

# SPAGHETTI DIVERS

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## Materials:

- \*Tall glass
- \*Two cups of water
- \*Baking soda  
-1 tablespoon
- \*Small handful of uncooked spaghetti broken into 1-inch pieces
- \*Vinegar  
-3 tablespoons

**Objective:** Learn about the molecular action of water.

## Instructions:

1. Put two cups of water into a tall glass. Stir in 1 tablespoon of baking soda until it dissolves.
2. Put the uncooked spaghetti into the glass. What happens to the spaghetti pieces?
3. Then stir in 3 tablespoons of vinegar. What happens to the pieces?
4. If the spaghetti pieces don't float, add several more tablespoons of vinegar until the spaghetti floats to the surface.

## How Does It Work?

A chemical reaction produces carbon dioxide gas. This gas forms bubbles on the pieces of spaghetti. The bubbles float the pieces to the top of the glass. Then the bubbles break at the surface of the water. This sends the pieces to the bottom of the glass.

## Questions to Ask:

1. Will this work with peas or raisins? Try it!
2. What does the addition of the baking soda and vinegar do to the weight of the water?