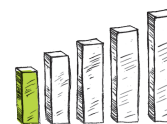


Naked Eggs



MESS
METER: 1



NO ADULT
SUPERVISION
REQUIRED



PREP TIME: 5 MINUTES
EXPERIMENT DURATION: 3 DAYS

Supplies Needed

Raw egg
Glass container
Vinegar

Science Question:

How do you make an eggshell disappear?

Eggshells are made of calcium carbonate. We can dissolve that shell, making the egg naked so we can see and touch the parts of a cell.

The Experiment

Place the egg in the container and cover it with the vinegar. Watch the egg for about 15 minutes—you should see bubbles form on the surface of the egg. Check the egg again after 8 hours and again after 3 days.

The Outcome

The eggshell will thin after about 8 hours and then completely disappear after 3 days. You can then see and touch the membrane covering the egg.

Why It Worked

The shell of an egg is made of calcium carbonate, which is a base. When vinegar, an acid, covers the shell it breaks down the calcium, releasing carbon dioxide (gas). You see this in the bubbles.

Variation

- If water hydrates, what does sugar do? Have two separate cups, one with water and another with corn syrup (the main ingredient in many sodas). Put an egg into each cup. After a couple of hours in the jars you can see how osmosis causes the egg in the water to get even bigger and how the sugars in the corn syrup dehydrated (pulled water out of) the other egg.