



Name _____

Quite a Reaction!

Background Information:

- Mentos are a candy with a slightly hard exterior and a soft, chewy interior. Some of the chemicals in the candy are gelatin and gum arabic. These chemicals make the inside of the candy chewy.
- Diet sodas contain caffeine, potassium benzoate, aspartame, & CO₂ gas, among other chemicals. The CO₂ gas is pumped into the bottles at the soda factory and stays suspended in the liquid until the bottle is opened.
- Physical reactions or changes are those that affect the size, shape or color of a substance, but in which original substances remain unchanged and no new substances are produced
- Chemical reactions or changes are those that cause the rearrangement of the atoms of one or more substances, resulting in the formation of new substances, often having entirely different properties.

Materials:

1 package of Mentos candies	2 L bottle of diet soda	Small cup or beaker	1 index card	Hand lens
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Procedure:

1. Observe a Mentos candy. Record your observations.
2. Pour some soda into a beaker. Observe the soda. Record your observations.
3. Drop the candy into the beaker. Observe. Record your observations.
4. Make a tube with the sheet of paper.
5. Stack the Mentos in the paper tube.
6. Cover the opening of the paper with the index card.
7. Open the bottle of soda.
8. Put the paper tube on the opening of the bottle – make sure the index card is between the candy and the opening.
9. Make sure the candies are lined in a stack.
10. Move the index card quickly so that all of the candies drop into the bottle at once.
11. Get out of the way!

Data:

Observations	
Mentos	
Diet soda	
Mentos + Diet soda in beaker	
Mentos + bottle of Diet soda	

Questions:

1. What type of investigation was this, descriptive or qualitative? Explain your answer.

2. Make a ***prediction***: was this a chemical or physical reaction? Explain your answer.
