

# Vitamin C Clock Reaction Worksheet

**Data Table 1**

	Color and Appearance of Solution
<b>Beaker A</b>	
Water + Vitamin C Solution	
Addition of Iodine	
After Stirring	
<b>Beaker B</b>	
Water + Hydrogen Peroxide	
Addition of Starch Solution	
<b>Beaker C</b>	
Start of Clock Period	
Alarm	

**Data Table 2**

Experiment	1	2
Amount of Water Added to Beakers A & B	15 mL	30 mL
Time Elapsed to Alarm (seconds)		



## Post-Lab Questions

- In this activity, two forms of iodine are present—the element form, iodine ( $I_2$ ), and the ion form, iodide ( $I^-$ ). In step 5, Vitamin C reacts with the iodine initially present in beaker A to produce iodide ions. According to your observations, what color is this product?
- In the presence of starch, elemental iodine ( $I_2$ ) will change color while iodide ions will remain colorless. Which form of iodine— $I_2$  or  $I^-$ —reacts with starch to produce the final product (the alarm) in beaker C? How do you know?
- Write a conclusion regarding the effect of concentration on reaction rate based on your results. Indicate whether or not the results support your hypothesis from *Pre-Lab Question 3*.

## Part II. Divergence and Rift Valley Formation

### Observations/Drawings

**Questions** (Use a separate sheet of paper to answer the following questions.)

1. Based on your observations for Part II, describe what happens as continental plates diverge.
2. List an example of where the type of movement seen in Part II (divergence) occurs.
3. Label possible weak points in your final drawing for Part II. How is the formation of these weak points different from those seen in Part I?