

Data Tables: Enzymes and Reaction Rate

Temperature (°C)				
Time (seconds)	0 Degrees	25 Degrees	37 Degrees	100 Degrees
15				
30				
45				
60				
75				
90				
105				
120				
135				
150				
165				
180				
195				
210				
225				
240				
255				
270				
285				
300				

Enzyme Concentration		
Time (seconds)	1 Pieces	2 Pieces
15		
30		
45		
60		
75		
90		
105		
120		
135		
150		
165		
180		
195		
210		
225		
240		
255		
270		
285		
300		

Post-Lab Questions: Enzymes and Reaction Rate Lab

Post-Lab Questions

- 1) Are enzymes used up during reactions? How do you know this is true?
- 2) Why did we measure the volume of O₂ produced?
- 3) How do you know the reaction rate increased or decreased?
- 4) How did temperature affect the reaction rate (affect the function of catalase)?
- 5) What temperature was the best for the enzyme catalase? Create a paragraph in the **CLAIM, EVIDENCE, and REASONING** format

- 6) How does enzyme concentration affect the reaction rate (affect the function of catalase)? Why do you think this happens? Create a paragraph in the **CLAIM, EVIDENCE, and REASONING** format

- 7) What are some experimental flaws or sources of error in the experiment? How could these flaws be corrected if we did this experiment again?

- 8) What were some human errors you may have encountered during the experiment? How could you avoid these errors in the future?

***Turn in the answers to the post-lab questions, data tables, and your graphs.**

Graphs that must be included

- Temperature Increase
- Temperature Decrease
- Enzyme Concentration