

Chapter 6 - Processing Enzymes

End of chapter review questions

Hands-on Exercise

1. Why does one waft?

2. What is the difference between the two negative control plates in the Smell-it Experiment?

3. What are the experiment steps to get you to microfacture banana smell molecules?

4. What made it feasible to complete the Blue-it Kit using cell extract rather than in the cells (like the Smell-it Kit)

5. What is DTT? Why is it used in the lysis and reaction buffers?

Fundamentals

1. Explain the Four B's in relation to a one or two substrate-enzyme reactions.

2. How is the classic illustration of an atom incorrect? (Figure 6-10)

3. What is a mole?

4. Describe how a single electron can create an orbital.

5. What shapes do s-orbitals and p-orbitals have?

6. What are the four major types of bonding?

7. What type of bonding is used when two strands of DNA zip together to form the double helix? Explain.

8. How does chloramphenicol acetyltransferase start the chemical reaction that is important for selection during genetic engineering?

9. What is the difference between a simple enzyme reaction and a complex enzyme reaction?