



## ***Materials List: The Power of the Wind***

<b><i>How Can We Design a Wind Powered Boat?</i></b>
Small Styrofoam tray
Flexible Straws
Cardboard or index cards
Tape
Straight pins
Scissors
Tape measure
Box fan
<b>Other Possible Materials:</b>
Pencils
Stop watch
String
Paper cups
Paper clips
Pennies
Miscellaneous hardware and office supplies

<b><i>How Can We Design a Better Pinwheel?</i></b>
Scissors
Straight pins
Pencils with erasers
Paper (index cards, construction paper)
Pinwheel pattern from Appendix C
<b>Other Possible Materials:</b>
Paper plates
Aluminum pie plates
Paper clips
Coffee stirrers
Popsicle sticks
Miscellaneous hardware and office supplies

<b><i>How Can We Use Wind To Lift a Load?</i></b>
Pennies
Round pencils
Straws (sturdy straws)
Card stock
String (cotton or poly works best)
Paper or plastic cups
Paper clips
Tape
Box fan
Stop watch or watch with second hand
<b>Other Possible Materials:</b>
Rubber bands
Poster Board
Plastic beads for spacers
Miscellaneous hardware and office supplies

<b><i>How Does a Pinwheel Use Wind Power?</i></b>
Scissors
Straight pins
Pencils with erasers
Pinwheel patterns from Appendix A and B

<b><i>Which Turbine Design Is Better for the Job?</i></b>
Pennies
Pencils
Straws (sturdy straws)
Card stock or index cards
Box fan
String (cotton or poly works best)
Box fan
Paper cups
Paper clips
Tape
Tape measure
Stop watch or watch with a second hand
Aluminum pie plates
Miscellaneous hardware and office supplies

<b><i>How Can We Use Wind Power to Produce Electricity?</i></b>
Card stock or index cards
Paper clips
Tape
Cork (natural or synthetic)
Multimeter
Box fan
Small motor
LED (string of tiny holiday bulbs, cut apart, works)
Wire stripper
<b>Other Possible Materials:</b>
Plastic drink bottles or aluminum pie plates
Rubber bands
String
Paper cups
Miscellaneous hardware and office supplies

<b><i>How Do Motors and Generators Work?</i></b>
Small motor
Leads (with alligator clips)
AA Battery (Caution: other batteries, such as 9V, may cause shock)
Multimeter