1. Devices need to find each other on a network to establish communications.
   1. These devices will use unique addresses, or identifiers, to locate each other. The addresses will ensure that communication happens with the right device.
      1. These are called the IP and MAC addresses.
2. A local area network, or LAN, spans a small area like an office building, a school, or a home.
   1. For example, when a personal device like your cell phone or tablet connects to the WIFI in your house, they form a LAN. The LAN then connects to the internet.
3. A wide area network or WAN spans a large geographical area like a city, state, or country. You can think of the internet as one big WAN.
   1. An employee of a company in San Francisco can communicate and share resources with another employee in Dublin, Ireland over the WAN.
4. A data packet is very similar to a physical letter.

It contains a header that includes the internet protocol address, the IP

address, and the media access control, or MAC, address of the destination device.

It also includes a protocol number that tells the receiving device what to do with

the information in the packet.

Then there's the body of the packet, which contains the message that needs to

be transmitted to the receiving device.

Finally, at the end of the packet, there's a footer,

similar to a signature on a letter,

the footer signals to the receiving device that the packet is finished.