

Camp@Home - Activities

This activity idea was originally part of a Durham Scouts [Camp@Home](#) event. It has been adapted for broader use as part of the Scouting from Home programme

Activities at home should always be risk assessed and supervised by parents/carers, taking note of the specific safety advice provided



Strongest Egg

We think of eggs as fragile (and you may have broken a few already with some of our other activity ideas!), but egg shells can actually be quite strong. If you think about it, they need to be quite strong to protect the contents as the egg comes out of the chicken.

You might want to conduct this experiment outdoors, or have some towels handy to mop up some water.



For this experiment you'll need:

- An egg (or two)
- Some plastic bottle caps
- A large pan (a large saucepan will do)
- Some water
- A measuring jug

Simply:

1. Place one bottle cap top down on a flat surface
2. Place the egg in the first bottle cap
3. Place the second bottle cap on top of the egg, top up (see picture)
4. Place the pan on the top of the second bottle cap, checking that it is level

All you have to do then is to use the measuring jug to add a measured amount of water to the pan each time e.g. 50ml at a time.

Before you start, try to predict:

- How much water you'll be able to add to the pan before something happens
- Whether the egg will fail gradually (start to slowly crack) or fail catastrophically (break, with water all over the place!)

As a clue, on [Camp@Home4](#) the strongest egg was able to support seven litres (7+ Kg in weight) – can you do better?

Safety Tips: Keep checking that the pan is balanced as you add more water. You don't want it slipping and landing on someone's foot.

This activity can count towards the following Activity Badges:



Cubs Scientist Activity Badge

<https://www.scouts.org.uk/cubs/activity-badges/scientist/>

This activity could meet the following requirements:

2. Interacting with energy
3. Another activity agreed with your leader



Scouts Scientist Activity Badge

<https://www.scouts.org.uk/scouts/activity-badges/scientist/>

This activity could meet the following requirements:

Option 2

2. Plan and complete three science experiments or activities. Check your plan with an adult first, then for each experiment:
 - Change something about the experiment or activity and try it again, at least once. Predict what you think will happen and find out if you were right.
 - Show that you understand the science behind your experiment or activity.