

LAB 7 – REACTION RATES

Question and Hypothesis: _____

Procedure:

1. Label the beakers A, B, C, D, E, & F.
2. Pour 20 mL of hot water into beaker A. Add ½ denture tablet. Stir. Time how long the reaction takes before completion. Record value.
3. Pour 20 mL of ice water into beaker B. Add ½ denture tablet. Stir. Time how long the reaction takes before completion. Record value.
4. Pour 20 mL of room temperature water into beaker C. Add ½ denture tablet. Stir. Time how long the reaction takes before completion. Record value.
5. Pour 20 mL of room temperature water into beaker D. Using a mortar and pestle, crush ½ denture tablet into a fine powder. Add the powder to the water. Stir. Time how long the reaction takes before completion. Record value.
6. Pour 20 mL of room temperature water into beaker E. Add a whole denture tablet. Stir. Time how long the reaction takes before completion. Record value.
7. Clean up.

Data:

| | Time |
|---|------|
| Beaker A: hot water + ½ tablet | |
| Beaker B: cold water + ½ tablet | |
| Beaker C: room temperature water + ½ tablet | |
| Beaker D: room temperature water + powdered ½ tablet | |
| Beaker E: room temperature water + whole tablet | |

Analysis:

1. How did temperature affect the rate of reaction?

2. How did surface area affect the rate of reaction?

3. How did quantity affect the rate of reaction?

Conclusion: _____

