# **Science at Home**

## 

Are you looking for something to do to keep your brain active and engaged? We're here to help with Science at Home! You can conduct these fun science experiments using commonly found items. You can also visit us at the Museum's <u>Science at Home</u> page for additional resources.

### **Experiment: Eggs-cellent Adventure #2**



Materials Needed: 1 raw chicken egg 1 coffee mug (or similarsized container) Household vinegar

#### Instructions:



**Step 1:** Place egg in mug and fill with vinegar until egg is completely submerged. Let sit for at least 24 hours.



**Step 2:** After 24 hours or more, remove egg from vinegar and gently rinse under the faucet using your fingers to help scrub away any remaining residue.



This "rubber" egg is exactly what it looked like inside the hen before calcium carbonate was applied to create the hard shell.

During egg laying, hens develop a special bone tissue called medullary bone which enables calcium in the chicken's bones to make its way to the egg. The finished shell is composed mostly of calcium carbonate, which dissolves easily in acid. (Vinegar is weak acid.)

Carbon dioxide is a by-product of the chemical reaction taking place and is seen as numerous bubbles that appear immediately after placing the egg in the vinegar! After about 24 hours, the shell has dissolved leaving only the interior membrane behind.



Having Fun? We want to see! Tag @naturalsciences on social media, so we can see you and your loved ones enjoying our Science at Home experiments.



**Step 3:** You now have a "rubber" egg!

### NORTH CAROLINA Museum of Natural Sciences

naturalsciences.org

@naturalsciences