

Make your own lightning

Brief summary:

In this experiment you will create and observe your own 'lightning' between a metal tray and a fork.

You will need:

- Metal baking tray
- Modelling clay
- Plastic carrier bag
- Metal fork

What to do:

Step 1. Take a handful of modelling clay and press it onto the bottom of the baking tray to make a kind of handle. From now on, don't touch the baking tray itself; only touch the modelling clay handle! Touching the tray might give you a bit of an electric shock - if you think you need it, ask for some help from an adult.

Step 2. Lay the plastic carrier bag flat onto a table or bench. Holding the tray by the clay handle move the tray round and round on the flat bag. Don't let the tray move off the bag!

Step 3. Lift the tray (still using the handle) a short distance from the plastic bag and bring the prongs of the fork close to one of the corners of the tray. A spark of 'lightning' will jump from the tray to the fork.

Take it further:

What other objects can you charge with static electricity? Experiment with plates, paper, cardboard, balloons and plastic.

Have a look at our static electricity experiments - *Light up the room with your hair!*, *Be a snake charmer*, *Static electricity can race* and *Bend water with static electricity*.

Big questions:

- What is thunder and where does it come from?
- How can you stay safe during an electrical storm?
- What happens to an object that is struck by lightning?

