

Lesson Plan for Networking Fundamentals -IT AND ME WORKS--GRADE 10 CURRICULUM

Topic: Labs

Time: Up to 6 hours

Objectives:

1. Students will apply and practice safety concepts learned.
2. Students will apply and practice concepts used for software and hardware set up and configuration.
3. Students will properly set up and configure a peer-to-peer network.

Activities:

Students will follow lab sheets to bring together previously taught concepts, which include the following:

- Opening a PC and identifying internal components
- Inserting and configuring a NIC
- Planning (drawing) different network topologies
- Identifying different hardware components used in networking
- Making patch cables

In bringing this all together the students goal is to have a two computer peer-to-peer network set up at the end of the activity. This peer-to-peer network should allow the two computers to communicate back and forth with each other.

Materials:

1. Lab set-up with one computer per lab group (two students per group).
2. Operating systems to install on lab computers (copies or license for all lab computers – this may have been done previous to this or may need to be done again).
3. NIC cards to outfit lab computers.
4. Tools as needed to outfit class (screw drivers, nut drivers, etc.).
5. Patch cables (pre-made in previous activities).
6. Cable testers.

School to Career Connection:

Discuss the importance of accuracy and quality of work as it relates to the lab and the workplace.