

Anatomy & Physiology: How do changes in environmental conditions affect enzyme activity?

Directions:

Step 1: Use a pencil! With a partner, underline where the author addressed each item listed below. Write the corresponding number for the question in the margin. If the author did not address one of the items, work together to figure out how he or she could have, and write the missing information in the margins of the paper.

Step 2: Open your report in Microsoft Word. Highlight in yellow each item you addressed from the items listed below in the report you submitted (these are the underlined portions of your paper). Highlight the items you added in green (these are the edits and additions you made to your paper).

Section 1: Introduction and guiding question

- 1) Did the author explain how enzymes catalyze reactions?
- 2) Did the author connect enzyme activity with the concept of structure and function?
- 3) Did the author connect enzyme activity with the law of conservation of matter?
- 4) Did the author explain their reasoning for making their claim?

Section 2: Method

- 5) Did the author explain why the rate of O₂ production was measured?
- 6) Did the author describe their control group or what they should have used as a control group?
- 7) Did the author explain why they used the mean of trials for each treatment group as the independent variable?
- 8) Did the author explain why they chose the type of chart they used to illustrate their data?

Section 3: Argument (presentation and analysis of evidence)

- 9) Did the author embed a hand-written chart within the text of the argument in a logical place?
- 10) Did the author title and label the axes with units?
- 11) Did the author use appropriate intervals, so the data fills the graph horizontally and vertically?
- 12) Did the author use specific data from their experimental results in terms of average rate in ppmO₂/sec?
- 13) Did the author give a complete description of the data?

Section 3: Argument (justification)

- 14) Is there a clear knowledge component?
- 15) Did the author explain how the knowledge led to the claim?
- 16) Is there specific data from the analysis that is related to the knowledge? (Not all data from the analysis is relevant to your claim)
- 17) Did the author identify the key data points that support or refute his/her claim?
- 18) Is there an explanation of how the data from the analysis supports the claim?