

STUDENT ACTIVITY 2.3_B: NETWORKS AND PROTOCOLS

MTA Course: 98-366 Networking Fundamentals

Lesson name: Understand media types. 2.3_B

Topic: Networks and protocols

(Two 50-minute class periods)

File name: NetFund_SA_2.3_B

Lesson Objective

2.3_B: Understand media types. *This objective may include but is not limited to:* cable types and their characteristics, including media segment length and speed; fiber optic; susceptibility to external interference (for example, machinery, power cables); susceptibility to electricity (for example, lightning), susceptibility to interception; twisted pair shielded or nonshielded; cabling, wireless.

Resources, software, and additional files needed for this lesson

- Cat 5 Cable, RJ-45 terminals, cabler's scissors or wire strippers/cutters, crimpers, cable tester

Directions to the student

Student activity 2.3_B

1. You may review the YouTube movie demonstrating how to make a patch cable that attaches a cat 5 cable to a computer and an RJ-45 connection to the Internet. It is located at <http://www.youtube.com/watch?v=482VtesZwZ8> and was created by cablesupply.com.
2. Get from the supply collection a piece of 5 foot cable and two RJ-45 connectors. You will also need tools, which you must share with other teams. Check the color coding in the chart at the end of this document. Align colors and matching wires carefully.
3. Work in pairs to make the cable. Each person should make one end.
4. Make the patch cable following instructions from the notes you took while watching the instructor or the movie. Terminate ends carefully.

5. Test your cable and present your cables to the class. It is acceptable to finish out of class.

Wiring Standards

Pin #	T568B	T568A
1	White/Orange	White/Green
2	Orange	Green
3	White/Green	White/Orange
4	Blue	Blue
5	White/Blue	White/Blue
6	Green	Orange
7	White/Brown	White/Brown
8	Brown	Brown

This specification applies to typical twisted pair network cabling