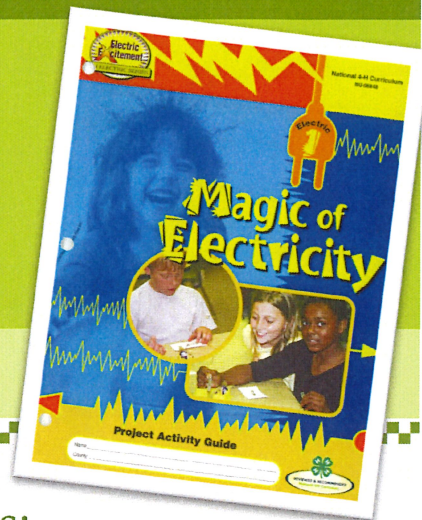


Buncombe County 4-H School Enrichment Presents...

# Magic of Electricity

4<sup>th</sup> Grade



## About the Curriculum:

Have you wondered why just some of the lights go out, why certain things insulate us from electricity better than others, or the effects of magnetism on various substances? Electricity is everywhere. Learn how to build a flashlight, a compass, and electromagnet and an electric motor.

Magic of Electricity aligns with the 4<sup>th</sup> grade Essential Standards- Energy: Conservation and Transfer. Developers of the Magic of Electricity curriculum designed each lesson to be grade-level appropriate and have correlated lessons to meet U.S. National Science Education Standards.

Materials and pre-class preparations are laid out, along with a suggested script. Where appropriate, vocabulary lists, worksheets, and activity sheets are included. An educational kit containing most of the non-consumables needed for implementing these lessons is available through the Buncombe County Cooperative Extension Service's 4-H Program.

## Essential Standards:

**Energy Conservation and Transfer (4<sup>th</sup> Grade)**

## Clarifying Objectives:

**Remember that energy takes various forms that may be grouped based on their interaction with matter.**

**4.P.3.1 Recognize the basic forms of energy (light, sound, heat, electrical, and magnetic) as the ability to cause motion or create change.**

- ✓ Electricity 1 – May the Force Be With You
- ✓ Electricity 1 – Attract or Repel
- ✓ Electricity 1 – A Passing Force
- ✓ Electricity 1 – Electric Attractions
- ✓ Electricity 1 – Sense the Current
- ✓ Electricity 1 – Control the Flow

**4.P.3.2 Recognize that light travels in a straight line until it strikes an object or travels from one medium to another and that light can be reflected, refracted, and absorbed.**

- ✓ Electricity 1 – Bright Lights
- ✓ Electricity 1 – Control the Flow
- ✓ Electricity 1 – A Passing Force
- ✓ Electricity 1 – Conducting Things
- ✓ Electricity 1 – Circuit Sense
- ✓ Electricity 1 – Is There a Fork in the Road



Interested in more 4-H School Enrichment Programs?

Please contact :

**Buncombe County Cooperative Extension Service  
(828) 255-5522**