



## Understand the Science

The eggshell, which is made up of calcium carbonate, undergoes a chemical reaction with the vinegar, a weak acid. The vinegar dissolves the calcium carbonate eggshell in a chemical reaction. The bubbles are an indication of a chemical reaction. The egg has a thin flexible membrane underneath the shell in order to protect the egg.

## Procedure

 **24 hours - 48 hours**

### Step 1:

Carefully put your egg into the glass jar



### Step 2:

Add white vinegar until the egg is fully submerged



### Step 3:

Wait 24 hours and the egg should be translucent in color, if not wait another 24 hours



### Step 4:

Rinse the egg with water and wash off any leftover residue



### Step 5:

You can now bounce your egg, but make sure not to drop it from high heights



## Warnings / Safety Precautions



The egg can still break and splatter if dropped from a high height because the membrane isn't very strong.

## Materials:

- ☐ Glass Jar
- ☐ bottle of White Vinegar
- ☐ One White Egg

## A Step FURTHER!

Try adding food coloring to the vinegar solution! Come up with a hypothesis on whether the egg will change color or not and explore your hypothesis by testing it out!

Try using a flashlight to examine the inside of the egg, what do you observe and how did the vinegar solution contribute to that ?

## Tips!

If the egg shell isn't completely broken down and there are no more bubbles forming you need to dump the old vinegar and replace with new fresh vinegar to complete the reaction.