

# The Fluttering

## Butterfly

**Gallery:** MBBY

**Course Name:** Energy Quest

**Grade Level:** 5<sup>th</sup> Grade

**Activity:** Pre

**Approximate Time Required:** 30 min.

### Vocabulary:

Static Electricity	Attract
Charge	Repel
Friction	

### Objective:

To produce a static charge by rubbing and observe the effect of static electricity on the butterfly's wings.

### Materials Needed:

Butterfly Picture (Clip Art)	Scissors
Glue Sticks	Balloons
Tissue Paper	Felt or Wool Fabric

### Procedure:

1. Hand out copies of the Butterfly picture and tissue paper. Trace the butterfly onto the tissue paper. Instruct students to cut out the tissue paper butterfly and glue only the body of the tissue butterfly onto the photo copy. \*It's important not to get any glue on the wings of the butterfly.
2. Hold the uncharged balloon close to the wings of the butterfly, then move away and observe.
3. Charge the balloon by rubbing it with the fabric. The **friction** causes the electrons from the fabric to transfer to the balloon making it negative. \*(Remember when an object gains electrons it becomes negative.)
4. Hold the charged balloon near the wings, then move away. Repeat. The Butterfly's wing should flutter.

### Evaluation:

Students should complete the results and conclusions portion of a student sheet.

### Georgia Standards:

S5P3, S5CS3, S5CS5,

Source:

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