**Activity 42: Introduction to Enzymes**

***Learning Objectives***

*Define the terms* enzyme, substrate, active site, cofactor *and* coenzyme

*Predict the polarity of the amino acid residues in the active site based on an enzyme’s substrate*

**Estimated Completion Time** 30 Minutes

**Instructor Information**

Basic information regarding the nature of an enzyme’s active site.

**ANSWERS TO QUESTIONS**

1. a. A pocket in an enzyme where the substrate fits and catalysis occurs.

b. The reactant

c. Assists the enzyme in catalysis

2. All amino acids have polar side chains.

3. Stereoisomerism

**Activity 42: Skill Development**

1. Tertiary

2. Serine H-bonds to carbonyl; N-H hydrogens bond to O of OH and carboxylate.

