

Eggy Science experiment

Prediction: What do you think will happen if you put an egg in vinegar?

Equipment: An egg, glass/jar/mug, vinegar, water (optional), food colouring (optional)

Method:

1. Place your egg in a glass or jar
2. Pour in enough vinegar to cover it – if you look closely you should be able to see bubbles appear (this is a chemical reaction of the acetic acid reacting with the calcium carbonate and releasing carbon dioxide)
3. Leave the egg for a day – then carefully rinse it off and replace it with a fresh lot of vinegar

Results:

After a few days the egg shell should have corroded and you should be able to rub away the final bits of shell. You are left with a naked egg surrounded by a membrane (a thin layer of tissue) and you should be able to see the yolk floating around in the middle.

You may notice that the egg is slightly larger now – this is because the egg is semi-permeable which means it can let SOME things through it (like water) and as vinegar is about 95% water and the egg is about 90% water it lets some water in to try and keep it balanced (this is called osmosis).

Additional task

If you want you could make your egg even bigger – just put it in a cup or jar of pure water and leave it overnight. You could even put some food colouring in and see if your egg changes colour!

What can you conclude from all this? What could you try next time? Could you use hard boiled eggs? How does it compare?