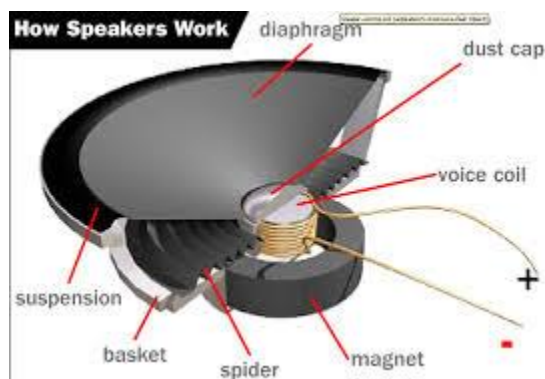


Definition writing (short) - Examples

- Amazon Echo - *Amazon Echo* (shortened to *Echo*) is a brand of smart speakers developed by *Amazon*. *Echo* devices connect to the voice-controlled intelligent personal assistant service *Alexa*, which will respond when you say "*Alexa*". **(Mechanism)**
- Mechatronics - *Mechatronics* is a multidisciplinary field that combines several types of engineering—electrical, computer, and mechanical—and refers to the skill sets needed in the contemporary, advanced automated manufacturing industry. **(Process/Field)**
- AI - *Artificial intelligence* refers to the simulation of human intelligence in machines that are programmed to think and act like humans. **(Process/Concept)**

Full length descriptions (with diagrams/images and illustrations) - Examples

- They invariably include short definitions to start with.
- Write a technical description based on the following illustration of a loud speaker (Process)



Example Data

A **wireless router** is a device that performs the functions of a router and also includes the functions of a wireless access point. It is used to provide access to the Internet or a private computer network. Depending on the manufacturer and model, it can function in a wired local area network, in a wireless-only LAN, or in a mixed wired and wireless network.

Functions

Wireless routers typically feature one or more network interface controllers supporting Fast Ethernet or Gigabit Ethernet ports integrated into the main system on a chip (SoC) around which the router is built. An Ethernet switch as described in IEEE 802.1Q may interconnect multiple ports. Some routers implement link aggregation through which two or more ports may be used together improving throughput and redundancy.[1]

All wireless routers feature one or more wireless network interface controllers. These are also integrated into the main SoC or may be separate chips on the printed circuit board. It also can be a distinct card connected over a MiniPCI or MiniPCIe interface. Some dual-band wireless routers operate the 2.4 GHz and 5 GHz bands simultaneously. Wireless controllers support a part of the IEEE 802.11-standard family and many dual-band wireless routers have data transfer rates exceeding 300 Mbit/s (For 2.4 GHz band) and 450 Mbit/s (For 5 GHz band). Some wireless routers provide multiple streams allowing multiples of data transfer rates (e.g. a three-stream wireless router allows transfers of up to 1.3 Gbit/s on the 5 GHz bands).

Some wireless routers have one or two USB ports. These can be used to connect printer or desktop or mobile external hard disk drive to be used as a shared resource on the network.[2] A USB port may also be used for connecting mobile broadband modem,[3] aside from connecting the wireless router to an Ethernet with xDSL or cable modem. A mobile broadband USB adapter can be connected to the router to share the mobile broadband Internet connection through the wireless network. Some wireless routers come with either xDSL modem, DOCSIS modem, LTE modem, or fiber optic modem integrated.

The Wi-Fi clone button simplifies Wi-Fi configuration and builds a seamless unified home network, enabling Super Range Extension, which means it can automatically copy the SSID and Password of your router etc.