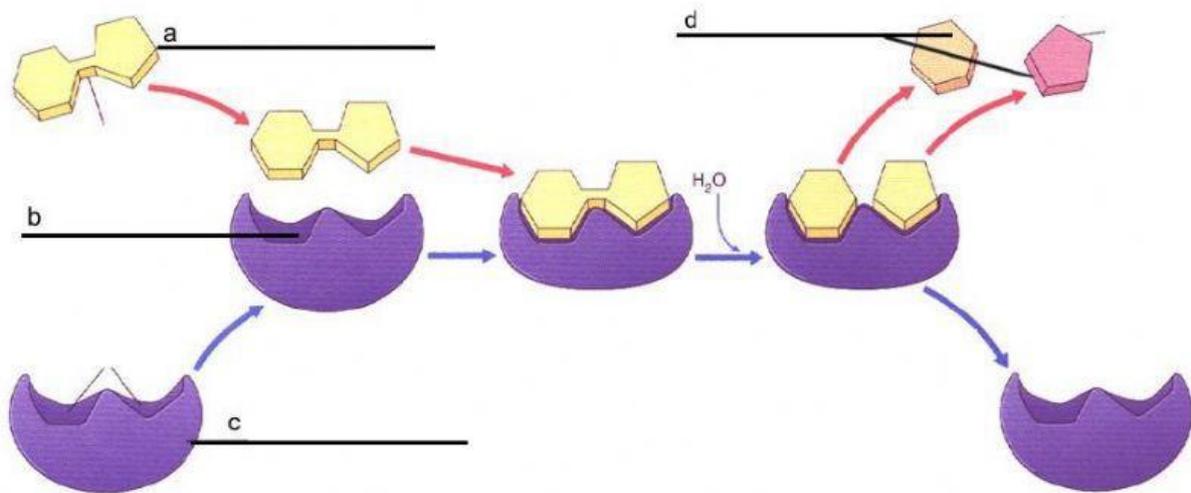


Enzyme Review

1. Label the diagram with terms: **substrate**, **enzymes**, **active site**, **products**



2. Answer true or false to the following statements:

- _____ Enzymes interact with specific substrates.
- _____ Enzymes change shape after a reaction occurs.
- _____ Enzymes speed up reactions.
- _____ One enzyme can be used for many different types of chemical reactions.
- _____ Enzyme reactions can be slowed or halted using inhibitors.

3. Choose the correct effect.

- Raising the temperature slightly will [increase | decrease | not change] the rate of reaction.
- Boiling temperature will [increase | decrease | not change] the rate of most biological reactions.
- Changing the pH toward the optimal pH will [increase | decrease | not change] the rate of reaction.
- Introducing a competitive inhibitor will [increase | decrease | not change] the rate of reaction.

4. Write "yes" next to the things that are expected to INCREASE the rate of an enzymatic reaction and "no" next to the things that are expected to DECREASE the rate of an enzymatic reaction.

- | | |
|-------------------------------------|------------------------------------------|
| a. _____ Add more enzyme | d. _____ Add a non-competitive inhibitor |
| b. _____ Add more substrate | e. _____ Freezing |
| c. _____ Adjust pH to optimal level | |