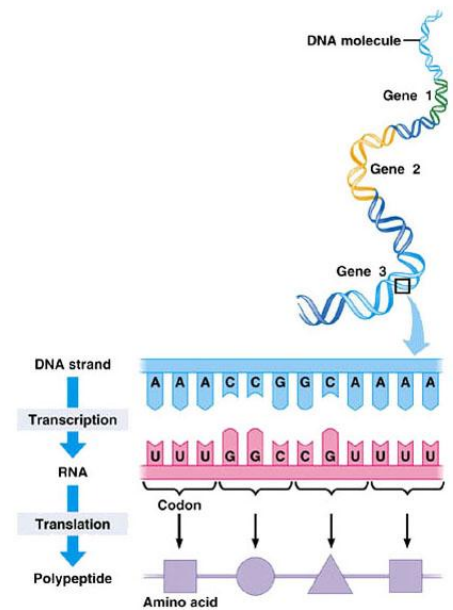
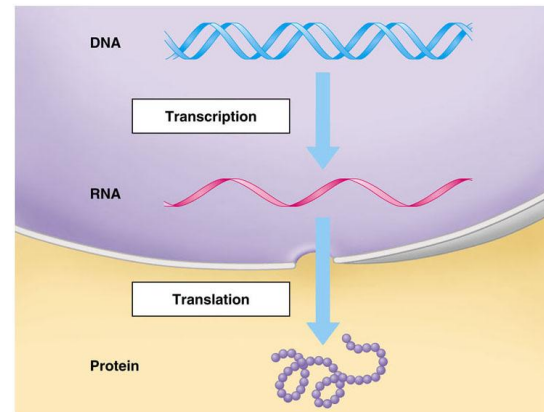


Chapter 5 Introduction to Studying Proteins

1. Describe the structure of proteins. What is the significance of amino acid R-groups?

2. Using the diagrams shown explain, in your own words, the steps of transcription and translation in the process of protein synthesis.



3. Discuss the important role that naturally occurring proteins and recombinant proteins have in biotechnology.

4. Explain the differences between proteins that function as:

1) part of structure

2) antibodies

3) enzymes

5. Describe the structure of antibodies and explain the relationship between **antibodies** and **antigens**.

6. a) Describe the six categories of enzymes and each enzymes unique function by completing the table below.

Category of Enzyme	General Function of Enzyme

b) Discuss the effect of reaction conditions (i.e. temperature or pH) on the rate of enzyme activity.