

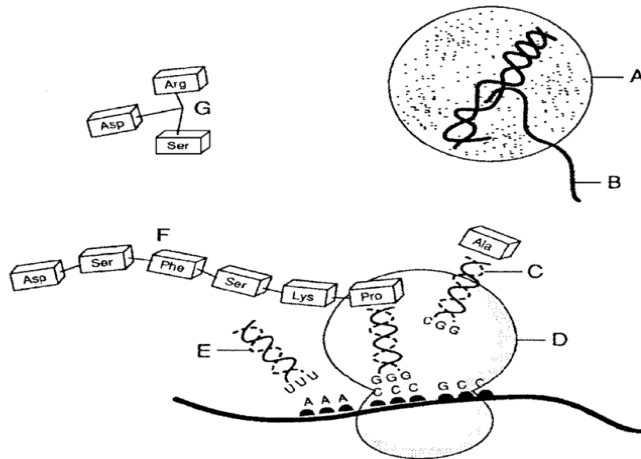
TAKS Practice Questions--DNA

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

Directions: Use the diagram to answer the following questions.

Protein Synthesis



- ___ 1. What process is taking place in the structure labeled A in the diagram?
 - a. Transcription of mRNA
 - b. Translation of mRNA
 - c. Replication of mRNA
 - d. Mutation of mRNA
- ___ 2. In the illustration, information from mRNA is used to produce proteins. What is this process called?
 - a. Transcription
 - b. Translation
 - c. Replication
 - d. Gene regulation
- ___ 3. What does messenger RNA do during protein synthesis?
 - a. Copies the coded message from the DNA and carries it into the cytoplasm
 - b. Copies the coded message from the DNA and carries it into the nucleus
 - c. Carries amino acids and adds them to the growing protein
 - d. Copies the coded message from the protein and carries it into the nucleus
- ___ 4. Sickle-cell anemia is a disorder resulting from a mutation that leads to the production of an abnormal protein. Which component of the DNA molecule provides instructions for the production of the protein?
 - a. The phosphate groups
 - b. The sugar molecules
 - c. The sequence of nitrogen bases
 - d. The bonds that hold the sugars to the Bases
- ___ 5. Which of the following does ribonucleic acid, but not deoxyribonucleic acid, contain?
 - I. Ribose
 - II. Phosphate group