The Racing Can

cience Knowledge Film Through estival Entertainment

FILM

Program with the Mouse - The Mystery of the Cloud

KEY OBJECTIVES

1)

To gain knowledge about electric charge and electrostatic force

INTRODUCTION

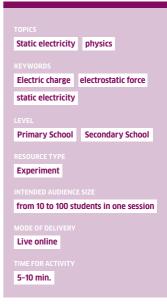
Cloud data is stored not in actual clouds but in buildings that are filled with thousands of hard drives. To use it, we have to be connected to the internet. Have you ever used cloud storage in your life? Probably the answer is yes because since the Covid-19 pandemic began, online teaching and learning have been used by teachers and students. In order to connect to the internet, we need electricity. Now, we are going to learn about static electricity, a phenomenon that involves positive and negative charges.

GUIDING QUESTIONS

— How can we move the empty can without actually touching it?

MATERIALS/PREPARATION

- An empty aluminum can
- A Balloon or a PVC pipe
- A dry shirt (wool works great) and dry hair (properly dry, not oily)





The Racing Can



TASKS/PROCEDURE

1) 2) 3) 4) 5)

1

2

Using a pen, draw a starting line and a finish line on the table

Put your empty can at the start line

Rub the PVC pipe against the shirt, or blow up the balloon and then rub it against your hair several times (at least five times)

Bring the pipe or balloon close to the can, without actually touching it. Observe what happens

Race the can until it crosses the finish line. You can have a race with your family or friends too!

FOSTERING DISCUSSIONS

What happens if you bring the pipe or balloon close to the can?

What happens if you rub the balloon on our heads or the pipe on the cloth fast or slow?

What if we rub it for a long time? Will it go further?

POSSIBLE EXTENSIONS

Try to rub PVC pipe on different types of fabric. Will the result be the same?

Try to rub the balloon on your hair. Quickly move the balloon near the stream of water. Observe what happens to the water stream!

AUTHORS AND SOURCES

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