PATHWAYS TO COLLEGE & CAREER READINESS
CareerClusters®

Information Technology

People in the Information Technology cluster work with computers and lots of information. They like to solve math and science problems. They create and work with software, hardware, networks and websites.

Information Technology

Computer User Support Specialists ■ Network & Computer Systems Administrators
Software Developers, Applications ■ Computer Systems Analysts
Web Developers ■ Information Security Analysts

Computer User Support Specialists

Computer user support specialists help people figure out what's wrong with a computer's software or hardware. They also answer questions about how to use computer hardware and software. They sometimes are able to fix problems over the phone. Other times they will have to fix the computer in person. They need to keep up with news on the latest software and hardware.

Use the clues to solve the crossword puzzle.
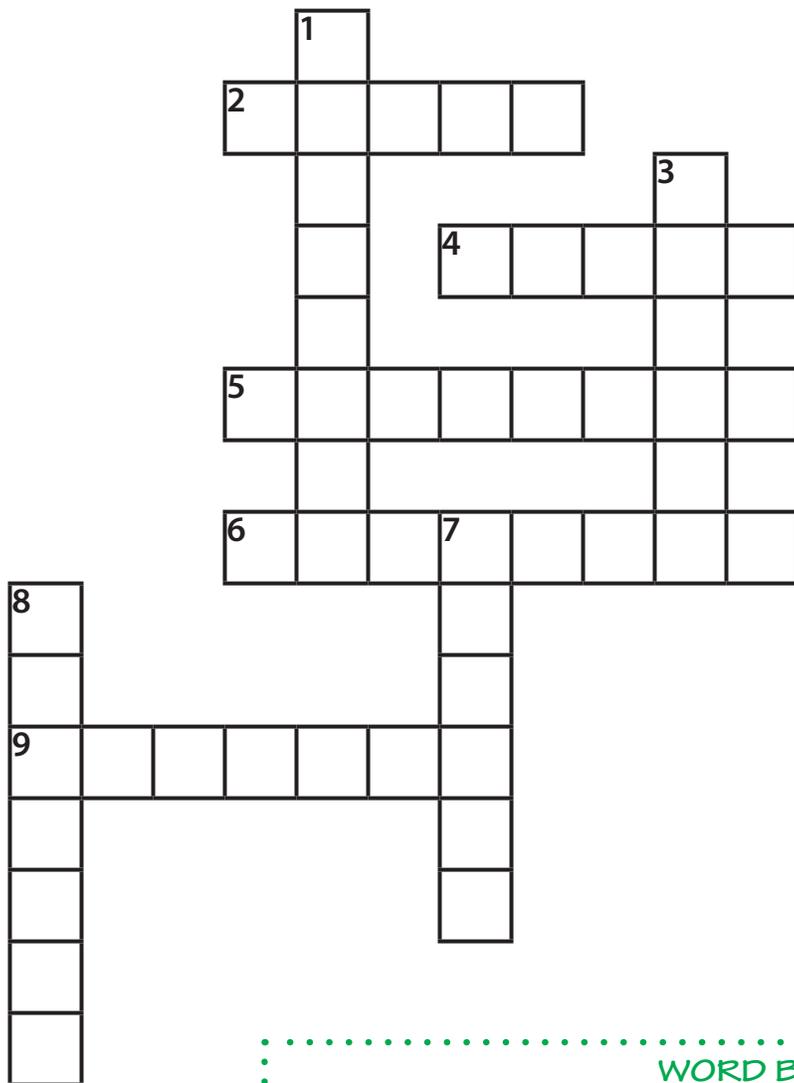
ACROSS

2. A thing that controls the cursor.
4. A program that infects computers and causes problems.
5. A file that has data organized so it is easy to search and sort.
6. The thing you use to type.
9. A group of computers linked together to share information.

DOWN

1. The programs that run on a computer.
3. The blinking box or line on your computer screen.
7. An extra copy of a program, file or document.
8. The screen that lets you see computer information.

WORD BANK

backup	keyboard	network
cursor	monitor	software
database	mouse	virus

School Rules: (How much education do you need?)

Occupation	High School	Some Beyond High School	Associate Degree	Bachelor's Degree	Advanced Degree
Computer User Support Specialists		✓			
Network & Computer Systems Administrators				✓	
Software Developers, Applications				✓	
Computer Systems Analysts				✓	
Web Developers			✓		
Information Security Analysts				✓	

Network & Computer Systems Administrators

People can share information on computers through networks and computer systems. Networks and computer systems administrators are in charge of these systems. They design the system. They install, test and maintain a network's hardware and software. They may also fix problems. They keep networks secure.

Help network the computers by finding a route through the maze.
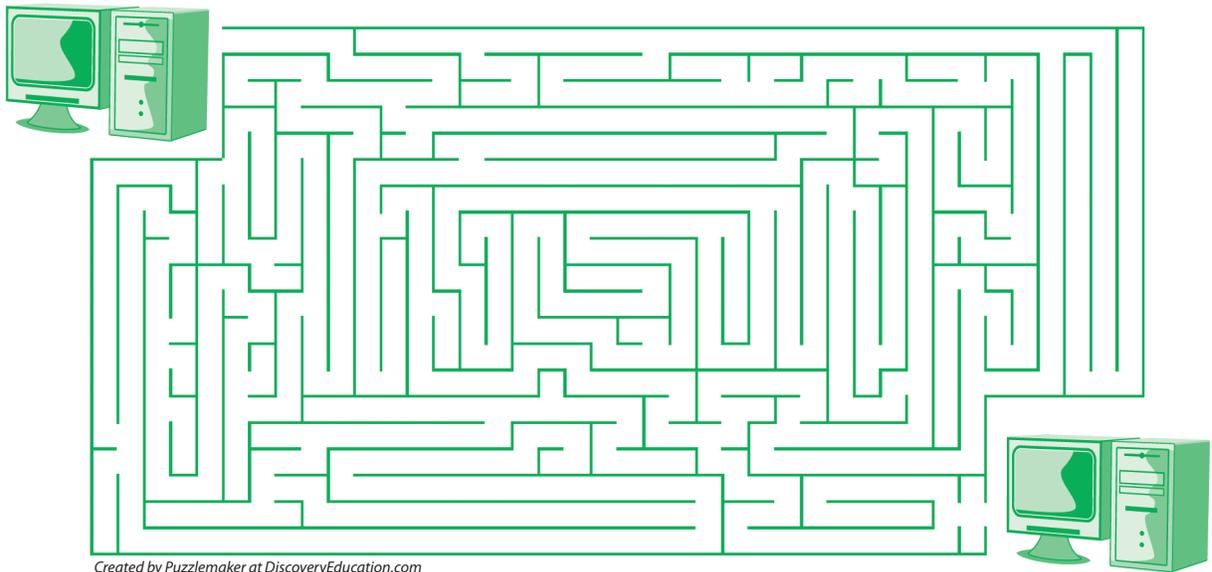
Created by Puzzlemaker at DiscoveryEducation.com

Software Developers, Applications

Software applications are programs people use to do things on computers. These programs let people do things like write reports, send emails, view photos and play games. Software developers create these programs. They use a computer language to create the software. The language is made up of lists of instructions that tell computers what to do.

If you have used a computer, list two of its software programs.

1._____   2._____

Computer Systems Analysts

Computer system analysts improve how computer systems work. They know a lot about business and computers. This helps them design better computer systems for clients. They talk to clients to figure out how the technology is used. They also figure out how much systems cost. They test systems and train clients. They like working with others.

Computer system analysts follow several steps to improve a company's computer system. The first and last steps have been filled in below. Put the rest of the steps in order.

_____ Look at the current system. Figure out what to do to make it better.

_____ Create new system or software with help of designers.

___1___ Research the company to understand what its purpose is.

_____ Give company an estimate on the cost.

_____ Fix problems found during testing and put new system in place.

_____ Test the new system.

___7___ Maintain and repair the new system.

Web Developers

Web developers design and create websites. They think about what the client wants. They want people to like the website when they use it. They also make sure the website runs smoothly. Some developers focus on how the site looks. Others work with things like programming languages, software and coding. Some developers do all of these things.

Circle the things that are important to keep in mind when making a website.

A. Put lots and lots of graphics. Who cares if it takes a long time to load. It will look so cool!

B. Make sure it is easy for the client and customers to find what they want on the website.

C. Put all the really important stuff at the bottom of the page so people have to look through the whole page to find it.

D. Make sure changes in programming and design are easy to do.

Information Security Analysts

Information security analysts make sure computer networks are safe. They watch for threats from hackers and computer viruses. They figure out if there are any problems and fix them. They install things like fire walls and other security software. They keep up to date on the latest cyber threats.

List three ways to protect computers against things like computer viruses and malware.

1. _____

2. _____

3. _____

How Much Does it Pay?

Average Hourly Wage in South Dakota (2018) Wage	Computer User Support Specialists	Network & Computer Systems Administrators	Software Developers, Applications	Computer Systems Analysts	Web Developers	Information Security Analysts
More than $30.00		💵	💵	💵		💵
$25.00-$30.00		💵	💵	💵	💵	💵
$20.00-$25.00		💵	💵	💵	💵	💵
$15.00-$20.00	💵	💵	💵	💵	💵	💵
Less than $15.00	💵	💵	💵	💵	💵	💵

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