<table>
<thead>
<tr>
<th>NAME OF ELECTRONIC COMPONENT</th>
<th>PICTURE</th>
<th>FUNCTION</th>
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</thead>
</table>
| Resistor                     | ![Resistor](https://www.qldscienceteachers.com/Resistor.png) | • A resistor provides resistance to the current, that is, it controls the amount of current measured in amps. The current in amps is dependent on the voltage.  
• Resistance is measured in Ohms. The first coloured band represents the first significant figure, the second coloured band represents the second significant figure and the third coloured band represents the number of zeros following the first 2 figures. A fourth colour may be used to indicate the percent tolerance of the resistor. |
| Variable Resistor           | ![Variable Resistor](https://www.qldscienceteachers.com/Variable Resistor.png) | • A variable resistor is a resistor with a sliding or turning device.  
• Names of variable resistors include rheostat and potentiometer.  
• These are used as volume controls in radio receivers and TV sets. |
| LDR - Light Dependent Resistor | ![LDR - Light Dependent Resistor](https://www.qldscienceteachers.com/LDR - Light Dependent Resistor.png) | • When no light shines on an LDR, it has infinite resistance, that is, no current can flow through it. This is because light photons provide the energy to run the circuit.  
• It is used in light sensor circuits. |
| Diode                       | ![Diode](https://www.qldscienceteachers.com/Diode.png) | • A diode allows current to flow in one direction only.  
• It consists of 2 pieces of silicon, each 'doped' with a different chemical (e.g. phosphorus and boron) to make one more positively charged than the other. The more positively charged piece attracts negatively charged electrons more than the other and this permits a one-way flow.  
• Diodes need greater than 0.7 volts to work.  
• To convert AC to DC, you must use a full wave rectifier that consists of 4 linked diodes. |
| LED - Light Emitting Diode   | ![LED - Light Emitting Diode](https://www.qldscienceteachers.com/LED - Light Emitting Diode.png) | • An LED is a diode that emits or gives out light when current flows through it.  
• LEDs are used in electrical appliances (e.g. the red on-off light on a TV) to show that they are switched on. |
| Capacitor                   | ![Capacitor](https://www.qldscienceteachers.com/Capacitor.png) | • A capacitor consists of 2 metal plates separated by an insulating material.  
• Capacitors store current on one plate and release it to the second plate over a specific set time period. |
| Variable Capacitor          | No picture | • A variable capacitor has a dial to vary the current.  
• It is used as the tuning dial to alter the frequency on a radio receiver. |
| Transistor                  | ![Transistor](https://www.qldscienceteachers.com/Transistor.png) | • A transistor consists of 3 layers of silicon or germanium and amplifies or increases the current.  
• These are used in basic amplifiers. |
### Inductor

- An inductor is a conducting wire wound into a coil.
- It sets up a magnetic field to stop the current from changing rapidly.
- These are usually radio receivers.

### IC - Integrated Circuit

- An IC is a silicon chip about 2 to 4 mm long containing a lot of linked transistors.
- It requires less space and power and are cheaper to manufacture than an equivalent device of transistors.

### CRT - Cathode Ray Tube

- A CRT is a glass tube containing a vacuum (no air). It has 2 terminals - positive and negative. When an electron gun at the back of the tube shoots electrons, the charged terminals deflect the electrons onto a phosphorescent screen (e.g. TV or computer monitor screen). The red, green and blue dots on the screen light up to create a coloured image.
  - Red + Green = Yellow
  - Green + Blue = Cyan
  - Red + Blue = Magenta

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Microsoft Illustration

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