Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Bottle flipping activity**

Scientific procedure

Step 1: Ask a question and make an observation: Ask a question or make an observation about the activity we are doing today.

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Step 2: Hypothesis (Must be an “if …. then” statement)

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Step 3: Variables:

Independent (Changed): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Dependent (Measured/observe): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Controls (Constant/ more than 1): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Step 4: Procedures (Step by step and must be detailed):

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Step 5: Data: Complete the following.

1. Measure your bottle height: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ centimeters
2. Amount of liquid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_milliliters
3. Height where you will be dropping it from (the same person must toss it every time): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_centimeters

Make a graph of your data and a table of your data:

|  |  |  |  |
| --- | --- | --- | --- |
| Bottle ML Filled | Number of successful tosses | Number of unsuccessful tosses | Fraction and percentage successful |
| A |  |  |  |
| B |  |  |  |
| C |  |  |  |
| D |  |  |  |
| E |  |  |  |

Create a bar graph of this data

Step 6: Conclusion- this will be done in your ELA class as a project grade.