

Lesson Plan: How Powerful is Static Electricity?

Area: Physical Science

Age Group: 2nd-3rd Grade

Supplies Needed:

- Plastic comb (one for each student)
- Tiny pieces of paper (from hole puncher?)
- Ping pong balls
- Running tap water
- Balloon

Introduction:

- Do small demonstration: rub balloon in hair to make hair stand up
- Ask students what causes this to happen
- It's Static Electricity!!

Demonstration:

- Set up three stations
 - Paper Station: paper is spread out on the table
 - Ping Pong station: ping pong tables laid out on table
 - Water station: have a thin stream of water coming from tap
- Ask students to write down predictions of what they think might happen if they run a comb through their hair and they hold the comb next to each of the objects provided

Directions:

- Split class up into three groups, have each group visit each station for about ten minutes.
- When student arrives at a new station, have them run the comb through their hair a few times and quickly hold the comb close to the object provided at the center
- What happens? Ask students to record what they see.
- When everyone is done, have discussion about what happened at each station and why
- Opposites attract and likes repel

Follow-Up:

- Brain-pop movie: <http://www.brainpop.com/science/energy/staticelectricity/>
- Where else have students seen static electricity at work?

Source: <http://www.canteach.ca/elementary/physical1.html>