

1. Describe the safety precautions you must exercise when using, building, altering, or repairing electronic devices.
2. Do the following:
 - a. Draw a simple schematic diagram. It must show resistors, capacitors, and transistors or integrated circuits. Use the correct symbols. Label all parts.
 - b. Tell the purpose of each part
3. Do the following:
 - c. Tell about the function of a printed circuit board. Tell what precautions should be observed when soldering printed circuit boards.
4. Do the following:
 - (a) Discuss each of the following with your merit badge counselor:
 - (i) How to use electronics for a control purpose
 - (ii) The basic principles of digital techniques
 - (iii) How to use electronics for three different audio applications
 - (c) Choose ONE of the following three projects. For your project, find or create a schematic diagram. To the best of your ability, explain to your counselor how the circuit you built operates.
 - (i) A control device
 - (ii) A digital circuit
 - (iii) An audio circuit
5. Do the following:
 - b. Tell about the need for and the use of test equipment in electronics. Name three types of test equipment. Tell how they operate
6. Find out about three career opportunities in electronics that interest you. Discuss with and explain to your counselor what training and education are needed for each position.