ENZYME WHITEBOARD ACTIVITY

Provide a complete explanation of how enzymes function. In your discussion, be sure to address the following six points:

1. Amino acid structure—what do all amino acids have in common, what makes them different.
2. Diagram an amino acid chain and suggest how it might fold into a protein relative to the chemical properties of each of the amino acids
3. Indicate the active site of your protein and why a given substrate would tend to enter. Discuss how "Lock and Key" is a useful model for describing this characteristic of enzymes.
4. Enzymes cause stable molecules to react by lowering the activation energy required for the reaction. Indicate how the enzymes account for this required activation energy and how this action can be thought of by the "Induced Fit" model of enzyme activity.
5. Indicate how high temperatures might cause enzymes (proteins) to unravel or denature.
6. Indicate why extremes of pH can cause enzymes (proteins) to unravel or denature.
7. Indicate why salinity might cause enzymes (proteins) to unravel or denature.