

How-To Home Electrical Project

In order to fully understand the concepts of electrical circuits you will be asked to research and demonstrate how to install a household electrical device. Most household circuits are based off of an alternating current feeding off of a circuit breaker box. First, you need to choose a household electrical device from the list below. Then, research the history of the device, product information, how to install the electrical device, safety installation concerns, and household energy efficiency facts. Next, create a Power Point illustrating your findings. When competed, you will demonstrate in class (with the Power Point) how to install the electrical device. This project is worth 100 points and will be due in two weeks.

1. Choose a household electrical device.

- 110 Volt Receptacle
- 220 Volt Receptacle
- Ceiling Light Fixture
- Ceiling Fan
- Light Switch
- 3-Way Light Switch
- Doorbell
- Garage Door Opener w/ Receptacle
- Outdoor Entry Light

2. Create a Power Point with the following slides :

1. Title Slide (5 points)
 - title, picture, and name
2. Device History Slide (12 points)
 - five facts about the history of the electrical device; picture
3. Product Information Slide (12 points)
 - five facts about specific product information; picture
4. How To Install Slide (12 points)
 - five steps (minimum) on how to install the electrical device; picture
5. Installation Safety Slide (12 points)
 - five safety guidelines required for installation; picture
6. Energy Efficiency Slide (12 points)
 - five (number-based) household energy efficiency facts; picture

3. Demonstration (25 points)

- visual demonstration of installation (real materials, model, computer animation, etc)
- demonstration coupled with Power Point presentation
- general knowledge of the electrical device should be shown

4. Appearance (10 points)