

## Lab 2-3 Understanding Wire Placement in 10BaseT Cabling

Work as a team on this one. Gather together

- ☞ 10 Feet of Cat5 cable
- ☞ Four RJ-45 Connectors
- ☞ Two computers running Windows 2000 or XP
- ☞ Crimper and wire stripper
- ☞ Make sure you've done the Hands on Cable Media Lab

**Estimated time:** 35 minutes

1. Using just one end of the cable, refer back to Lab 2-1 to create one good end of a twisted pair cable.
2. On the other end, use a crimping tool to create a cable with a wiring diagram like this one:

| Pin Number | Pair Number | Color                |
|------------|-------------|----------------------|
| 1          | 4           | Brown                |
| 2          | 4           | White/Brown stripes  |
| 3          | 1           | White/Blue stripes   |
| 4          | 3           | White/Orange stripes |
| 5          | 3           | Orange               |
| 6          | 1           | Blue                 |
| 7          | 2           | White/Green stripes  |
| 8          | 2           | Green                |

3. Log into each computer as an administrator.
4. Change from the domain to a workgroup. Name both computer workgroups **labgroup**.
5. Right click my computer. Click networking tab. Click change button. Type in workgroup name.
6. Restart both computers.
7. Log onto the computer locally (see me if you need to).
8. Double click on My Network Places. Can you see the other computer? \_\_\_\_\_
9. Ping the other computer using the command prompt and the ping (ping IP address of computer). Do you get a ping reply? \_\_\_\_\_
10. Cut the bad head off the wire. Create a working wire.
11. Reconnect. Now can you see the other computer? \_\_\_\_\_
12. Ping the other computer. What response do you get?

13. Which wires/pins were "damaged" in this lab?

14. In the diagram below, label what each of the wires in a Cat5 Cable is responsible for.



| Number | Purpose |
|--------|---------|
| 1      |         |
| 2      |         |
| 3      |         |
| 4      |         |
| 5      |         |
| 6      |         |
| 7      |         |
| 8      |         |

Get a cable tester from me and test that your cable works correctly.