## **Proteins and Enzymes**

Zebra Book: 156-160, 167, 170, 1025-1027

#### **Proteins**

What are the function of proteins? What are proteins composed of?

What are amino acids? How many amino acids are there?

What do amino acids look like?

What are essential amino acids and how do humans get them?

#### **Protein Structures**

What is the primary structure?
What is the secondary structure?
What is the tertiary structure?
What is the quaternary structure?

Why is the specific structure important to protein function?

#### **Chemical Reactions**

What are chemical reactions? (Give an example)

What is a reactant? What is a product?

What is a chemical equation? (Give an example)

What is activation energy and why is it important?

# **Enzymes**:

Vocabulary:

Catalyst

Enzymes

Substrate Active Site

Why are enzymes necessary in living organisms?

How would a reaction be different with and without an enzyme?

(hint: figure 6.17, draw it and explain in words)

How do enzymes work?

(hint: figure 6.18, draw it and explain in words)

Why is each enzyme specific to only one chemical reaction?

What are some examples of enzymes?

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