
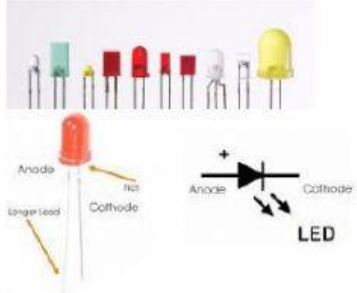

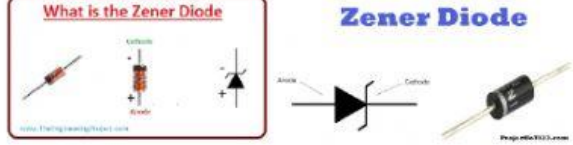


This Worksheet provides evidences for the GC 1.8

GC	GC1.8	Describe at least four different types of diodes, their function, applications, and symbols. The types include, single diode, LED, Photodiode and Zener diode.
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Q1) Match the diode type with its applications.

No.	Diode type	No.	Application
1	 <p>The image shows a standard diode with its cathode and anode labeled, a light-emitting diode (LED), and their respective circuit symbols. The LED symbol includes two arrows pointing outwards to represent light emission.</p>		Used as indicator in electronic devices and the powerful type is used as low consumption light source.
2	 <p>The image displays various colored LEDs, a close-up of an LED with its anode and cathode labeled, and the standard circuit symbol for an LED, which features a triangle pointing to a horizontal line with two outward-pointing arrows.</p>		Used to rectify AC power signals into DC. It could be also used for protecting circuits from high reverse currents.
3	 <p>The image shows several Zener diodes in different packages (axial lead, DIP, and through-hole), and their circuit symbols. The Zener symbol is a triangle pointing to a horizontal line with a vertical line through it, indicating its function in voltage regulation.</p>		Used to regulate the input voltage to a fixed value to protect circuits, provide stable power supply and control load currents.
4	 <p>The image includes a photodiode, its circuit symbol (a triangle pointing to a horizontal line with a vertical line through it and a circle around the symbol), and a close-up of the component. The symbol is similar to a Zener diode but used for light detection.</p>		Used as light sensor, IR transmitter and receiver to trigger circuit and provide selective control such as remote control, light switch, and used in proximity sensors.