## MoSH <br> ELECTRIC CIRCUITS: Suitcase Program [3-5]

## TEACHER'S MANUAL

This Suitcase Program provides the materials and lesson plans for teachers of grades 3-5 with content and activities increasing in difficulty by grade level. Activities in this Suitcase Exhibit may assist in meeting the Tennessee State Standards.

## ACTIVITIES

CHAPTER 1: Getting Started

Introduction: What is Electricity?
Electrical Safety
Kitbook Safety
CHAPTER 2: Simple Circuits
Introduction: Parts of A Circuit
ACTIVITY 1: Simple Circuits
ACTIVITY 2: Lamp
ACTIVITY 3: Buzzer
CHAPTER 3: Batteries
Introduction: How Batteries Work
ACTIVITY 4: Batteries
CHAPTER 4: Conductors and Insulators
Introduction: To Flow or Not to Flow
ACTIVITY 5: Conductors \& Insulators

## CHAPTER 5: Switches

Introduction: How Switches Work
Controlling Flow
ACTIVITY 6: Switches
CHAPTER 6: Series Circuit
Introduction: Single Path
Loads in Series
ACTIVITY 7: Series Circuits
CHAPTER 7: Parallel Circuits
Introduction: Multiple Paths
Loads in Parallel
ACTIVITY 8: Parallel Circuits
CHAPTER 8: Electromagnetism
Introduction: Magnets \& Magnetism
Attractive Forces
ACTIVITY 9: Electromagnets

## INVENTORY CHECKLIST

## TENNESSEE STATE STANDARDS FOR 3-5

3.PS2.1 Explain the cause and effect relationship of magnets.
3.PS3.2 Apply scientific ideas to design, test, and refine a device that converts electrical energy to another form of energy, using open or closed simple circuits.

For the entire activity and materials and to reserve a Suitcase Exhibit, please call 901.636.2362.

## Suitcase Exhibit Inventory Checklist

School:
Check Out:
Return Date: $\qquad$

| MoSH <br> Check In: | Teacher <br> Check In: | Item | Materials | Teacher <br> Return: |
| :--- | :--- | :--- | :--- | :--- |
|  |  | 1 | Teacher KitBook |  |
|  |  | 2 | Student KitBook (14) |  |
|  |  | 3 | Activity Boards (14) |  |
|  |  | 4 | Copper Wire |  |
|  |  | 5 | Shiny Pennies (2) |  |
|  |  | 6 | Galvanized Nails (2) |  |
|  |  | 7 | LCD Clock |  |
|  |  | 8 | Multi-meter |  |
|  |  | 10 | Glass Jar | Metal Spoons (2) |
|  |  | 11 | Salt |  |
|  |  | 12 | AA Batteries (2) |  |
|  |  | 13 | Un-insulated Copper Wire |  |
|  |  | 14 | Wall Switch |  |
|  |  | 15 | Doorbell Switch |  |
|  |  | 16 | Rotary Switch |  |
|  |  | 17 | Simple Telegraph |  |
|  |  | 18 | Student Worksheet Folder |  |
|  |  |  | Extra Batteries (5 AA) |  |
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