

Mentos and Soda Lab

Name: _____

Period: _____

Objective of this lab is for students to check their estimation of height. They will use a scale ratio to check their estimation.

Information:

When Mentos is dropped into a carbonated liquid, the Mentos will sink to the bottom of the container. The dissolved carbon dioxide reacts to the coating on the Mentos causing the dissolved CO₂ to become a gas. Because this happens at the bottom of the container it will push the liquid up and out the spout with a great force.

Before

Estimation of Diet Coke: Feet: _____ Inches: _____

Estimation of second soda: Feet: _____ Inches: _____

After:

Estimation of Diet Coke: Feet: _____ Inches: _____

Estimation of second soda: Feet: _____ Inches: _____

A picture was taken with a 36 in yard stick. A second picture was taken of the diet coke at maximum height. A third picture was taken of the second soda at maximum height.

Students will use proportion analysis to find the true height.

$$\frac{36 \text{ in picture height}}{\text{Picture height}} = \frac{36 \text{ inches}}{\text{unknown true height}}$$

Estimation accuracy

$$\text{Your estimation} / \text{true height} * 100 = \underline{\hspace{2cm}} \%$$