Put this in your portfolio!

Last #

Your Name

Mr. Larson

Intermediate Computers

July 4, 1776

Once you get here, go to Home – Paragraph and use the icon to turn on double spacing (2.0)

Don't forget your header!

Put in the date according to how you have been taught. Do NOT simply type it in.

Justify the paragraphs

Network Cards and Wi-Fi

Have you ever wondered how all your electronic devices can talk to each other and connect to the Internet? Well, although it is pretty complicated, it is easy to break things down to some basic concepts. 36

Network Cards

Last year we talked about **network cards** and **Wi-Fi cards**. These devices were typically called adapter cards a long time ago. Now, these devices are built into any electronic device that can access the Internet. They come in *two different* forms. 41

Network Cards. A network card uses a thick cord that looks like the old-style telephone cable your parents or grandparents used to use before cell phones became popular. Although most devices are wireless today, a wired network connection is actually more reliable, and can communicate much faster than **Wi-Fi** can. Most **network cards** can communicate at one gigabit per second, which means it can send 125 megabytes per second through the cable. At this speed, it could send an average movie on a Blu-ray disk from one device to another in only *seven minutes*. 50/94

Wi-Fi Cards. A Wi-Fi card is a small radio that uses an antenna to send a wireless signal that can be heard by any other device that also has a **Wi-Fi** radio in it. Although convenient, they operate much slower than a device that has an actual **network card.** 49/78

Anything underlined like this may be skipped if you are doing the "short" version of the assignment.

Instructions:

1. Every Day Steps
2. New Assignment Steps
3. 1" Margins
4. Font is Arial 12
5. Put in the date correctly

Your average Wi-Fi radio in your cell phone or game console can only operate at 210 Mbps and would take *thirty-four minutes* to transfer the same movie described above!

MAC Address

Whether you are using a network card or Wi-Fi, these two network devices have to have something called a **MAC (media access control) address**. A **MAC address** is a unique serial number assigned to each and every device in the world. They are assigned to the device when it is made at the factory. 00:15:E9:2B:99:3C is an example of a typical **MAC address**, and they contain the letters A through F and the numbers 0 through 9. This allows us to have over *281 trillion* devices on the internet!

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Network Switch

Now we need a way to connect these devices together. Today we use a **network switch**, which works just like one of those power strips you plug into the wall so you can plug in many devices at once. These *switches* usually have 8, 16, 24, 32, or even up to 64 ports in it. Each port allows you to plug in one device such as a computer.

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Wireless Access Point

You also need a **WAP** (Wireless Access Point, sometimes called a Wi-Fi router) that works like a network switch for wireless devices. This device is basically a small radio station that listens for your Wi-Fi devices radio signals and then converts them back to a wired signal that then gets sent across the network switch. If you look, you will see one on the ceiling of our classroom.

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Follow your Bibliography steps

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Poole, Dr. Shaelee A. Configuring a Network. Boise: Larson and Bingham Publishing, 2017. Pages 24-37.

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Do NOT Justify the Bibliography.