Semester 1 CCNA

**Chapter 1 – Explore the Network**

* OSI Model – Open Systems Interconnection [SEE PICTURE IN NOTEBOOK]
  + Please Do Not Throw Sausage Pizza Away ( 1 🡪 7)

**Chapter 2 – Configuring a Network Operating System**

* Operating Systems
  + Shell – what he user typically interacts with
  + Kernel – communicates between the hardware and software
  + Hardware – physical part with electronics
* Access Methods
  + Console – plugging in via hard wire
  + SSH – *secure* remote connection through virtual interface over a network
  + Telnet – *insecure* remote connection through virtual interface over a network
* Primary Command Modes
  + User Exec Mode – Switch>/Router> limited number of basic commands
  + Privileged EXEC Mode – Switch#/Router# can use all commands
* Configuration Command Modes
  + Line Configuration Mode – used to configure console, SSH, Telnet, or AUX access
  + Interface Configuration Mode – Used to configure a switch port or router network interface

Commands to Configure a Switch:

Switch>enable

Switch#configure terminal

Switch(config)#hostname [name here]

[name](config)#line con 0

[name](config-line)#password cisco

[name](config-line)#login

[name](config-line)#logging synchronous

[name](config-line)#line vty 0 15

[name](config-line)#password cisco

[name](config-line)#login

[name](config-line)#transport input ssh telnet

[name](config-line)#exit

[name](config-vlan)#int vlan 1

[name](config-if)# ip address 192.168.10.1 255.255.255.0

Other Commands

exit – backs up one space

end – backs out of config

do show run – shows what you’ve done

Subnetting