = C$
- $T = 15\%$
 $A = ?$
- 35%
 - 30%
 - 15%
 - 85%
- 4) If 15% of a DNA sample is made up of thymine, T, what percentage of the sample is made up of cytosine, C?
- $A = T$
 $G = C$
- $T = 15\%$
 $C = ?$
- 15%
 - 70%
 - 85%
 - 35%
- 5) The shape of a protein is most directly determined by the
- mistakes made when the DNA is copied
 - kind and sequence of amino acids in the protein
 - type and number of DNA molecules in a cell
 - amount of energy available for synthesis of the protein

- 6) Which one of the following substances is an inorganic molecule?
- fat
 - DNA
 - water
 - starch
- 7) Which statement best describes enzymes?
- The rate of activity of an enzyme might change as pH changes.
 - Temperature changes do not affect enzymes.
 - Enzymes are produced from the building blocks of carbohydrates.
 - Every enzyme controls many different reactions.
- 8) Which statement describes a similarity between all enzymes, antibodies, and hormones?
- Their chemical structure is critical to their ability to function.
 - They are made by and carried by the blood.
 - Their ability to replicate identical copies ensures continuation of the species.
 - They work better at 100°C than 37°C.
- 9) The enzyme amylase will affect the breakdown of carbohydrates, but it will not affect the breakdown of proteins. The ability of an enzyme molecule to interact with specific molecules is most directly determined by the
- sequence of bases present in ATP
 - number of molecules involved
 - shapes of the molecules involved
 - amount of glucose present in the cell
- 10) The diagram below represents a model of a biological process that occurs in humans at normal body temperature, 37°C.

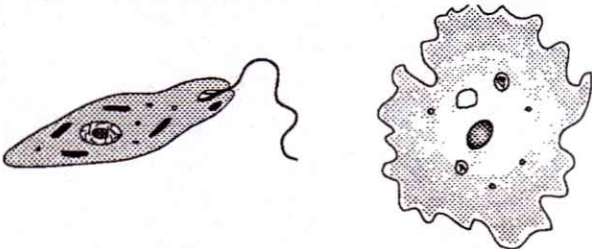


Increasing body temperature to 40°C would interfere most directly with the rate of function of structure

- A
- B
- C
- D

Name:

HOMEWORK # 2.2 5 KINGDOMS

- Using one or more complete sentences, state one observation a student could make to determine that a slide preparation of unicellular organisms contained protists and not monerans.
- In one modern classification system, organisms are grouped into five
 - kingdoms
 - phyla
 - genera
 - species
- Some species of algae are unicellular, motile, and photosynthetic. Under one modern system of classification, they would be classified as
 - mollusks
 - fungi
 - protists
 - tracheophytes
- In which kingdom is an organism classified if it lacks a membrane separating most of its genetic material from its cytoplasm?
 - protist
 - monera
 - plant
 - animal
- Organisms are grouped into a five-kingdom classification system based on their structure and
 - evolutionary relationships
 - habitat
 - food preferences
 - social behavior
- Organisms are classified into kingdoms primarily on the basis of
 - behavior
 - structure
 - size
 - habitat
- A microorganism observed under a microscope is unicellular and lacks an organized nucleus. This organism is classified as a
 - moneran
 - protist
 - fungus
 - plant
- The diagrams below represent unicellular organisms. In the past, they were difficult to classify as either plants or animals.


Currently, these organisms are classified as

 - coelenterates
 - annelids
 - tracheophytes
 - protists
- A scientist recently discovered a pond organism that is unicellular, contains chloroplasts and other membrane-bound organelles, and possesses a flagellum. In which kingdom is this organism classified?
 - monera
 - protista
 - fungi
 - plant
- According to the five-kingdom classification system, which two groups of organisms are classified as protists?
 - bryophytes and tracheophytes
 - coelenterates and annelids
 - protozoa and algae
 - bacteria and chordates