

Name

## Exploring Light Sticks Worksheet

## Data Table

Test Tube	<b>Observations Before Treatment</b>	Observations After Treatment
+ sodium salicylate		
Control		
+ 0.1 M HCl then 0.1 M NaOH		
+ 0.1 M NaOH		

## Questions

- 1. Why is a control used in experiments and demonstrations?
- 2. What is the effect of sodium salicylate on the light stick reaction?
- 3. How does changing pH affect the reaction time of the light sticks?
- 4. In the case of a commercial light stick, a specific amount of sodium salicylate is added. How much sodium salicylate would be too much? Why?
- 5. Traditional emergency flares used to be found in all road hazard kits. The flares were lit and burned out after a few hours. Discuss the advantages and disadvantages of replacing road flares with light sticks.

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