PETER NORTON'S®

Introduction to Computers

- Web integrated activities
- Self-assessments to reinforce main concepts
- Online Resource: www.mhhe.com/peternorton

Technology Education

Chapter 1A

Introducing Computer Systems

The Computer Defined

- Electronic device
- Converts data into information
- Modern computers are digital
  - Two digits combine to make data
- Older computers were analog
  - A range of values made data

Computers For Individual Use

- Desktop computers
  - The most common type of computer
  - Sits on the desk or floor
  - Performs a variety of tasks
- Workstations
  - Specialized computers
  - Optimized for science or graphics
  - More powerful than a desktop

Computers For Individual Use

- Notebook computers
  - Small portable computers
  - Weighs between 3 and 8 pounds
  - About 8 ½ by 11 inches
  - Typically as powerful as a desktop

Computers For Individual Use

- Tablet computers
  - Newest development in portable computers
  - Input is through a pen
  - Run specialized versions of office products

Computers For Individual Use

- Handheld computers
  - Very small computers
  - Personal Digital Assistants (PDA)
  - Note taking or contact management
  - Data can synchronize with a desktop
- Smart phones
  - Hybrid of cell phone and PDA
  - Web surfing, e-mail access

Computers For Organizations

- Network servers
  - Centralized computer
  - All other computers connect
  - Provides access to network resources
  - Multiple servers are called server farms
  - Often simply a powerful desktop

Computers For Organizations

- Mainframes
  - Used in large organizations
  - Handle thousands of users
  - Users access through a terminal

Computers For Organizations

- Minicomputers
  - Called midrange computers
  - Power between mainframe and desktop
  - Handle hundreds of users
  - Used in smaller organizations
  - Users access through a terminal

Computers For Organizations

- Supercomputers
  - The most powerful computers made
  - Handle large and complex calculations
  - Process trillions of operations per second
  - Found in research organizations

Computers In Society

- More impact than any other invention
  - Changed work and leisure activities

- Computers are important because:
  - Provide information to users
  - Information is critical to our society
  - Managing information is difficult

Computers In Society

- Computers at home
  - Many homes have multiple computers
  - Most American homes have Internet
  - Computers are used for
    - Business
    - Entertainment
    - Communication
    - Education
    - Defence

Computers In Society

- Computers in education
  - Computer literacy required at all levels
- Computers in small business
  - Makes businesses more profitable
  - Allows owners to manage
- Computers in industry
  - Computers are used to design products
  - Assembly lines are automated

Computers In Society

- Computers in government
  - Necessary to track data for population
    - Police officers
    - Tax calculation and collection
  - Governments were the first computer users

Computers In Society

- Computers in health care
  - Revolutionized health care
  - New treatments possible
  - Scheduling of patients has improved
  - Delivery of medicine is safer

Chapter 1A

End of Chapter