











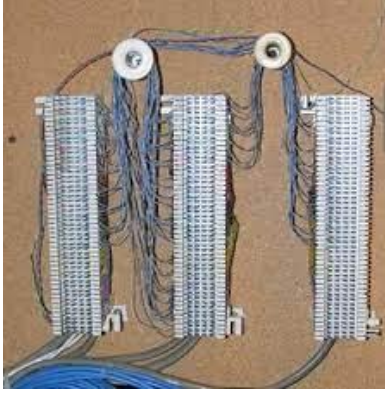

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Lab 1

Wired NIC		<p>This computer component allows desktops to connect to a network via Ethernet. Back then, computers didn't always come with networking capabilities, so wired NICs could be added as an expansion.</p>
Wireless NIC		<p>Like a wired NIC, a wireless NIC also provides computer access to the network. The major difference here is that instead of Ethernet, a wireless NIC uses WiFi.</p>
Powerline NIC		<p>Powerline NICs provide a cheaper alternative to rewiring a house for gaining access to the Internet. It essentially plugs into an outlet and uses some of the house's electricity to extend the network.</p>
CAT 5/6 Ethernet cable		<p>These cables provide users a method of connecting to a network physically. They have multicolored cables that are shielded all around on the outside. The different</p>

		categories of ethernet cables provide different speeds and connections for connected devices.
RJ45 connector		This component is typically seen on the ends of Ethernet cables. They are used as a means of connecting into the ports of devices, such as one end being on the back of a computer and the other being side the port of a router.
Coaxial cable		This cable is designed in such a way that it can send data quickly while suffering very little from interference. It is commonly used by ISPs, phone companies, and cable TV.
Switch		This network device acts like an “extension” of a router where it can allow several devices to connect to the Internet. The switch would still need to be connected to a router/modem to access the Internet/network. Devices connect to a switch via Ethernet.

Router		<p>A router acts as the communication point between connected devices and the Internet. Specifically, it filters through incoming and outgoing packets of data from other networks. Routers also have their own firewall as a method of protection.</p>
Remote access point		<p>Remote access points connect to a router or switch via Ethernet and provide a Local Area Network (LAN) in a specific location. These are commonly used in commercial environments such as an office.</p>
Cable modem		<p>Cable modems provide networks with Internet access via coaxial cable. It would then connect to a router via Ethernet. Modems are in charge of modulating digital data into analog in addition to demodulating analog data (from the Internet) into digital data for the connected devices to understand.</p>

<p>Punch-down block</p>		<p>Punch-down blocks can be used over long distances or in large buildings such as an office tower. They are typically used in telecommunications and have an abundance of wires connected to it.</p>
<p>Patch panel</p>		<p>Patch panels are commonly seen in server rooms as a part of a company or government organization. They have multiple Ethernet ports and provide an efficient and flexible way of connecting a plethora of devices within a large network.</p>