

Cinderella's Task

Poor Cinderella has been given the menial task of separating salt from pepper. She's going to need a miracle! Challenge your friends to do the same and I will tell you how to win!

You will need:

- Adult help
- A balloon
- Finely ground pepper and salt
- A plate
- Your or a friend's hair

Let's make it!

Sprinkle about a teaspoon of salt and pepper as randomly as possible onto a plate. Now blow up a balloon and tie it. Rub the balloon vigorously on your or your friend's hair until you can see the hair standing on end...cool eh? Next place the balloon about 1cm above the pepper and salt mix...Watch the pepper jump and stick to the balloon!

How?

When you rub the balloon, it picks up electrons from your hair and becomes negatively charged. The electric charge of the balloon attracts light and fluffy particles like pepper. The charge pushes electrons towards the back of each pepper particle leaving the front of each particle with a positive charge making them attract to the balloon. It doesn't work as well on salt grains as their electrons don't push away as easily and the grains are heavier!

