

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 [Science at Home](#) page for additional resources.

Experiment: Eggs-cellent Adventure #1



Materials Needed:

- 2 squares of cardboard or foam board (roughly 1 foot square)
- 3 raw chicken eggs
- A pile of books
- Optional: bathroom weight scale

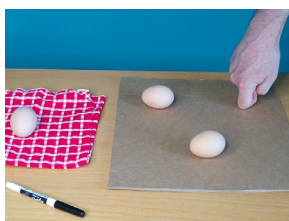
What We've Learned

Eggs are naturally curved. Almost anything with a curve in its design is strengthened by this simple structural addition.

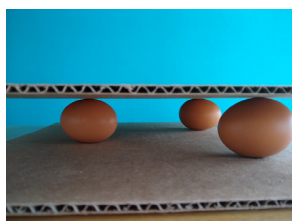
Think of Roman arches in 2000-year-old aqueducts or Inuit igloos made only from snow. Curvature imparts surprising strength.



Instructions:



Step 1: Place one cardboard square on a table and using your knuckle make three dents equally spaced in an equilateral triangle. Six inches apart is a good distance, but can be less.



Step 2: Place one egg in each dent. (The dents keep the eggs from rolling away.) Now place the second square of cardboard on top.



Step 3: Now carefully begin to stack books on top of the cardboard; start with your largest, widest and heaviest books. Stack slowly and carefully and see just how many books you can stack before the eggs crack. You will be very impressed how tall your stack becomes before the eggs crack!

Optional Step: If you have a bathroom scale, you can weigh the books (minus the final one that brought upon the crash!) and see how many pounds these three eggs supported. You're likely to find the results surprising!

