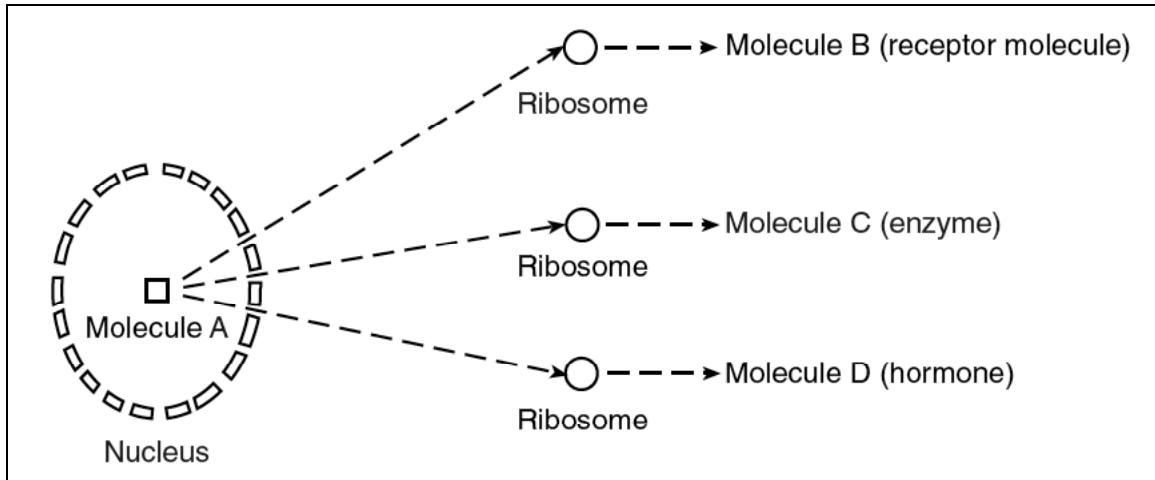


**PROTEIN SYNTHESIS PRACTICE 2**

Interpreting diagrams is an important skill in learning science. The following diagram illustrates some aspects of protein synthesis — the making of a protein from a gene. Let's interpret the diagram by answering the questions.



1. Molecule *A* is meant to represent \_\_\_\_\_
2. Molecule *A* contains the
  - a. starch necessary for ribosome synthesis in the cytoplasm
  - b. organic substance that is broken down into molecules *B*, *C*, and *D*
  - c. proteins that form the ribosome in the cytoplasm
  - d. directions for the synthesis of molecules *B*, *C*, and *D*
3. Molecule *B*, *C*, and *D* are
 

a. carbohydrates	c. lipids
b. proteins	d. nucleic acids
4. Molecules *B*, *C*, and *D* are similar in that they are each
 

a. composed of genetic information	c. composed of amino acids
b. involved in the synthesis of antibiotics	d. control the diffusion of oxygen into the cell

5. The diagram indicates that molecules *B*, *C*, and *D* do different jobs. Give two reasons why they would do different jobs.

a. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. If molecules *B*, *C*, and *D* all came from molecule *A*, then explain how they can be different from each other.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. The different sections of molecule *A* that have the separate instructions for making molecules *B*, *C*, and *D* are called \_\_\_\_\_

8. What job did the ribosomes do in this diagram?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_