



CONTENTS

Project Description

Modules:

- Investigating Magnetic Field Lines
- Using Electricity to Make a Magnet
- Build a Stronger Electromagnet
- Magnetism and Temperature
- Molarity: Making Solutions for use in Voltaic Cells
- Electrical Conductivity of Solutions
- Voltaic Cells: Using Chemical Reactions to Generate Electricity
- Lemon Battery: Using a Lemon to Create a Voltaic Cell

Helpful Hints

- Activities 1-4 focus on magnetism, while activities 5-8 focus on electrochemistry. Both groups of activities are arranged in the order that you would do them if you were going to complete the kit. However, each activity can be done separately. Activities 1 and 5 are great lead-ins for the three activities that follow them.
- Activities 1-4 are closely related, and the electromagnets that you make in one activity can be used in subsequent activities. With this in mind, you may want to gather data from all four activities before doing your post-lab discussions.
- In doing activities 5-8, you may want to combine the molarity and the conductivity labs since the solutions that are made in the molarity activity can be used in the conductivity activity.
- Teacher Reading Assessment Forms, and Teacher Project Assessment Forms are available at <http://education.magnet.fsu.edu/curriculum/recertification/index.asp> They can be completed online. Once completed, check with your district's Staff Development Office for directions on where to send or email them.

