



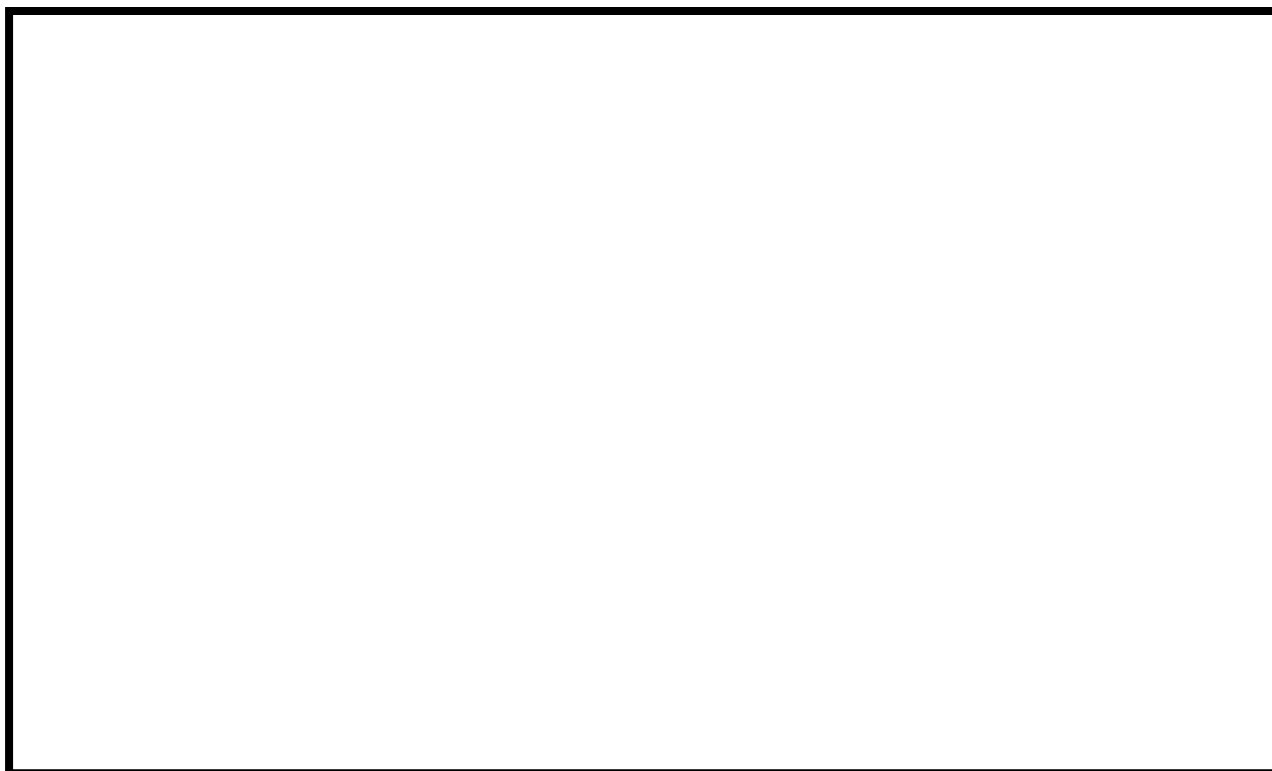
*Check the box if the group selected your design to build for the experiment and the voltage contest.*

## **MINI ENGINEERING DESIGN PROJECT**

### **CAN YOU LIGHT AN LED WITH THE ITEMS IN YOUR BOX?**

The goal of this project is to light an LED using the items in the box, as well as a fan, which will serve as the source of energy for your design. You may not conduct research for this mini project.

Use the space below to sketch your design.



## EXPERIMENT DESIGN

Variable	Experiment Design (provide a repeatable description of your control experiment and your test experiment below and then perform the test).	How does this affect voltage generated?
<b>Color of the wires</b>	Control scenario:  Test scenario:	Voltage Generated in control: _____  Voltage generated in Test 1: _____
<b>The number of wind turbine blades.</b>	Control scenario:  Test scenario:  Test scenario 2:  Test scenario 3:	Voltage Generated in control: _____  Voltage Generated in Test 1: _____  Voltage Generated in Test 2: _____  Voltage Generated in Test 3: _____
<b>The width of wind turbine blades.</b>	Control scenario:  Test scenario:  Test scenario 2:  Test scenario 3:	Voltage Generated in control: _____  Voltage Generated in Test 1: _____  Voltage Generated in Test 2: _____  Voltage Generated in Test 3: _____
<b>The length of wind turbine blades.</b>	Control scenario:  Test scenario:  Test scenario 2:  Test scenario 3:	Voltage Generated in control: _____  Voltage Generated in Test 1: _____  Voltage Generated in Test 2: _____  Voltage generated in Test 3: _____

<b>The material of wind turbine blades.</b>	Control scenario: Test scenario: Test scenario 2: Test scenario 3:	Voltage Generated in control: _____ Voltage Generated in Test 1: _____ Voltage Generated in Test 2: _____ Voltage Generated in Test 3: _____
<b>The angle of wind turbine blades.</b>	Control scenario: Test scenario: Test scenario 2: Test scenario 3:	Voltage Generated in control: _____ Voltage Generated in Test 1: _____ Voltage Generated in Test 2: _____ Voltage Generated in Test 3: _____