RECAP/

Purpose of the IPv4 Address

Its a logical network address that identifies a particular host

**It has to be** **properly configured and unique within the LAN, for local communication**

Also must be **properly configured and unique in the world, for remote communication**

Its assigned to the network interface connection for a host

This connection is usually a NIC installed in the device

**Every packet sent across the internet has a source and destination IPv4 address**

This information is required by networking devices to ensure the information gets to the destination and any replies are returned to the source

The IPv4 address structure

Its hierarchical made of 32-bit

Has 2 parts = the network, the host

192,168.5.11 submask of 255.255.255.0   
 (192.168.5) identify the network

1. Identify the host

Routers only need to know how to reach each network, rather than needing to know the location of each individual host

With IPv4 addressing, multiple logical networks can exist on one physical network if the network portion of the logical host addresses is different