NATIONAL SCIENCE AND TECHNOLOGY WEEK

COMMUNICATIONS WORD SEARCH

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Communication has always been important to people. Scientists and engineers have developed technology to help us communicate better and faster across longer distances than ever before. Now, people can not only talk to each other over the telephone, but they can send computer files, read electronic bulletin boards, and even pay their bills over telephone lines. Soon, communications companies will be able to send hundreds of video channels over the telephone line to your house.

All the telephones, computers, fax machines, switches, and the lines that connect them are called the communications network. The network changes the sound of your voice and the data from your computer to electronic signals. Sometimes these electronic signals are changed to light particles, or photons, using tiny, powerful lasers. The photons travel superfast for hundreds or thousands of kilometers through hair-thin glass strands called optical fibers. At the other end of the fiber, the photons get changed back into electrical signals. Finally, the signals become the sound of your voice in your friend's telephone, or letters and numbers that show up on her PC.

The number of calls, faxes and computer messages is growing rapidly. To meet this demand, scientists and engineers are creating digital switches that can each handle a trillion bits of information [1]:[1] every second. This corresponds to almost 200 fax messages, 660,000 video conference calls, or 6,600 high-definition TV channels.

Someday, you may be one of the thousands of scientists and engi-

neers at AT&T Bell Laboratories who are working to make communications faster, easier and cheaper. To get started, find and circle these words about communications technology. The words are listed from top to bottom and left to right . . . how many can you find? (Hint: The 32 words hidden in the puzzle are found around the borders of this article.)



S T E L E P H O N E B U G
P A T A L K V P H O T O N
S C R E E N O T G V R C P
O H C P C D I I B I T H L
F I L E T I C C O D E A U
T P A F R S E A T E S N C
W R S C O K A L K O W N O
A I E H N E T W O R K E M
R N R F A X O A I L O L P
E T W I R E M E M O R Y U
F C A B L E S W I T C H T
L I N E S A T E L L I T E

CHACHTY CARLY DIAK PRINT FIF SCREEN TALK COMPUTER VOICE LINE SATELLYE BIT VIDES

MEMONY OPTICAL FIBER

PC PHOTON CHANNEL