



Help Grow The Grinches Heart

If you've recently watched the Grinch you'll remember his heart Grows three sizes at the end, well you can now help the Grinch at home! In this activity using simple ingredients you can see and understand the science behind this activity.

Follow the steps below to create the chemical reaction which allows the Grinches heart to grow. Use the table at the very bottom and complete this experiment 3-5 times each time record the time it takes for the reaction to deflate the balloon, if there are smells, color changing or other characteristics.

Materials

- Green Ballon
- Marker
- White Vinegar
- Empty Water Bottle
- Baking Soda

Step 1

Fist take your marker and Green ballon and draw a heart. Don't worry it'll get bigger!



Step 2

Next, prestretch the balloon a bit and set aside. After, take the empty water bottle and put about one tablespoon of baking soda into it. Next, quickly add a 1/4 cup vinegar and put the balloon over the top of the bottle.

The baking soda and the vinegar combine to form carbon dioxide. The reaction you just made caused the balloon to fill with gas, making the heart grow!

Now you can dump out the contents and repeat!



Experiment number	Time it takes for balloon to completely fill	Time it takes for reaction to complete	Any Smell? color? other characteristics?