Home networking, the simplified version:

LAN: Local Area Network: This is what you create when you use a router to connect more than one device to your modem.
A “typical” LAN might consist of a cable modem, router, one or more PC's or laptops connected by (10-BaseT) cable or wirelessly to the router. Other devices such as printers or network streaming devices such as a Roku (for streaming Netflix movies wirelessly to the living room TV), may also be connected by cable or wirelessly. Our own home network includes a cable modem, router, 3 PC's, two laptops, 2 printers, one Roku. Our 12Mbps connection is sufficient to stream Netflix movies to the living room, while both my wife and I play World of Warcraft on separate computers at the same time, while having a 3-way Skype voice chat with a friend in Australia, without any skipping in the movie, or 'lag' in the games. A typical wireless router (or one like ours) has 4 sockets for PC's or whatever to be connected to it directly by cable and the wireless capability of handling up to 50 wireless devices.

ISP: Internet Service Provider: In our area, the common broadband ISPs are AT&T (DSL) and Charter Communications (cable). Dial-up (“narrrowband” or low speed service) providers are not practical for service to anyone with more than one device to connect to the internet for any large amount of data.

Modems:
Dial-up = low speed (also called “narrowband” access by the providers) to Internet via voice telephone line. These allow speeds up to 56Kbps (not counting data compression which might do a bit better)
DSL modem = Digital Subscriber Line, allows mid-range broadband speed connection to the Internet over standard telephone lines. Up to 3Mbps, depending on distance from Central Office.
Cable modem = high speed broadband (10 to 100Mbps) connection to the Internet through the same cable as cable TV is provided through.
Satellite and cellphone connections to the Internet will not be discussed here.
Interested parties may use Wikipedia or Google to find out exactly what “Kbps” and “Mbps” means under various circumstances. Suffice it to say that Mbps is about 1000 times faster than Kbps.

Routers and Hubs: Both provide the ability to connect many devices to the one connection provided by any of the modems just mentioned. Connecting multiple PC's to a dial-up modem can be done, but will be an exercise in frustration. Hubs provide no firewall or security features. Routers do. Forget hubs.

Router security: Encryption schemes: WEP and WPA and WPA-PSK(TKIP) are older and have been hacked. You will want to use WPA2-PSK(AES) encryption which is the strongest currently available, ***provided all your networked devices support it.***

Wireless protocols: B/G and N: B is oldest, and slowest
G is newer, and backward compatible with B, but a little faster IF no B devices are wirelessly in use.
B/G are susceptible to interference from cordless phones and microwaves and Bluetooth devices.
N is faster than B/G, but can not be implemented in the router with B/G at the same time as B or G.
If you wish to use wireless N, ALL your wireless devices must connect using N. This might mean buying a Wireless-N adapter (USB or PCI-express) for any older laptops or such.

Wireless Access Control: can be enabled in some routers to limit wireless access to specific devices based on their unique MAC address. *This must be configured by the user and is a little tricky.*

Printing on your LAN:
Standard printer connected to a PC on the LAN: The PC and printer will both have to be on. The printer will need to have its properties set to be Shared on the network. File and Printer sharing will need to be enabled.

Networked printer connected by 10-Base T cable directly to the router: No PC will need to be on, except the one that is sending output to the printer. The printer should be visible on the network in the Networking control panel display.

Wireless printer providing its own 'hot-spot': After carefully following the manufacturer's instructions, the wireless printer should be visible as a printer in your Networking control panel. These are the trickiest ones to set up and reading the manual will be REQUIRED.

In ALL cases: Make sure you have the latest driver updates for your printer. Download them from the manufacturer's web site if needed. Make sure you have uninstalled drivers and installations for older printers that you have removed from the system. Make sure that when you select a printer as your default printer, that you have chosen the correct one that you really have installed. These last few tips often are the last little bit that has been overlooked when someone's printing doesn't work. Unless you send print to the correct installed printer, nothing useful is going to result.