**ASAN, BREECH KIRBY    CC10-1C**

## Step 1: Identify common components of a network as represented in Packet Tracer.

The icon toolbar at the bottom left hand corner has various categories of networking components. You should see categories that correspond to intermediary devices, end devices, and media. The **Connections** category (with the lightning bolt icon) represents the networking media supported by Packet Tracer. There is also an **End Devices** category and two categories specific to Packet Tracer: **Custom Made Devices** and **Multiuser Connection**.

List the intermediary device categories.

Without entering the internet cloud or intranet cloud, how many icons in the topology represent endpoint devices (only one connection leading to them)?

   - 25 Endpoint devices

Without counting the two clouds, how many icons in the topology represent intermediary devices (multiple connections leading to them)?

   - 12 Intermediary devices

How many end devices are **not** desktop computers?

   - 6 End devices

How many different types of media connections are used in this network topology?

   - 7 Media connections

## Step 2: Explain the purpose of the devices.

a.  In Packet Tracer, only the Server-PT device can act as a server. Desktop or Laptop PCs cannot act as a server. Based on your studies so far, explain the client-server model.

   - This is when 2 programs communicate, 1 being the sender(Client) and 1 being the receiver(Server)

b.  List at least two functions of intermediary devices.
   1. Hubs
   2. Switches

c.  List at least two criteria for choosing a network media type.

   1. Cost of the media and installation
   2. Environment of which the media is to be installed

## Step 3: Compare and contrast LANs and WANs.

a. Explain the difference between a LAN and a WAN. Give examples of each.

LANs a.k.a Local Area Network only connects users and applications within the same area or building. WANs in the other hand can connect users and applications wherever internet access is available, in other words "Globally"

b. In the Packet Tracer network, how many WANs do you see?

- Only 1

c. How many LANs do you see?

- Only 3

d. The internet in this Packet Tracer network is overly simplified and does not represent the structure and form of the real internet. Briefly describe the internet.

- The internet is a worldwide network of networked computers, servers, phones, and smart appliances that use the transmission control protocol (TCP) standard to talk to one another and exchange files and other forms of data quickly.

e. What are some of the common ways a home user connects to the internet?
- Wifi
- Ethernet

f. What are some common methods that businesses use to connect to the internet in your area?

- Shared network
- Dedicated Internet Access (DIA)
- Fiber Internet