

Extra Experiment 1: The Incredible, Bouncing Egg

Here's your challenge: make an egg bounce. If you try simply tossing the egg down on the ground, you're likely to create a mess. But dissolving the eggshell exposes the strong and bouncy egg membrane. Here's how:

Materials

Egg
Bowl that's large enough to hold the egg
Vinegar

Procedure

1. Fill the bowl with vinegar.
2. Place the egg in the vinegar. (Make sure the vinegar completely covers the egg.)
3. Leave the egg overnight. (You'll notice bubbles forming after five to ten minutes.)
4. The next day, remove and carefully dry your egg.
5. Starting with small bounces, see how high the egg can go on an outside patio or driveway.

Extra Experiment 1: The Great Egg Drop Competition

Test your egg and engineering knowhow with this experiment. Compete against family members and friends to see who can devise a way to protect an egg from a high fall.

Materials (for each participant)

Egg (uncooked and unaltered)
Small box (e.g., shoebox)
Tape
Common household materials (to protect the egg in the box)
Ladder or high location

Procedure

Adults should supervise the experiment and conduct the egg drop.

1. Each participant receives one box and one egg.
2. Using only common household items, each participant has a set amount of time to devise a means for protecting the egg inside the box. (The egg may not be altered in any way.)
3. Seal each participant's box with tape.
4. Once complete, carry each entry to the top of a ladder or high location and toss the box off.
5. Open each box to see which eggs survived the fall.