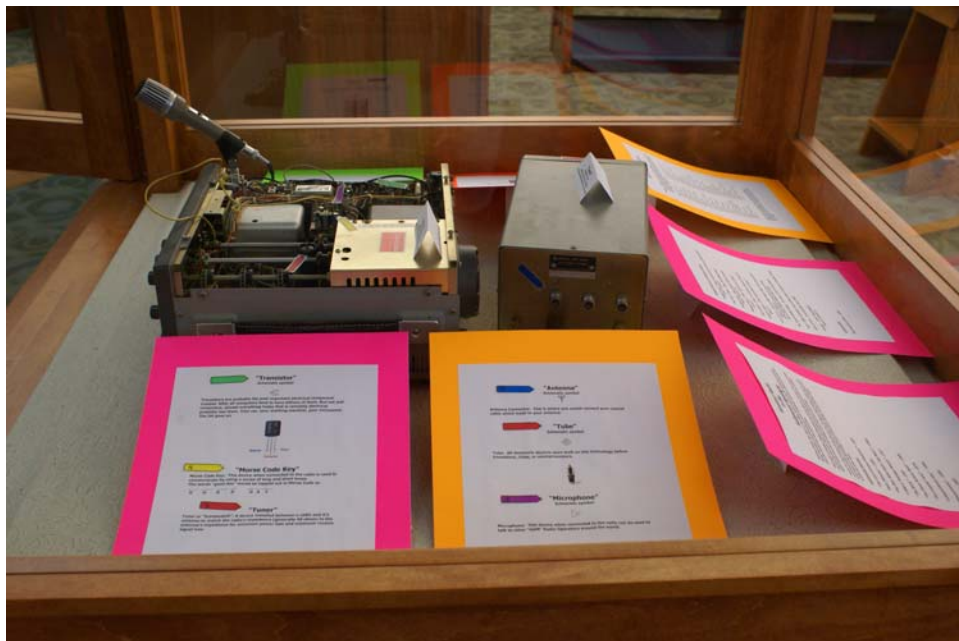


To use this work sheet, you get a radio and take the hood off, find the components and then use some kind of labels or numbers to point to them. I find that the public really likes to see what makes the radios work.

See photos



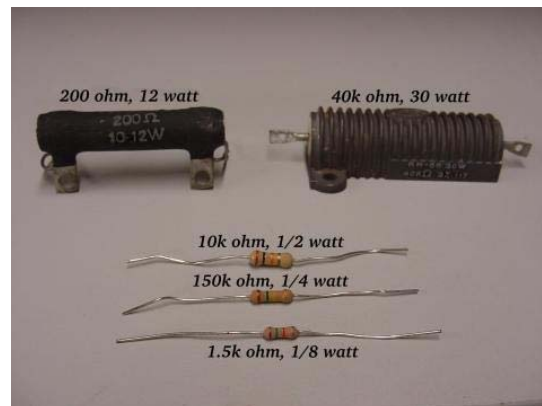
Electrical Component Symbol Schematic

"Resistor"

Schematic symbol



Resistor: An electrical component that limits or reduces current flow.



"Capacitor"

Schematic symbol



Capacitor: A device consisting of two conducting surfaces separated by an insulator and having the ability of storing electric energy.

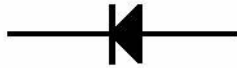


"Diode"

Schematic symbol



Diode: An electrical device that allows current to pass through itself in only one direction (converts alternating current or "AC" to direct current "DC").



Lots of different diodes, with the electronic symbol for a diode below.
Cathode is on the left, Anode on the right.

"VFO or Variable Frequency Oscillator"

VFO or Variable Frequency Oscillator: device (knob) used to tune to or change frequencies.

"Display"

Display: Gives digital readout of operating frequency in Megahertz such as 14.420 MHz. Or it could be a Dial with number on it.

“Antenna”

Schematic symbol



Antenna Connector: This is where you would connect your coaxial cable which leads to your antenna.

“Tube”

Schematic symbol



Tube: All electronic devices were built on this technology before transistors, chips, or microprocessors.



“Microphone”

Schematic symbol



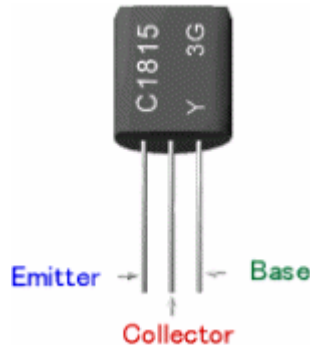
Microphone: This device when connected to the radio can be used to talk to other “HAM” Radio Operators around the world.

“Transistor”

Schematic symbol



Transistors are probably the most important electrical component created. After all computers tend to have billions of them. But not just computers, almost everything today that is remotely electrical probably has them. Your car, your washing machine, your microwave. The list goes on.



“Morse Code Key”

Morse Code Key: This device when connected to the radio is used to communicate by using a series of long and short tones.

The words “good day” would be tapped out in Morse Code as

— — · — — — — — — — ·· — ·· · — · — — —

G O O D D A Y

“Tuner”

Tuner or “transmatch”: A device installed between a radio and its antenna to match the radio’s impedance (generally 50 ohms) to the antenna’s impedance for minimum power loss and minimum receive signal loss.