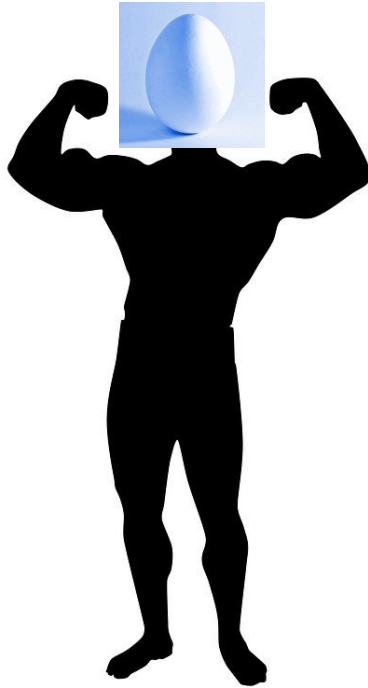


Testing the strength of eggs

Wes R. & Brooks L.



Question

How many eggs does it take to hold up the weight of an average 10 year old boy?

Hypothesis

Wes: I thought it would take 8 eggs to hold up a 10 year old boy.

Brooks: I thought it would take 6 eggs

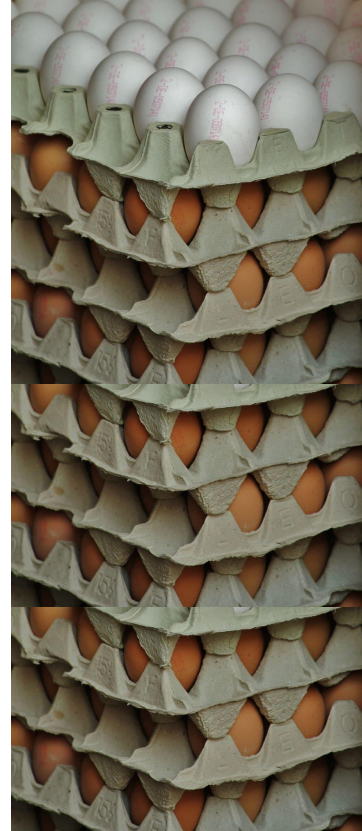


Experiment Design

MATERIALS - 5 dozen eggs, egg crates that the eggs come in, 2 flat surfaces (we used the top of storage containers), towel, scale, brick to adjust the weight, pen and paper to chart results

SETUP - Look up the average weight of a 10 year old boy, weigh Brooks & Wes to determine how much weight to add, lay out project on a flat surface, lay out eggs

PROCEDURE - Put egg carton with eggs inside on the flat surface, then put towel on top. Next get someone to pick you up and slowly lower you on to the eggs





Results - Description

It is important which way you lay out the eggs. We tried 5 patterns. The strongest one was the circle shape.

April 5:

12 eggs heart shape, 1 broken

10 eggs cross shape, 0 broken

8 eggs cross shape, 0 broken

6 eggs double row, 3 broken

April 26:

8 egg, double row, 1 broken

8 eggs, cross shape, 1 broken

7 eggs, H shaped, 2 broken

6 eggs, circle shape, 0 broken

4 eggs, 2 parallel, 1 broken

Conclusions

6 eggs in a circle pattern can hold up a 10 year old

The arch is what makes the egg strong because it evenly spreads out the weight of whatever is on it.

Stuff we looked at online:

[Surprise! You Can Stand on Eggs | Scholastic | Parents](#)

[How to stand on Eggs Without Breaking Them | Street Science - YouTube](#)

Structures that use an arch to support weight:

