|  |  |
| --- | --- |
| Macintosh HD:private:var:folders:cg:j9y63stj0y9_ct_3n9vx0hqc0000gp:T:TemporaryItems:images.jpg**Science 8**  **Antacid Reaction Challenge!** | **Name: Date: Block:** |

As a class, brainstorm some questions about antacid tablet reaction speeds that can be answered by using the scientific method.

**With your group, choose ONE of the questions to study!**

|  |
| --- |
| **QUESTION** |

My question is:

|  |
| --- |
| **HYPOTHESIS** |

My hypothesis is:

|  |
| --- |
| Independent Variable: Dependent Variable: |

|  |
| --- |
| **EXPERIMENT** |

**MATERIALS:**

* Two beakers

**PROCEDURE:**

1. Put on safety goggles.

|  |
| --- |
| **RESULTS** |

**BEFORE the experiment**:

|  |  |
| --- | --- |
| **Tablet A: \_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **Tablet B: \_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| Qualitative:  Quantitative: | Qualitative:  Quantitative: |
| **Liquid A: \_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **Liquid B: \_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| Qualitative:  Quantitative: | Qualitative:  Quantitative: |

**DURING the experiment**:

|  |  |
| --- | --- |
| **Beaker A** | **Beaker B** |
| Qualitative: | Qualitative: |

**AFTER the experiment**:

|  |  |
| --- | --- |
| **Beaker A** | **Beaker B** |
| **REACTION TIME:** | **REACTION TIME:** |
| Qualitative:  Quantitative: | Qualitative:  Quantitative: |

|  |
| --- |
| **ANALYSIS** |

Find another group that had the same research question as your group. Compare their results to your group’s results by completing the table below.

|  |  |  |
| --- | --- | --- |
|  | Beaker A Reaction Time | Beaker B Reaction Time |
| My group’s results: |  |  |
| Another group’s results: |  |  |

|  |
| --- |
| **CONCLUSION** |

In your conclusion, write a **paragraph** describing:

* your findings
* the effect of your independent variable on the reaction time
* whether your hypothesis was confirmed or rejected
* any variables that could have affected your results
* what you would do differently if you were to perform this experiment again