## HANDS-ON ACTIVITY 3A

### Looking Inside Your Cable

One of the most commonly used types of local network cable is Category 5 unshielded twisted pair cable, commonly called "Cat 5." Cat 5 (and an enhanced version called Cat 5e) are used in Ethernet LANs. If you have installed a LAN in your house or apartment, you probably used Cat 5 or Cat 5e.

Figure 3.27 shows a picture of a typical Cat 5 cable. Each end of the cable has a connector called an RJ-45 connector that enables the cable to be plugged into a computer or network device. If you look closely at the connector you will see there are 8 separate "pins." You might think that this would mean the Cat 5 can transmit data in parallel, but it doesn't do this. Cat 5 is used for serial transmission.

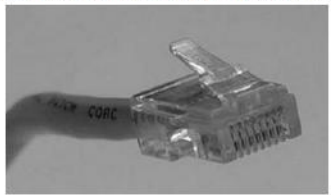

**FIGURE 3.27** Cat 5 cable
Source:© Jason/Alamy



**FIGURE 3.28** Inside a Cat 5 cable
Source: © Jason/Alamy