# SUPER STRONG EGGS

See how much weight an egg can hold without breaking!

## Materials
- Play-Doh
- 3 Eggs
- Several books or magazines
- Tray or dropcloth

## Procedure
- Find a flat surface to perform your experiment. Set your experiment up on top of a tray or drop cloth in case things get messy!
- Stand the egg up with the narrow end pointing upwards, then mold the Play-Doh around the base so that it stands on its own. Repeat this process for the other two eggs and arrange them in a triangle.
- Place a hardcover book on top of the eggs. Start stacking your other books and magazines on top of the eggs and see how much weight you can add before the eggs crack.

## Results
The eggs can hold a great amount of weight without cracking.

## Why?
A chicken egg has a compressive strength of 100 pounds! That means one egg could hold up to 100 pounds. Of course, every egg is different, so some eggs may be stronger than others. The reason eggs are so strong is their shape. Arches are one of the strongest shapes because they can distribute weight evenly over its surface. Eggs are super strong when weight and pressure are spread evenly over their surface, but when a lot of force is applied on just one spot they break easily. This is so the chick can break out of the egg when it is time to hatch, but the mother hen doesn’t break the eggs by sitting on them.

To learn more about biology, check out the Natural History galleries at the Pink Palace Museum.