

**NAME:** \_\_\_\_\_

**PERIOD:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

## ENZYME ANIMATION WORKSHEET

How do living things obtain energy that they need? How is that energy transferred, and what is it transferred into? Draw this molecule.

What happens when the bonds of this molecule are broken? How much energy is released? What does this energy do?

What is activation energy? What happens at the transition state? What type of reaction is shown in the animation of activation energy? Describe that type of reaction.

What can help chemical reactions move over the “activation energy hump”? What do catalysts do? How does this affect the energy released from the reaction?

What are catalysts in living organisms called? What can cause enzymes to stop working? What is the location called where substrates bind with enzymes?

Detail the action of enzymes/substrates in four steps.

How many reactions are enzymes specific for?

In the lock and key model, what is the lock? Key? The key hole?

What is the induced fit model?