Name: _____ Date: _____

1. Name the following layers of the OSI model.



2. The Category 6 twisted pair cable was replaced with fiber optic cable last month. Looking at the diagram, what network topology is presently used?



- 3. Warren is training a new technician on setting up thinnet coax cable to support a series of home networks. Ralph, the new technician just completed the 1105 Smith Avenue house. Warren says that when he was checking the work, he found two things wrong. First, the entire network does not work. Second, Ralph left off a small critical device from the end of the thinnet cable. What is the device?
- 4. What device is typically placed between the Internet Service Provider (ISP) and the client? In many applications, it can be wired, wireless or both. _____

- 5. On a cable crimper for twisted pair cable, there are two crimping dies. What are their designations?
- 6. What physical media for connecting computers in a Local Area Network (LAN) would probably not be found?
 - a. A coax cable
 - b. 8 conductor twisted pair
 - c. A satellite dish
 - d. Fiber optic cable
- 7. The Johnson Foundry has three buildings that are connected by a fiber optic loop. The metal pouring building contains the metallurgical network, the main building has the accounting network and the warehouse building has the production network. They recently ran a cable to the school 1 mile away as a community service. What type of network is described?
- 8. Madison is making a Category 5e cable using the 8 conductor cable. How many twisted pairs are there?
- 9. Last year, the telecommunication company dug up the main north –south street in the city to bury the latest OC cable. What is the name of this network feature?
- 10. The hospital wants a redundant network with three layers of communication. All of our computers have a single embedded NIC. There are 17 computers in the emergency room; there are 24 medical stations with three computers each. The maintenance department has 7 computers and the administration office has 56 computers. We need to order devices along with an addition 10% for spares. How may NICs do we need to order? Show your work.