



## NATURAL SCIENCE CENTER OF GREENSBORO

Community Service Through Science

# Electricity

Program Length: Approximately 45 minutes

### Science Presentations

The Science Presentation you have scheduled is designed to help illustrate the science concepts taught in the classroom and to stimulate student interest in the subject matter.

### Program Description

Electricity will be presented using numerous lively demonstrations, many of which will involve student volunteers. The last demonstration calls for the students to form a “human circuit” through which a mild, brief dose of electrical current is conducted. The instructor will often ask teachers if they would like to experience this demonstration along with their students. The students love it when the teacher volunteers, so please feel free to join in!

### Program Objectives

- 1) To introduce students to the concept of electricity
- 2) To help students understand static electricity
  - a) relationship to magnetism
  - b) electrical charges in matter
  - c) creating an imbalance between positive and negative charges
- 3) To recognize the contributions of pioneers in the field of electricity
  - ◆Thales ◆Franklin ◆Van de Graff ◆Faraday
- 4) To explain how a generator works
- 5) To help students understand the concept of electrical circuits

### Vocabulary

pole	amber	repel	magnet	Van de Graff
attract	positive	negative	Faraday	Benjamin Franklin
insulator	open circuit	closed circuit	Thales	
electromagnet	generator	conductor	electrical charge	

