Types of WIFI:

IEEE 802.11: The original! Created in 1997, this now-defunct standard supported a blazing fast maximum connection speed of megabits per second (Mbps). Devices using this haven't been made for over a decade and won't work with today's equipment.

IEEE 802.11a: Created in 1999, this version of Wi-Fi works on the 5GHz band. This was done with the hope of encountering less interference since many devices (like most wireless phones) also use the 2.4GHz band. 802.11a is fairly quick too, with maximum data rates topping out at 54Mbps. However, the 5GHz frequency has more difficulty with objects that are in the signal's path, so the range is often poor.

IEEE 802.11b: Also created in 1999, this standard uses the more typical 2.4GHz band and can achieve a maximum speed of 11Mbps. 802.11b was the standard that kick-started Wi-Fi's popularity.

IEEE 802.11g: Designed in 2003, the 802.11g standard upped the maximum data rate to 54Mbps while retaining usage of the reliable 2.4GHz band. This resulted in widespread adoption of the standard.

IEEE 802.11n: Introduced in 2009, this version had slow initial adoption. 802.11n operates on both 2.4GHz and 5GHz, as well as supporting multi-channel usage. Each channel offers a maximum data rate of 150Mbps, which means the maximum data rate of the standard is 600Mbps.

IEEE 802.11ac: The ac standard is what you will find most wireless devices using at the time of writing. Initially released in 2014, ac drastically increases the data throughput for Wi-Fi devices up to a maximum of 1,300 megabits per second. Furthermore, ac adds MU-MIMO support, additional Wi-Fi broadcast channels for the 5GHz band, and support for more antenna on a single router.

IEEE 802.11ax: Next up for your router and your wireless devices is the ax standard. When ax completes its rollout, you will have access to theoretical network throughput of 10Gbps—around a 30-40 percent improvement over the ac standard. Furthermore, wireless ax will increase network capacity by adding broadcast subchannels, upgrading MU-MIMO, and allowing more simultaneous data streams.