**Day 1 – Domain Names & IP Addresses**

**Warm-Up Activity**

1. ~~Go to the web page:~~ [~~https://centralops.net/co/~~](https://centralops.net/co/)
2. Go to the web page: <https://mxtoolbox.com/DNSLookup.aspx>
3. Select the “NsLookup” tool and search for the following domains:
   1. [www.peelschools.org](http://www.peelschools.org)
   2. some of your favorite / popular domains
4. ~~Try the “Traceroute” tool for the same domains~~
   1. ~~What is the purpose of this tool?~~
5. ~~Try the “Ping” tool for the same domains~~
   1. ~~What is the purpose of this tool?~~
6. ~~Try the “Whois” tool for~~ [~~www.peelschools.org~~](http://www.peelschools.org)
   1. ~~Who is the owner of this domain?~~
   2. ~~Who is the registrar of this domain?~~
   3. ~~When does the registration expire?~~

**Presentation Notes: Client-Server Model**

What is a client?

* An app that runs on your phone or PC.

Where does it run?

* It runs on the internet.

What does it do?

* Provides you with the Interface.

List some examples of a client.

* Pc, Phones, Laptops.

What is a server?

* Software that runs on hardware.

Where does it run?

* On a hardware.

What does it do?

* It sends and receives data between multiple clients using internet connections.

List some examples of a server.

* On-Line Games, Spotify, MLB at Bat, etc.

Explain why you need both a client and a server to complete an internet application?

* Because server is the one who needs the client to use the hardware which is owned by them and both of them requires internet to work.

**Presentation Notes: Domain Names & IP Addresses**

What is a Domain Name?

* An ID for a service on the internet

What is it used for?

* It is human readable format.

Is it for human or computer use?

* It’s used for both, but to use on computer you need to put an Ip address,

Provide an example of a Domain Name.

* **www.peelschools.org**

1. What is a IP Address?

* It is a id number of a client or server device on the internet.
  1. What does IP stand for.
* Internet Protocol.
  1. What is it used for?
* It is used to route messages and data between computers
  1. Is it for human or computer use?
  2. Provide an example of an IP Address.

1. Who can register a domain name?
2. Who controls domain names for countries (i.e. .CA, .UK, etc.)?
3. Who controls domain names like .COM, .ORG, etc.?
4. Who owns and controls IP Addresses?
5. If you own a Domain Name does that mean you also own an IP Address?
6. What services do *middleman* companies like GoDaddy.com provide?
7. What are some issues and features related to IPv4?
8. What are some issues and features related to IPv6?
9. What are some issues and features related to 5G Networks?

**Day 2 – Internet Services (Software)**

Questions t.b.d.