Inflate a Balloon with Vinegar and Baking Soda

EXPERIMENT

Follow the steps below to inflate a balloon using vinegar and baking soda.

Supplies
1/3 cup baking soda
1 cup vinegar
plastic bottle
balloon
funnel

1. Place the funnel into the balloon opening and fill the balloon with the baking soda.
2. Use the same funnel and pour the vinegar into the plastic bottle.
3. Stretch the balloon opening and slip it securely over the bottle opening, careful
not to spill the baking soda into the bottle, yet.
4. Lift the balloon and let the baking soda fall into the bottle.
5. The balloon will begin to inflate.

1 In your own words, explain what happened when the baking soda mixed with the vinegar:
The vinegar and baking soda created bubbles that filled the bottle. As the bubbles expanded the balloon began to inflate.

2 What caused the balloon to inflate?
   Gas produced by a chemical reaction created when the vinegar and baking soda mixed.

3 What kind of gas is created by mixing baking soda and vinegar?
carbon dioxide

4 Do you think mixing baking soda with water will create the same reaction? Why or why not?
No because water is not acidic.

5 What do you think will happen if twice as much baking soda is added?
The balloon might burst or fly off.