## FLINN SCIENTIFIC

Name

# **Enzyme Studies Worksheet**

# Part I. The Tests

Test Tube #	1	2	3	4	5	6	7
Distilled H <sub>2</sub> O	3 mL		3 mL		4 mL		1 mL
Benedict's Solution	1 mL	1 mL	1 mL	1 mL			
Sugar			Pinch		Pinch		
Starch Solution		3 mL		1 mL		4 mL	1 mL
Amylase				2 mL			2 mL
Initial Color							
Color After Test							

## Questions

1. Describe a positive test for sugar with Benedict's solution.

- 2. Describe a positive test for starch using iodine solution.
- 3. Which test tubes served as controls in your tests? Explain.
- 4. Use your results to defend the statement Amylase digests starch into sugar.

#### Part II. Enzyme Concentration

		Time in Seconds											
		0	15	30	45	60	75	90	105	120	135	150	165
ion	10%												
entrat	20%												
Concentration	30%												
Amylase (	40%												
Am	50%												

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## Part II. Enzyme Concentration (cont.)

Graph your results below and write a statement about the relationship your graph depicts.


## Part III. pH

Well #	pH	Observations
1		
2		
3		

Question: What can be stated about pH and amylase activity?

## Part IV. Temperature

Well #	Water Condition	Observations
1		
2		
3		

Question: Does temperature seem to influence amylase activity? Explain.