**In class activity - Ch.5 (5.4 Switches in LAN)**

1) Switch = carries datagrams between hosts and routers

* works on Link L. datagrams
* uses Link L. address NOT IP address

2) Link L. address – in hosts + routers (their adapters)

* LAN, or physical, or MAC address
* 6 bytes 🡺2^48 address space

3) ARP (Address Resolution Protocol) – creates tables in adapters

4) Ethernet (1975) – uses CSMA/CD; most LANs use Ethernet

5) Hub = repeater

* What MAC address is used for broadcast?
* ARP translates IP to MAC address. This is similar to …………..
* MAC addresses are unique to each adapter, IP addresses are not. Explain this with the example given in the book (SS# and postal addresses).
* Name the 3 types of addresses there are in Internet and in what layer they are used.
* What means that ARP tables are plug-n-play?
* Discuss the Ethernet frame at pg. 471.
* The Ethernet frame has a CRC field. If a switch detects an error in a frame what does it do?
* Why Ethernet is “simple and cheap”?
* Are there many types of Ethernet standards?

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