

STATIC, STATIC!

Gallery: MBBY

Course Name: Energy Quest

Grade Level: 5th

Activity: Pre

Approximate Time Required: 30 min.

Vocabulary:

Static Electricity	Attract
Friction	Repel
Charge	

Objective: To identify characteristics of static electricity through exploration and inquiry.

Materials Needed:

Balloons	Plastic wrap
Wool or felt material	Paper towels
Spray bottle of water	Static tubes
Misc. small items (confetti, paper clips, foil, cotton, thread, etc.)	

Procedure:

1. Blow up a balloon and ask students how it could demonstrate static. Enlist a volunteer to show examples: hair standing on end, balloon “sticking” to the wall.
2. Have students make observations about static electricity.
3. What do you think would happen if you sprayed an attracted object with water? Try it out and explain to students how humidity affects static. Why is there more static when it’s dry (winter) than humid (summer)?
4. Give students a piece of plastic wrap. Have each student (1) Place the plastic wrap flat on his desk and rub it with a paper towel. What happens? (2) Place it on the desk and rub it again with the paper towel. Pick up the plastic wrap on both sides in the middle of each side (so that the plastic will fold in half as he picks it up). What happens? (3) Using Ziploc with small items, hold the plastic over the objects and see which ones will attract to the plastic. Again discuss observations.
5. Use a piece of wool or flannel and rub it along the static tube and watch the Styrofoam balls jump. Challenge students to move the balls in various ways.

Evaluation:

Draw conclusions based on observations.

Georgia Standards:

S5P3, S5CS3, S5CS5,