

# METABOLISM UNIT GUIDED READINGS

## ENZYMES GUIDED READING (1C) sect 5.2, 5.3, 5.4

- What is the first law of thermodynamics and what does it have to do with metabolism?
- What is the second law of thermodynamics and what does it have to do with metabolism?
- What is catalysis?
- Contrast the role of substrates, reactants, and products in chemical reactions.
- Contrast exergonic and endergonic reactions.
- What is activation energy and what does it have to do with chemical reactions?
- What is an enzyme, what do enzymes do, and what are enzymes made of?
- Contrast the difference between an active site and a binding site.
- Explain the "Lock and Key" analogy for enzyme function/specificity
- What is denaturation and why does it affect enzymes?
- What types of factors affect enzyme function?
- Contrast the effect of cofactors, coenzymes, pH, and temperature on enzyme function.