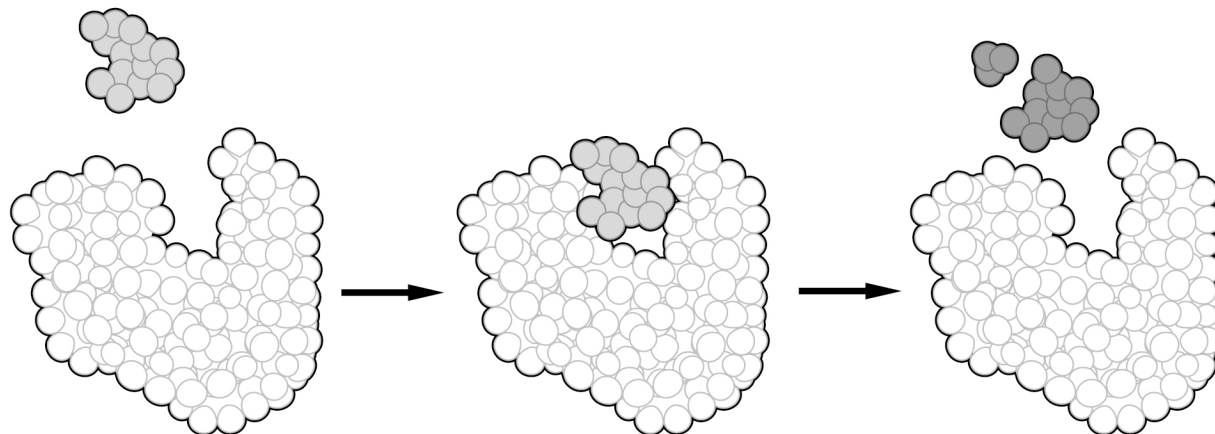


Name _____ Class _____ Date _____

The diagrams below show an enzyme that catalyses the breakdown of a substrate molecule.



- 1 Label the enzyme in each diagram.
- 2 The **active site** is where the substrate sits in the enzyme.
 - a Label the active site in the middle diagram.
 - b Are the shapes of the substrate molecule and active site similar or different? Explain your answer.

- 3 a Could this enzyme catalyse the breakdown of a different substrate molecule?

b Explain your answer. _____

- 4 If the temperature increased, the special shape of the enzyme would change. Suggest how this change in shape would affect how the enzyme catalyses the breakdown of the substrate. Explain your answer.
