



FIGURE 7-2:
A network cabled
with twisted-pair
cable.

Cable categories

Twisted-pair cable comes in various grades called *categories*. These categories are specified by the ANSI/EIA Standard 568. (*ANSI* stands for American National Standards Institute; *EIA* stands for Electronic Industries Association). The standards indicate the data capacity — bandwidth — of the cable. Table 7-1 lists the various categories of twisted-pair cable that are currently available. (Higher categories, including Cat-7 and Cat-8, are in the design stage but are not yet commercially available.)

TABLE 7-1 **Twisted-Pair Cable Categories**

Category	Maximum Data Rate	Intended Use
1	1 Mbps	Voice only
2	4 Mbps	4 Mbps Token Ring
3	16 Mbps	10BaseT Ethernet
4	20 Mbps	16 Mbps Token Ring
5	100 Mbps (2-pair)	100BaseT Ethernet
	1000 Mbps (4-pair)	1000BaseTX
5e	1000 Mbps (2-pair)	1000BaseT
6	1000 Mbps (2-pair)	1000BaseT and faster broadband applications
6a	10000 Mbps (2-pair)	Provides for 10 Gbps Ethernet