

Baking Soda and Vinegar Balloon Experiment

1. Blow up the balloon and then deflate it to stretch it.
2. Use the funnel to put 1 cup of vinegar in the plastic bottle.
3. Rinse and dry the funnel. Then use it to put the baking soda inside of the deflated balloon.
4. Have your parent carefully pull the edge of the balloon over the top of the water bottle.
5. This experiment happens very quickly so you are going to record it so that you can replay it later. Have your parent hold the balloon and have a helper hold a ruler next to the top of the bottle. This is so you can record the height. You will be recording the experiment on a smartphone.
6. Hit record and yell “go.” When you say “go” your parent should lift the balloon so that the baking soda falls into the vinegar.
7. Replay the experiment and pause video every second or so to record the height. If you can’t get a measurement for every second that is fine.
8. Use the information to fill in the table below. Approximations are ok.

Materials:

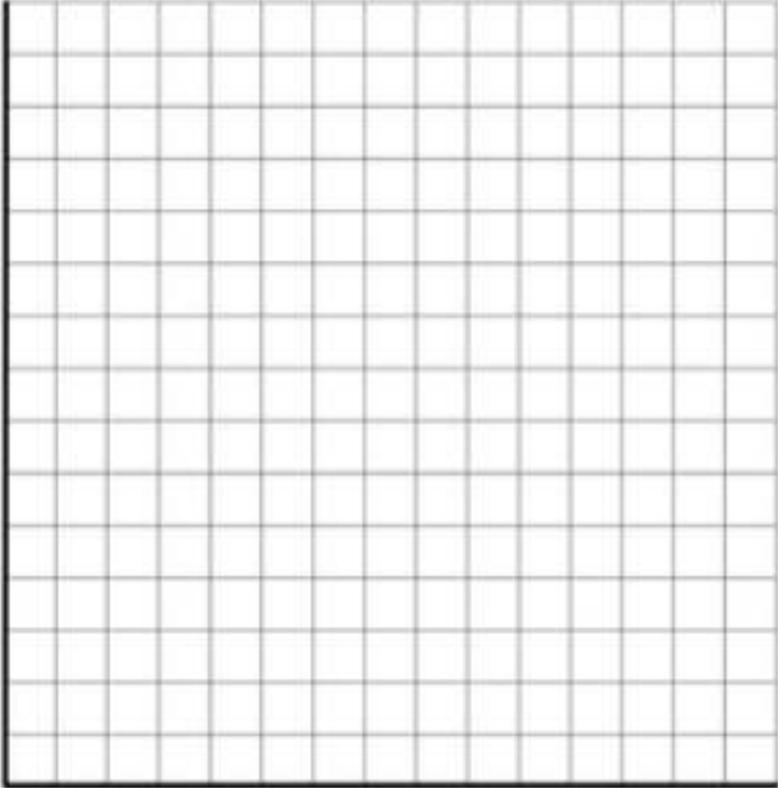
- A balloon
- An empty plastic bottle
- A timer
- 1 cup white vinegar
- 3 tsp. baking soda
- A funnel
- A ruler
- A smartphone to record the experiment
- Your parent and a helper

Time in seconds	Height of the balloon in inches
0	
1	
2	
3	
4	
5	
6	

Now use the information in the table to create a line graph of the results. A line graph is a graph with points connected by lines. It is a very useful graph for showing how something changes over time. First

label the axes and then draw dots for each of the data points on your table. Finally, connect the dots with lines using a ruler.

Height in Inches



Time in Seconds