**Mentos Fountain Worksheet**

**Answer Key**

**In a Mentos® fountain, \_potential\_\_\_\_\_\_\_\_\_\_\_\_\_ energy stored in the
soda’s carbonation is transferred to \_kinetic\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ energy.**

**Our teacher has designed the following fountain:**

|  |  |  |
| --- | --- | --- |
| **Nozzle** | **Soda Temperature** | **# of Mentos** |
| x shape | room temperature | 5 |

**We want to design a Mentos® fountain that shoots higher than this one.**

**Our class is going to work together to design a Mentos® fountain that
shoots as high as possible so we can defeat the teacher in a
head-to-head competition. My group is investigating the effect of

\_number of Mentos® candies\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**Example Answers**

**We will vary \_number of Mentos® candies\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, while the other factors remain the same.**

**We predict that: More Mentos® candies will make the fountain go higher\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Run #** | **Nozzle** | **Soda Temperature** | **# of Mentos®** | **Results** |
| **1** | **x shape** | **room temperature** | **3** | **The fountain went about 10 feet high.** |
| **2** | **x shape** | **room temperature** | **6** | **It went higher than the last one. It went about 15 feet high.** |
| **3** | **x shape** | **room temperature** | **10** | **This one was highest. We estimate it went about 18 feet high.** |

**Our prediction was right/wrong.** (circle your answer)

**Based on our results, we found: Using more Mentos makes the fountain go higher\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**After sharing our results with the other groups, we predict the best fountain design is:**

|  |  |  |
| --- | --- | --- |
| **Nozzle** | **Soda Temperature** | **# of Mentos®** |
| **circle shape** | **room temperature** | **10** |