Taylor Earl

* 3x5 note card
* scientific calculator
* 30 questions
* 1-7 26-27 chapters
* Terms
  + Early networks
    - Arpanet
    - csnet
    - nsfnet
  + Organizations
    - Know some of these
  + Internet Standards
    - RFC
      * Request for comment
      * What it is
  + OSI
    - **7 layers in order**
      * **Application**
      * **Presentation**
      * **Session**
      * **Transport**
      * **Network**
      * **Data Link**
      * **Physical**
    - All people seem to need data processing
    - Data units
    - Addresses
    - **Know about layers 1-3**
      * What they are doing
      * What types of things each layer is responsible for
      * What devices at which layer
        + hub is layer 1 device
        + router is a layer 3 device
        + Layer 2 ethernet

Data frame

* + - * + Network layer is segments of packets
        + Address at the data link

Mac

* + - * + Addresses at the network

ip

* + CSMA/CD vs /CA
  + Generations of Ethernet
    - what needs to be in place for another to continue
* Chapter 4
  + Terms
    - Connection Oriented
    - Connection-less
  + Header
    - Sizes of entire header
    - important fields and jobs
      * Source Address and Destination Address
      * TTL
      * Fragmentation in header
  + Anycast, unicast, multicast, broadcast
    - Broadcast
      * 11111’s
    - Multicast
      * Last bit of the first byte
      * 1
    - Unicast
      * Same
      * 0 as last bit
* TCP/IP
  + Layers 1-3
    - Application
  + 4 Transport
  + 5 Network
  + 6 Data Link
  + 7 Physical
* IP/Addresses
  + CIDR Notation
    - /24 or /22
  + Classful
    - Original Way
    - 5 Classes
      * A /8
        + 0-127
        + 01…….
      * B /16
        + 128-191
        + 10…...
      * C /24
        + 192-223
        + 110…...
      * D /
        + 224-239
        + 1110...
      * E
        + 240-255
        + 111100...
  + Classless
  + Special Addresses
    - 0.0.0.0
      * This network
      * Don’t know our ip address
    - First Address
      * = Network Address
    - Local Broadcast
      * 255.255.255.255
    - Last Address
      * Broadcast address
    - 127.0.0.8
      * Loopback address
    - 10.0.0.0/8
      * 172.16.0.0/12
        + Private Address
      * 192.168.0.0/16
      * 169.254.0.0/16