



# IT Fundamentals

## Unit - Networking

### Lesson 2.7.1 - Network Communication Basics

#### IT Fundamentals Objectives (FC0-U61)

Objective 2.7 - Explain basic network concepts.

- Basics of network communication
  - LAN vs WAN

#### Grade Level(s)

8, 9

#### Cyber Connections

- Networks & Internet

*This content is based upon work supported by the US Department of Homeland Security's Cybersecurity & Infrastructure Security Agency under the Cybersecurity Education Training and Assistance Program (CETAP).*

# Network Communication Basics

## LAN vs. WAN

The majority of networks can be placed into one of two categories: LANs or WANs. A *local area network* (LAN) covers a small area, with all of the computers connected via cables, wireless signals, or a combination of the two. LANs typically cover one building or a small group of nearby buildings. Home and small office networks are almost always LANs.

A *wide area network* (WAN) covers a large area, typically being composed of two or more LANs connected together. For example, all of the schools in a district may have a unique LAN per school but could be linked together to form a WAN. The abbreviation WLAN is not to be confused with a combination of LAN and WAN, instead it stands for *wireless local area network*.