**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**

1. What is a client?
   1. Where does it run?

On your phone or PC

* 1. What does it do?

Provides the interface for things but not the data. Servers provide the data to the client.

* 1. List some examples of a client.

Google Chrome, Internet Explorer etc.

1. What is a server?
   1. Where does it run?

Hardware owned by the app company

* 1. What does it do?

Sends and receives data between multiple clients using internet connection.

* 1. List some examples of a server.

Data on Chrome, Internet Explorer, Video Game etc.

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

One is useless without the other, they need to interact to work.

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

1. What is a Domain Name?

ID for the internet

* 1. What is it used for?

It is used for identifying

* 1. Is it for human or computer use?

It is for human use

* 1. Provide an example of a Domain Name.

www.Google.com

www.peelschools.org

1. What is a IP Address?

ID for client or server device on the internet

* 1. What does IP stand for?

Internet protocol

* 1. What is it used for?

Used to route messages and data between computers

* 1. Is it for human or computer use?

For computer use

* 1. Provide an example of an IP Address.

67.21.152.99

1. Who can register a domain name?

Companies or individuals can register domain names.

1. Who controls domain names for countries (i.e. .CA, .UK, etc.)?

myname.ca – CIRA (Canada)

myname.uk – NOMINET (United Kingdom)

com, ord, etc. – Network Solutions (United States)

1. Who controls domain names like .COM, .ORG, etc.?

Network Solutions (United States)

1. Who owns and controls IP Addresses?

Large internet companies

1. If you own a Domain Name does that mean you also own an IP Address?

Separate things, you have to get both.

1. What services do *middleman* companies like GoDaddy.com provide?

Arrange domain registrations.

1. What are some issues and features related to IPv4?

There are a limited number of IP addresses and limited speed

1. What are some issues and features related to IPv6?

Has a higher speed and unlimited number of connections

1. What are some issues and features related to 5G Networks?

Uses IPv6 tech to provide extreme speed. Every device will have its own address

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

Questions t.b.d.