

3rd Grade Career Development
Activity #11: Information Technology Careers
Estimated time: 30-45 minutes

National Career Development Guidelines Indicators

ED1 - Attain educational achievement and performance levels needed to reach your personal and career goals

- ED1.K7 - Recognize that your educational achievement and performance can lead to many workplace options
- ED1.K8 - Recognize that the ability to acquire and use information contributes to educational achievement and performance

ED2 - Participate in ongoing, lifelong learning experiences to enhance your ability to function effectively in a diverse and changing economy

- ED2.K3 - Recognize the importance of being an independent learner and taking responsibility for your learning

CM3 - Use accurate, current, and unbiased career information during career planning and management

- CM3.K2 - Recognize that career information includes occupational, education and training, employment, and economic information and that there is a range of career information resources available
- CM3.K4 - Identify several ways to classify occupations

CM4 - Master academic, occupational, and general employability skills in order to obtain, create, maintain, and/or advance your employment

- CM4.K4 - Recognize that many skills are transferable from one occupation to another

Goal:

Students will investigate careers in the Information Technology Career Cluster.

Objectives:

- Understand that a career cluster is a grouping of occupations based on commonalities
- Recognize that the **Information Technology** Career Cluster includes careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services.
- Investigate careers in the Information Technology Career Cluster

Materials:

- 3rd Grade Career Development Activity #11- **Information Technology Careers: IT Occupations** handout #1
- 3rd Grade Career Development Activity #11- **Information Technology Careers: Decoding Occupations** handout #2
- 3rd Grade Career Development Activity #11- **Information Technology Careers: Decoding Occupations** answer sheet
- Writing materials

Activity:

1. “Today we’re going to learn about occupations in the **Information Technology** Career Cluster. Does everyone remember what a Career Cluster is? **A career cluster is a grouping of occupations based on things they have in common.** Today we’re going to focus on the **Information Technology** Career Cluster.”
2. “The **Information Technology** Career Cluster includes careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services. *Write this on the board.* “Let’s talk for a minute about the design and operations of computers. We all know how to operate a computer, at least to do some basic things on it. What do you do with a computer?” *Allow time for students to answer the question. Possible answers: writing, games, finding information, emailing, storing information, playing music, etc. Add some of your own uses: keeping records, making charts, making slide shows, etc.*
3. “If we have all these ways we use computers, can you imagine what businesses, like banks and restaurants and television and radio stations and hospitals, use computers to do? Let’s think about hospitals for a moment. Have you ever been in a hospital before? Well, then you’ve seen all the machines they use to help take care of people. And they have to communicate with one another and record all the important patient information. They have to diagnose situations and run tests and they have to keep all these important systems running and trouble-free at all times.”
4. “Let’s have a look at some of the important jobs there are in information technology.” *Distribute the **Information Technology Careers: IT Occupations** handout #1 to students and go over each of the occupations on the list. Ensure that students understand each term before moving to the next.*
5. *Once students have gone over the list, distribute the **Information Technology Careers: Decoding Occupations** handout #2 to students. Explain the directions and answer any questions about the handout. Ensure they understand the directions. Allow time for students to complete the assignment. Walk around the room and offer assistance to students.*
6. *Once students have completed the handout, go over the answers and collect the handouts.*

Evaluation:

Students will be evaluated on their participation and on their handouts.

Handout #1

Information Technology Careers: IT Occupations 3rd Grade Career Development: Activity #11

Systems analysts solve computer problems and apply computer technology to meet the individual needs of an organization. Most systems analysts work with specific types of systems—for example, business, accounting, or financial systems, or scientific and engineering systems—that vary with the kind of organization.

Animators use drawings, sculptures, or computers to create the illusion that characters and scenes are moving. They create special effects in movies, cartoons, commercials, and computer and video games.

Network administrators manage local area networks (LAN), wide area networks (WAN), and Internet systems. They maintain network hardware and software, analyze problems, and monitor the network to make sure everything is working properly. They troubleshoot problems reported by users and make adjustments as needed.

Computer support specialists provide technical assistance, support, and advice to customers and other users. These troubleshooters interpret problems and provide technical support for hardware, software, and systems. They answer telephone calls, analyze problems using automated diagnostic programs, and resolve recurrent difficulties.

Computer security specialists plan, coordinate, and implement the organization's information security. These workers may be called upon to educate users on computer security, install security software, monitor the network for security breaches, respond to cyber-attacks, and in some cases, gather data and evidence to be used in prosecuting cyber-crime.

Computer programmers develop and write computer programs to store, locate, and retrieve specific documents, data, and information.

Computer scientists conduct research into fundamental computer and information science as theorists, designers, or inventors. Solve or develop solutions to problems in the field of computer hardware and software.

Handout #2

Information Technology Careers: Decoding Occupations
3rd Grade Career Development: Activity #11

Directions: Spell out information technology occupations and terms by matching letters to the numbers.

12	33	45	28	11	40	37	51	64	30	66	75	25
A	B	C	D	E	F	G	H	I	J	K	L	M

80	58	48	52	69	77	55	91	61	84	44	21	70
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

—
 45 58 25 48 91 55 11 69 77 45 64 11 80 55 64 77 55

 —
 77 21 77 55 11 25 77 12 80 12 75 21 77 55

 —
 48 69 58 37 69 12 25 25 11 69

 —
 77 11 45 91 69 64 55 21 77 48 11 45 64 12 75 64 77 55

 —
 12 80 64 25 12 55 58 69

 —
 80 11 55 84 58 69 66 12 28 25 64 80 64 77 55 69 12 55 58 69

 —
 64 80 55 11 69 80 11 55

 —
 77 58 40 55 84 12 69 11 & 51 12 69 28 84 12 69 11

Answer sheet

Information Technology Careers: Decoding Occupations 3rd Grade Career Development: Activity #11

1. Computer Scientist
2. Systems Analyst
3. Programmer
4. Security Specialist
5. Animator
6. Network Administrator
7. Internet
8. Software & Hardware