

Mythbusters: Diet Coke and Mentos Research

1. What happened when Jamie removed the CO₂ gas from the soda and then dropped the candy in the soda?
2. How did the soda spray height compare to the spray height of the carbonated water? What does this mean?
3. Adam tested each of the other soda ingredients in the carbonated water one by one. Which of them caused the water to spray higher? (circle the ones that apply)
 - a. Aspartame (artificial sweetener)
 - b. Acids (citric & phosphoric acid)
 - c. Potassium Benzoate (preservative)
 - d. Caffeine
4. Adam tested the ingredients in the Mentos one by one to see which ones affected the reaction. What was the result when he tested...
 - a. Gum Arabic
 - b. Gelatin
5. How did the Mythbusters test the theory that nucleation sites create carbon dioxide bubbles causing the cascade?
6. Describe in your own words/diagrams what causes the “soda explosion” when you mix Mentos and Diet Coke.