

THE SCIENTIFIC METHOD IN THE BILINGUAL CLASSROOM IN PRESCHOOL AND PRIMARY EDUCATION



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EXPERIENCE THAT I AM GOING TO DEVELOP WITH MY STUDENTS IN CLASS

Activity 1

✚ To create static electricity

- A. by rubbing a pen with wool
- B. by rubbing a balloon with wool

Activity 2

✚ How to turn some oranges in series or parallel into a battery?

LEVEL: PRESCHOOL

OBJECTIVES OF THE ACTIVITY

- ✚ To bring science closer to preschool students.
- ✚ To develop interest in science and technology in boys and girls.
- ✚ To introduce some concept like electricity, attraction, forces, battery, energy, and so on.
- ✚ To use the scientific method.
- ✚ To experiment with different materials and situations
- ✚ To take out some conclusions.
- ✚ To disseminate results

CONTENTS OF THE ACTIVITY

- ✚ Introducción “El CSIC en la escuela” methodology
- ✚ Science topics
- ✚ Production of static charges
- ✚ Electricity
- ✚ Atraction
- ✚ Open and closed electrical circuits
- ✚ Uses and functions of electricity
- ✚ Work in teams
- ✚ Autonomy

NECESSARY MATERIALS

Activity 1.A

- ✚ Pen
- ✚ Some paper like tissues

Activity 1.B

- ✚ Ballons (3)
- ✚ Wool sweater or scarf

Activity 2

- ✚ Copper electrodes (3)
- ✚ Zinc electrodes (3)
- ✚ Alligator clip leads (6)
- ✚ Red light-emitting diode (LED) (3)
- ✚ Lemons (3)

TIMING

Two sessions.

DESCRIPTION OF THE DEVELOPMENT OF THE ACTIVITY

Activity 1. A

- ✚ Cut the paper into small pieces
- ✚ Rub the pen on the sweater.
- ✚ Bring the pen close to the pieces of paper without touching them, to see how they are attracted to the pen.

Activity 1.B

- ✚ Blow up the balloon and tie off the end.
- ✚ Rub the balloon on the sweater, in one direction.
- ✚ Bring the balloon close to the pieces of paper without touching them, to see how they are attracted to the balloon.

Activity 2

- ✚ Insert one copper and one zinc electrode into each of the oranges.
- ✚ Use alligator clips to connect the electrodes.
- ✚ Connect the alligator clip from the zinc electrode to the *shorter* lead of the LED.
- ✚ Connect the alligator clip from the copper electrode to the *longer* lead of the LED.
- ✚ Discover how to the LED lights up.