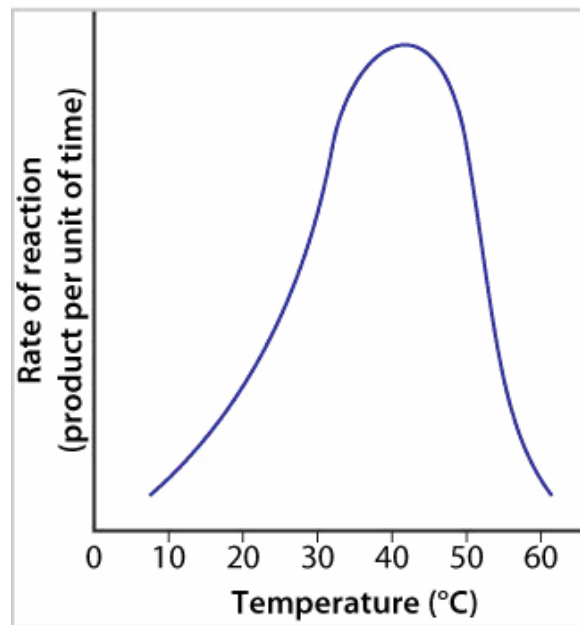


CHAPTER 6**ANSWER KEY****Factors Affecting Enzyme Activity Answer Key****BLM 6.1.7A****Enzyme reaction rate by temperature**

2. The optimum temperature for this enzyme is approximately 40 °C.
3. At temperatures between 25 °C and 30 °C (lower than the optimum temperature) the bonds that determine enzyme shape are not flexible enough to enable substrate molecules to fit properly.
4. At higher temperatures, such as 50 °C, the bonds are too weak to maintain the enzyme's shape. It becomes denatured, meaning that its molecular shape and structure (and, thus, its properties) are changed. Therefore, enzymes function best within an optimal temperature range.