Properties of Gas Lab

Properties of a Gas Investigation:

What's needed:

An unfilled balloon Vinegar Baking soda Empty bottle Funnel Procedure:



What to do:

- Pour vinegar into the empty bottle using a funnel, filling it about 1/3 full.
- Put a few spoon-fulls of baking soda into the balloon using the funnel.
- Carefully stretch the opening of the balloon over the opening of the bottle so that the baking soda falls into the vinegar.
- Watch what happens.

Predict what you think will happen:

Record, report and explain your findings:

Teacher Notes:

- Ask students to observe what happens to the balloon as it inflates.
- Ask them to describe what they see, hear, and feel.
- Ask them to describe the properties of the gas that they observe. For example, they may note that the gas is invisible, odorless, and has the ability to fill up space and expand.
- Discuss with the students how the gas was produced by a chemical reaction between the vinegar and baking soda.
- Ask students to compare the properties of the gas to other materials they are familiar with, such as liquids and solids.
- Encourage students to make connections between the properties of the gas they observed and everyday applications, such as inflating balloons or powering vehicles.

Conclusion:

Through this activity, students will be able to identify some basic properties of gases, such as invisibility, odorlessness, and the ability to fill up space and expand. They will also gain an understanding of how gases are produced through chemical reactions, and how these properties can be applied in real-world scenarios.