1. What are the five components in a communication system?

The five components in a communication system are:

* 1. Protocol
  2. Sender
  3. Signal
  4. Transmission medium
  5. Receiver

1. List four types of cables which are used in wired channels
   1. Telephone land lines
   2. Coaxial cable
   3. Cat 6
   4. Fiber-optic
2. What are three Pros and Cons of Wired channels

Pros

* 1. Cables can be shielded against interference/they can be protected when used in rough environments
  2. Wired connections are dependable, unlike wireless connections, there are no interferences
  3. Wired connections are more secure and less susceptible to attacks

Cons

1. Wires are expensive
2. Only go as far as the cable can reach
3. Hard to organize in a large scale/eye sore
4. What are three Pros and Cons of Wireless channels

Pros

* 1. Mobility
  2. Cleaner
  3. Less vulnerable to power spikes

Cons

1. Speed, often much slower than wired connection
2. Range
3. Security, connection is vulnerable to anyone near it
4. What are the five network topologies?
   1. Point-to-point
   2. Star
   3. Bus
   4. Ring
   5. Mixed
5. What's DTE and what's DCE?

DTE: (data terminal equipment) any device that stores or makes data

DCE: (data communication equipment) device that controls speed of data, converts signals, checks data, routes data to destination.

1. What are the seven layers in OSI model?
   1. Application
   2. Presentation
   3. Session
   4. Transport
   5. Network
   6. Datalink
   7. Physical
2. What's MTU?

MTU: (maximum transmission unit) largest packet that is carried across a channel.

1. What's TCP and what's UDP?

TCP: (transmission control protocol) divides data into chunks, adding information in the form of headers to be reassembled, and data checking to make sure data is not corrupt after transportation.

UDP: (user datagram protocol) alternate to TCP but is faster and doesn’t have data checking.

1. What's DMZ and what's DNS?

DMZ: (demilitarize zone) acts as a buffer between the internet, like a border,

DNS: (domain name system) mechanism for connecting domain names to their IP address.