GREENSBORO SCIENCE CENTER
AQUARIUM MUSEUM ZOO

ELECTRICITY AND MAGNETISM

Grade Levels	Program Length
3rd , **4th**, 5th , **6th**, 7th , 8th	Approximately 45 minutes

Science Presentations

Science Presentations are designed to help illustrate and elaborate science concepts taught in the classroom and to stimulate student interest in the subject matter.

Description

Spark your students' scientific curiosity with this exciting program as we investigate the connections between magnetism, static electricity, electrical current, conductors and insulators. An introduction to atomic structures and a sprinkling of history help to make demonstrations with a Van de Graaff generator, motors, magnets, and electrical conduction a truly hair-raising experience!

North Carolina Essential Standards Correlation

4th Grade	4.P.1, 4.P.3.1
6th Grade	6.P.2, 6.P.3

Objectives

1) Identify electricity as a form of energy.
2) Discover how magnets interact to produce motion.
3) Discover how electrically charged particles interact to produce motion.
4) Understand static electricity and electrical current by seeing examples of each.
5) Recognize contributions from famous inventors such as Thales, Franklin, Van de Graff, Volta, Faraday, and Shen Kuo.

Vocabulary

amber
attract
atom
battery
closed circuit
conductor
current
electrical charge
electricity
electromagnet
electron
generator
insulator
lightning
magnet
negative
open circuit
positive
pole
repel
static electricity
volt