Lysozyme Activity

1. Collect tears or saliva in a Petri dish, as explained by your instructor.

Wear safety goggles when pipetting.

2. Prepare a 1:10 dilution of tears or saliva by adding 0.5 ml of tears or saliva to a 4.5-ml lysozyme buffer. What is the purpose of the buffer? _____

_____

3. Mix 2.5 ml of the tear or saliva preparation with 2.5 ml of *Micrococcus luteus* suspension in a spectrophotometer tube. Carefully pipette the contents of the tube up and down three times to mix.
4. Record the absorbance at 540 nm at 30 seconds, 60 seconds, 120 seconds, 180 seconds, 240 seconds, and 5 minutes, and at 5-minute intervals for the next 15 minutes (Appendix C).
5. Repeat steps 3 and 4, using egg-white lysozyme.
6. Plot your data in the Laboratory Report.

PURPOSE

HYPOTHESES

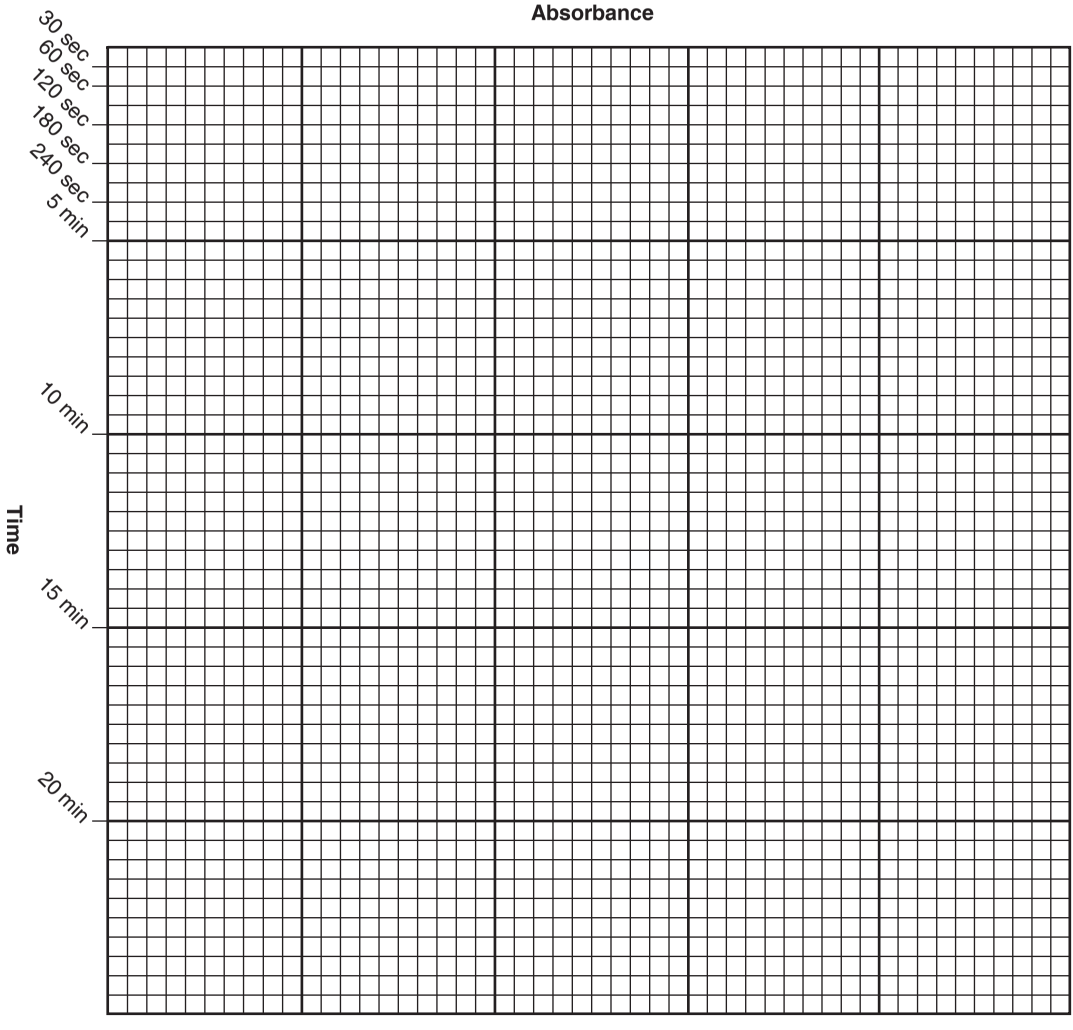
1. H_0: Lysozyme activity will not be found in _____.
2. H1: Lysozyme activity will be found in _____.

RESULTS

Lysozyme Activity

	Absorbance		
Time	**Test substance**	**Test substance**	**Egg-White Lysozyme**
30 sec			
60 sec			
120 sec			
180 sec			
240 sec			
5 min			
10 min			
15 min			
20 min			

Plot your data for lysozyme activity using a computer application or on the graph paper on the next page. Absorbance is marked on the Y-axis and time on the X-axis. Make one line for tears or saliva and another line for egg-white lysozyme.


Absorbance
Time
30 sec
60 sec
120 sec
180 sec
240 sec
5 min
10 min
15 min
20 min