1.2 Computers in the Workplace

Essential Question
- How does changing technology affect current and future employment?

Competencies
- 6670.40 Investigate current and future trends in information technology.

After completing this section, you will be able to:
- Explain how advances in information technology have affected productivity.
- Describe the use of information technology in current employment.
- Discuss the future outlook for employment in information technology.

Terms
- telecommuting
- worker productivity

Worker Productivity
- **Worker productivity** is a measure of how _____ and quickly one can complete tasks
- Changing Tools
  - Workers are becoming loyal to their _____, not their employers
  - People used to read books and manuals to learn; now they use the Internet and search engines
- Eliminating Distance
  - Employees can communicate with colleagues around the world
  - _____ is working for a company from home using information technologies
- Technical Knowledge
  - Number of worldwide Internet devices in use in 1984 was only 1,000
    - 1,000,000 by 1994
    - 1,000,000,000 in 2008
    - 75,440,000,000 projected for 2025
  - Employers expect a solid foundation in hardware

- o Possible that what students learn in their first year will be _____ by their third year

Current Employment
- • _____ basic understanding of computers
- • Jobs have disappeared
    - o Replaced by technology
    - o Examples is printing press typesetter
- • New jobs have appeared
    - o Computer programmers
    - o Help desk operators

Future Employment
- • Emerging technologies grow from
- • New jobs will emerge as time goes on
- • Advanced Medical Research
    - o Moving from treating and curing to preventing
    - o Leads to more personalized health care
- • Automotive Industry
    - o Vehicles are becoming more energy efficient
    - o More complex _____ computers are being developed
- • Finance
    - o Real-time data to model _____ growth
    - o Computer programs to perform financial analysis
- • Home Health Care
    - o Increased by 50 percent over last few years
    - o _____ connection to patients
- • _____ Collar Jobs
    - o Designing, manufacturing, selling, installing, and maintaining environmentally friendly technologies
    - o Clean energy and other environmentally friendly jobs

Chapter 1: Introduction to Information Technology

Section 1.2 Review (page 22)

1. What are four ways in which the use of computers has impacted the workplace:

    a.

    b.

    c.

    d.

2. How does telecommuting improve productivity?

3. How have advances in technology changed the types of jobs people do?

4. How will continued growth in the use of the Internet and communication technologies create new careers?

5. What are green collar jobs, and how is IT needed in them?

6. Using computers in the workplace has increased which of the following for many types of jobs?
    a. Job security
    b. Free time
    c. Satisfaction
    d. Level of detail

7. Which of the following is an example of how computers are currently used in the workplace?
    a. Track and apprehend criminal suspects
    b. Research diseases and maintain complex health records
    c. Track the progress of a package
    d. All of the above

8. _____ measures how efficient and quickly a person completes a task.

9. _____ is working for a company from home using information technologies.

10. T/F   People without access to digital devices are placed at a major disadvantage in looking for jobs.

Application and Extension:

Scavenger Hunt Worksheet

Directions: Use internet search engines to answer the computer history questions.

1. What is ARPA, and what lead to its creation? _____

    _____

2. Who invented the microprocessor? _____

3. Who invented the computer mouse? _____

4. In what year was the IBM PC first introduced? _____

5. What software launched Bill Gates' career on his way to becoming the richest man in the

    world?_____

6. In what year did Apple introduce the Macintosh computer?_____

7. What company was responsible for the invention of the Graphical User Interface (GUI)?

8. What is the difference between analog and digital technology? _____

9. Who is Christopher Sholes?_____

10. Who is Steve Wozniak and Steve Jobs? _____

New Careers - Identify five new information technology careers that were created as a result of the advent of social media.

New Technology Job	Description of job	What skills are needed for the job (minimum of 2)