PURDUE EXTENSION
INDIANA 4-H

Electric Level 5

Dissect, Discover, and Display

What's it all about?

This project sheet allows you to take an old appliance, power tool, or an electronic gadget that does not work and disassemble the device (with permission) to see how it is made. The parts and components can be used for a display, like the one shown on page 2 of this project sheet. Additional research will need to be done to identify each part and what function it serves. A multimeter may be required to take measurements and determine how a switch or other parts function.

During this process, you may even discover why the device was not working. This is a great opportunity to turn a useless piece of equipment into a strong project. Include labels and diagrams with each component to help others see what was discovered. With practice, confidence will build with the pulling apart of items to learn how they function and soon you will be able to start troubleshooting and repairing equipment. This process will help remove the mystery of components and the understanding of how things function.

Keys to Remember

- Choose a device that you are able to dissect that you have around your house. Do not buy any new devices or use unsafe tools during the dissection.
- Take time and care when disassembling an item for the first time. You may end up breaking some pieces due to not knowing how it was originally assembled.

For the Project

- Display board should be appropriately sized for the project and the workmanship of the display board should be orderly
- Include an effective title, as well as drawings, pictures, or diagrams. Describe your electrical device and explain what it is and how it is used. Lay out the components of the device, label them, and give a definition of them.
- Use the "Poster and Display Board Judging Sheet" as a guide for putting the project together.
- Record sheet