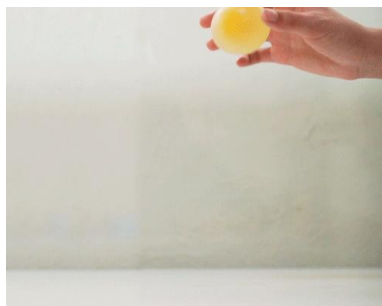


Egg in Vinegar Experiment



Want to see a chemical reaction in action? This experiment allows you to see how two common household materials react — eggshell and vinegar. When these materials come in contact, a (safe) chemical reaction takes place and creates new compounds. This easy experiment is great for children to do on their own, and fun to observe how the egg changes over time.

How we did it:



1.

Carefully put your egg into a jar and fill the jar about three-quarters full with the egg completely submerged in the vinegar.



2.

You should be able to see bubbles form around the egg immediately. Where do you think they come from?

Wait 48 to 72 hours. We found it exciting to check in on the egg as we went as the egg grows and changes over time.



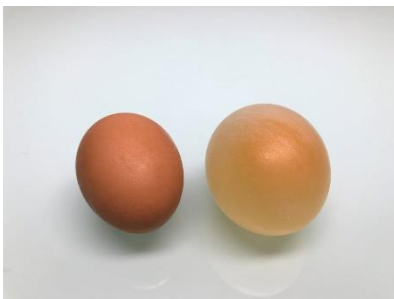
3.

After waiting, use a spoon to take out the egg. Carefully rinse it thoroughly under the faucet using warm water.



4.

Your egg is now ready to bounce! Hold your egg about 3 inches from the table and gently let go. If bounced too hard the egg will break. This means you'll get to see the membrane of the egg!



5.

Compare your transformed egg to a regular egg. What do you think happened to the eggshell? What other differences can you observe?

What's Going On?

If you look closely at the egg while it's submerged in the vinegar, you can see bubbles forming on the surface. Those bubbles are full of carbon dioxide, just like the bubbles in a glass of soda. You're seeing a reaction between a compound in the eggshell (calcium carbonate) and an acid in the vinegar (acetic acid). This reaction creates carbon dioxide (and some other things) and breaks down the eggshell in the process. The membrane underneath the shell doesn't react, so it's left behind. Once the shell is completely gone, all that's left is the flexible membrane, giving you a bouncy "rubber" egg!

Egg in Vinegar Experiment Activity

Hypothesis - Scientific guess of what you think will happen during this experiment.

Materials Used - List the materials you used in the experiment.

Observations Day 1 – What do you notice what happens each day?

Observations Day 2

Observations Day 3

Conclusion – What is the outcome of the experiment? What did you learn from this experiment?