Supplemental Reading for Alphabet Soup

The many different 802.11 specifications -- most commonly b, a, g, n, and ac -- all operate with the same basic data link protocol. But, how they operate at the physical layer varies. Each of these specifications can have different ranges, can use different modulation techniques, can have different transmission bit rates, operate on different frequency bands, etc.

Memorizing all of these differences probably isn't worth the time unless you're going to be working with many different types of wireless networks all the time. The most important thing to remember is that networks that operate on the 5Ghz band are almost always faster, but have less of a range. Most of the 2.4Ghz networks are slightly slower and more susceptible to interference, but usually cover a larger area

If you want to learn more about these complicated network specifications, you can start with Wikipedia. This page has an overview of the 802.11 family, but also includes links to articles about each specification with many technical details: here.