

## Hypothesizing in Science – Lab Write-up

Science \_\_\_\_ Title \_\_\_\_\_ Name: \_\_\_\_\_

**Purpose:** To determine whether antibacterial soap is more effective at killing bacteria than regular soap.

**Hypothesis:** *place your IF/THEN statement here:*

**Materials:** list of things the student used in the experiment

**Procedure:**

- 1) Select 150 volunteers
- 2) Separate the volunteers into 3 groups of 50
- 3) Label the groups: regular soap users, antibacterial soap users, control (warm water)

4) \_\_\_\_\_

5) \_\_\_\_\_

6) \_\_\_\_\_

7) \_\_\_\_\_

8) \_\_\_\_\_

9) \_\_\_\_\_

**Observations:**

a) Average bacterial counts were:

| Type of Soap              | Average Number of Bacteria per Hand (x 1,000) |     |       |     |       |     |       |     |
|---------------------------|---|-----|-------|-----|-------|-----|-------|-----|
|                           | Day 1 (2 <sup>nd</sup> day)                   |     | Day 3 |     | Day 5 |     | Day 7 |     |
|                           | A   | B   | A     | B   | A     | B   | A     | B   |
| <b>Regular Soap</b>       | 1000  | 100 | 1000  | 100 | 1000  | 100 | 1000  | 100 |
| <b>Antibacterial Soap</b> | 1000  | 1   | 1000  | 10  | 1000  | 30  | 1000  | 200 |
| <b>Control</b>            | 1000  | 500 | 1000  | 500 | 1000  | 500 | 1000  | 500 |

b) Bar graph of bacterial counts (after washing):

c) It was observed that \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Questions:** List three questions that you thought of while writing the lab up.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**Conclusions:**

1. How accurate do you think your results are? Explain.

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2. Paraphrase the student's conclusions here:

A)

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B)

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