

# Static Electricity: NC Summer Tour Lesson Plan 2007

**Lesson Plan:** How Powerful is Static Electricity?

**Area:** Physical Science

**Age Group:** 2<sup>nd</sup>-3<sup>rd</sup> Grade

**Supplies Needed:**

- Balloons (need to be inflated)
- 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 balls 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 rub a balloon through their hair and they hold the balloon next to each of the objects provided

**Directions:**

- Split class up into three groups, have each group visit each station for about five minutes.
- When student arrives at a new station, have them run their 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

NOTE: As this is a shorter lesson, I would like it to be supplemented with a small powerpoint on static electricity, possibly explaining how all objects have areas of positive and negative charge on them and showing that static electricity comes from when the charges organize themselves. Add in any info that you know or can find out on the topic.

Also, this is a good chance to introduce “observations”, “hypothesis”, and “experimentation” (testing hypothesis). Also, see what “conclusions” the kids can draw at the end.

Depending on group and mentor size, you may or may not want to split the kids into groups.