Name Date Class Partners

Mentos Lab 2013

Abstract (summary of experiment)

We observed explosion of diet coke and mentos. We asked, “How much soda did they need to use for the explosions to happen?”

Purpose/Objectives:

In this lab we will find out how much soda it takes to make the mentos and soda explode.

Hypotheses:

1. We think that if we have 100 mL or more of soda\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. We think that if we have less than 100 mL of soda there will be\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The more soda we use the \_\_\_\_\_\_\_\_\_\_\_\_\_ explosion will be\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  
   Materials:  
   Coke, mentos, beakers, ruler or meter stick, graduated cylinder, goggles, apron, gloves, rubber band for hair

Materials: List at least 5 (and be specific- how much and what size):

Procedure:  
  
Part 1- Less than 100 ml

1) Measure the soda for experiment using a \_\_\_\_\_\_\_\_\_\_

\* 1st experiment we will use 50 ml of pop

2) Take out \_\_\_\_\_\_ mentos per group

3) Place the measuring stick next to the beaker with the 0 on the bottom

4) Drop in the mentos

5) Measure how high the spray \_\_\_\_\_\_\_\_\_\_\_

6) Record the measurement of the\_\_\_\_\_\_\_\_\_\_\_

Part 2- More than 100 ml  
1) Measure the pop for the experiment using a 1000mL \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. We need 250mL.

2) Take out \_\_\_\_\_\_ mentos per group.

3) ) Place the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ next to the beaker with the 0 on the bottom

4) Drop in the \_\_\_\_\_\_\_\_\_\_\_

5) Measure how high the \_\_\_\_\_\_\_\_\_\_\_ goes into the air

6) \_\_\_\_\_\_\_\_\_\_\_\_ the measurement of the spray  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
Results

Data Table 1: Results of less than 100mL experiment

|  |  |  |
| --- | --- | --- |
| Group number | Height of Spray (cm) | Observations/Descriptions |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |

Data Table 2: Results of more than 100mL experiment

|  |  |  |
| --- | --- | --- |
| Group number | Height of Spray (cm) | Observations/Descriptions |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |

Analysis

Data set 1: Results of 50 mL experiment  
\_\_\_\_\_ happened because\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  
1)   
2)   
3)   
  
Data set 2: Results of 250 mL experiment

\_\_\_\_\_ happened because\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1)

2)

3)

Conclusions- Were our hypotheses correct?  
1)Hypothesis 1 was \_\_\_\_\_\_\_\_\_because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2)Hypothesis 2 was \_\_\_\_\_\_\_\_\_because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3) Hypothesis 3 was \_\_\_\_\_\_\_\_\_because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
  
Future Directions  
1) We could use more \_\_\_\_\_\_\_\_\_

2) We could use more \_\_\_\_\_\_\_\_\_\_\_\_

3) We could use a different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mentos Lab Part 2

Abstract (summary of experiment)

We observed that the Mentos and diet coke did not \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. We redesigned the lab to see if the changes to our procedure will make the experiment work.

Purpose/Objectives:

In this lab we will find out if using \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ will make the Mentos and Diet Coke explode.

Hypotheses  
1) I think \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ because\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2) If \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  
  
Write your procedure here:  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
Create a data table here:  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
Record your analysis here:  
  
  
  
  
  
  
  
  
  
  
  
  
Record your conclusions here:  
  
  
  
  
  
  
  
  
  
  
Record at least 2 Future directions here:  
  
  
  
  
  
  
  
 **Learning statement:** This experiment taught me that sometimes in science experiments\_\_\_\_\_\_\_\_\_\_\_\_\_\_. This is ok because they teach us \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.Then we can change things and see   
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.