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Course Name: Energy Quest

Grade Level: 5th

Activity: Post

Approximate Time Required: 30 min.

Vocabulary:

Static Electricity	Atoms
Charge	Electrons
Contact	Friction

Objective:

To demonstrate that a charged object can transfer charge to a neutral object by contact.

Materials Needed:

Comb	Felt or Wool Fabric
Pepper or Styrofoam spheres	
Spray bottle of water	

Procedure:

1. Sprinkle some of the pepper over the uncharged comb. Notice the movement of the pepper as it moves toward the comb.
2. Rub the comb with the fabric, charging it negatively. Sprinkle the pepper or Styrofoam spheres over the charged comb. Pepper should appear to be first attracting to the comb, then jumping off of it.
3. Generate discussion based on student observations. Explain that although at first the pepper is attracted to the comb (unlike charges attract), the charges can be transferred from the comb to the pepper by **contact**. The comb transfers some of its electrons to the pepper, causing them to have like charges and therefore repel one another.

Evaluation:

Draw conclusions based on observations and discussion.

Georgia Standards:

S5P3, S5CS3, S5CS5

Source:

Suckley, Michael H. and Klozik, Paul A. "Charge Up with Static Electricity"

