

An Activity from **NEWTON'S APPLE**

NEWTON'S APPLE is the Emmy Award-winning, fast-paced, PBS family science program that answers viewers' questions about the world around us. Each program features a diverse team of hosts who explore science, mathematics, technology, and engineering through high-energy, hands-on demonstrations. **NEWTON'S APPLE** provides educators with free teachers' guides that support program segments with classroom activities. **NEWTON'S APPLE** also has an extensive line of educational resources. For more information, contact the Director of Outreach, **NEWTON'S APPLE**, 172 East 4th St., St. Paul, MN 55101-9851, or via e-mail at newtons.apple@umn.edu. **NEWTON'S APPLE** is a production of Twin Cities Public Television and is made possible by a grant from 3M.



You can transfer electricity in your classroom!

Grade Level

1-5

Materials

- Silk or fur
- Pie pan
- Rubber tubing
- Tape
- Styrofoam

Discussion

Have you ever touched something and accidentally been shocked? Or seen sparks when separating your clothes? This is static electricity, which is energy. Energy cannot be created or destroyed. It's only moved from one place to another, or transferred.

The following activity will demonstrate an electricity transfer.

Activity

(Note to the engineer: Tell students that this activity is a safe way to transfer electricity and to check with a teacher or parent before trying any other electricity experiment.)

1. Tape the tubing to the pan.
2. Rub the fur or silk against the Styrofoam to create an electrical charge.
3. Place the pan on the Styrofoam.
4. Touch the pan with your finger to create a spark.

Question to the students:

- Why did rubbing the Styrofoam create electricity?
- How do you think electricity is made for our homes and schools?
- Are there materials that won't conduct electricity?
- How fast did the electricity travel?