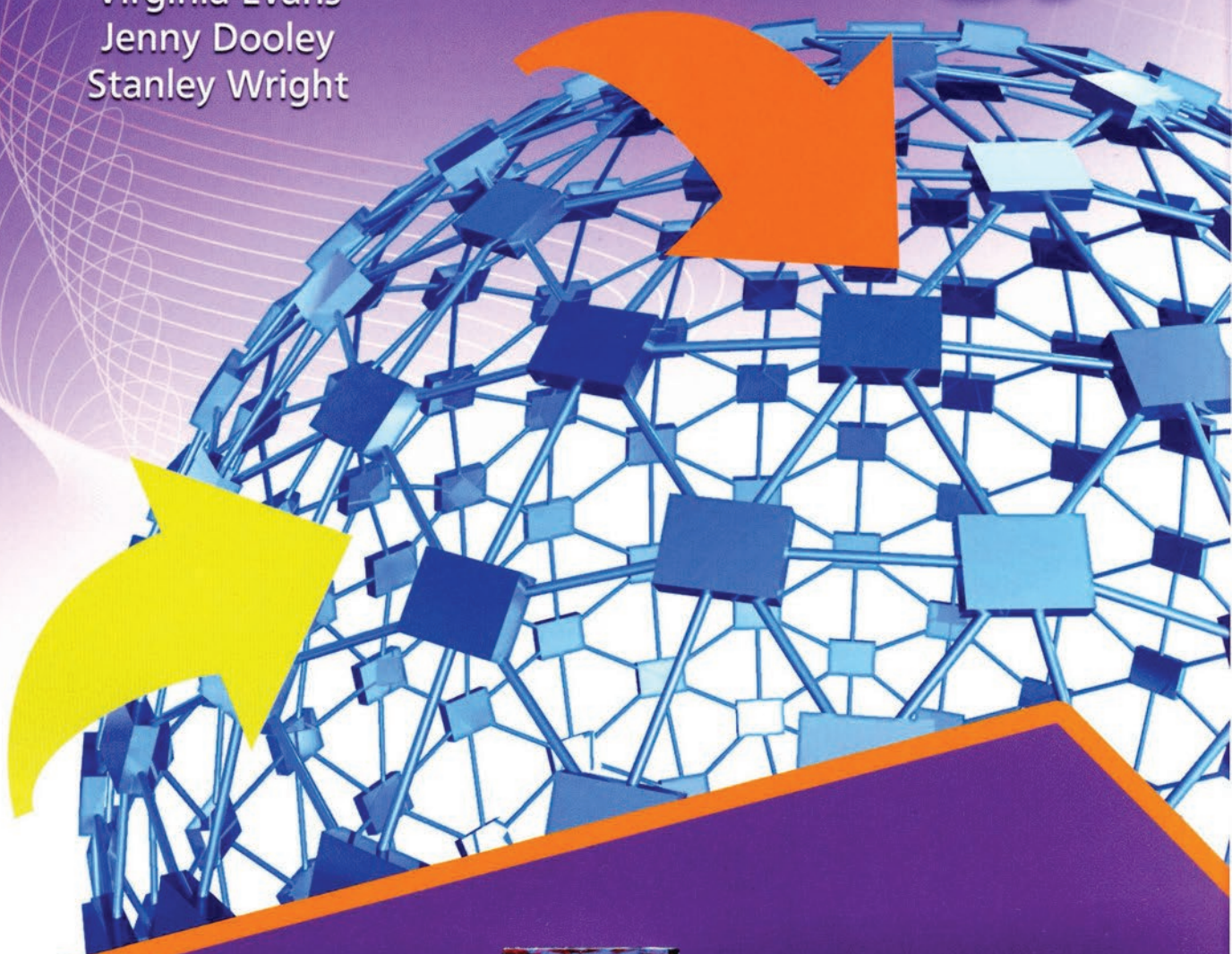


**CAREER
PATHS**

Information Technology

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Book

1

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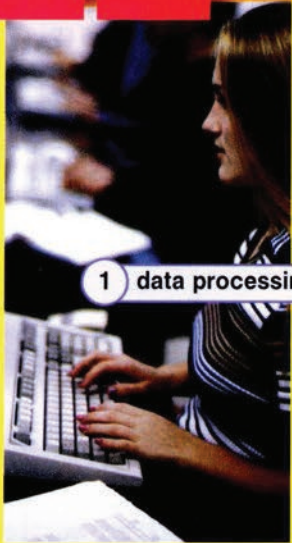
Scope and Sequence

Unit	Topic	Reading context	Vocabulary	Function
1	Information Technology	Manual	code, data processing, data, encoding, hardware, information security, online, quality assurance, software, technical support	Getting someone's attention
2	Introduction to Computing Systems	Email	cell phone, computer, desktop computer, handheld PC, laptop, mainframe, PDA, server, supercomputer, workstation	Giving instructions
3	Inside the Computer	Product Guide	case, expansion card, fan, hard drive, heat sink, motherboard, power supply, processor, RAM	Describing a process
4	Computing Devices	Catalog	input device, microphone, monitor, mouse, printer, scanner, scroll wheel, touch screen, USB	Making a suggestion
5	Networking	Magazine Article	CAT-5, configuration, cycle, DHCP, Internet, IP address, LAN, network, router, WLAN	Describing options
6	The User Interface	Manual	desktop, drag, folder, GUI, icon, maximize, menu, minimize, OS, pointer, shortcut, window	Offering a solution
7	Word Processing	Advertisement	compatibility, document, font, format, formatting, layout, macro, spell check, template, word processing program	Clarifying a situation
8	Email	Memo	attachment, domain name, email address, email client, ISP, password, POP3, SMTP server, username, webmail	Checking for errors
9	Web Browsing	Email	HTML, http, hyperlink, meta tag, search engine, URL, web browser, web host, web site, www	Expressing confusion
10	Image and Graphic Design	Magazine Article	contrast, crop, exposure, graphic editing program, graphics, JPEG, pixel, resize, resolution, tint	Answering the phone
11	Databases vs. Spreadsheets	Email	cell, database field, database, formula, function, operator, query, sort, spreadsheets, table, worksheet	Asking for help
12	Web Design vs. Web Development	Course Descriptions	appearance, coding, content, CSS, functionality, navigation, usability, visibility, web design, web development	Asking about purpose
13	Desktop Publishing	Job Listing	clip art, comprehensive layout, design, desktop publishing software, desktop publishing, electronic pages, electronic paper, electrostatic printing, graphic communications, offset lithography, page layout	Talking about experience
14	Videoconferencing	Email	bandwidth, dedicated system, document sharing, echo-cancellation, monitor, multipoint videoconference, video bridge, videoconferencing, webcam	Explaining differences
15	E-commerce	Email	affiliate, banner, brick and mortar, certificate authority, digital certificate, e-commerce, FAQs, shopping cart, traffic	Clarifying information

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1 Information Technology



1 data processing

IT Department Restructuring

DataPro Inc. is growing, and so our workload is increasing. But our IT department is not dealing with this increase effectively. So I am dividing the IT department into three sections: **quality assurance**, **data processing** and **information security**. The responsibilities of each section are:

Quality Assurance

Testing **hardware**
Providing **technical support**

Data Processing

Writing **code**
Organizing **data**

Information Security

Encoding **online** data transfers
Updating security **software**

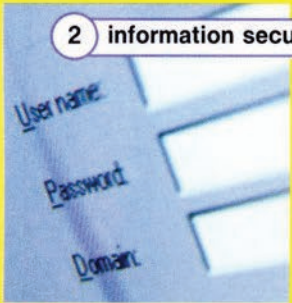
These changes are not simple or easy. But smaller groups deal with tasks more efficiently than larger ones. See your supervisors for your new section assignment.

Thomas Jenkins,
CEO DataPro Inc.

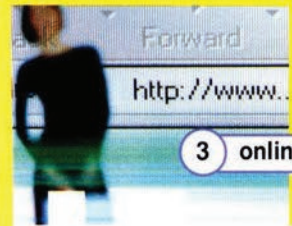
4 technical support

5 hardware

6 software



2 information security



3 online



Get ready!

1 Before you read the passage, talk about these questions.

- 1 What is Information Technology?
- 2 What do Information Technology professionals do?

Reading

2 Read the statement from the DataPro Inc. CEO. Then, mark the following statements as true (T) or false (F).

- 1 ___ The IT Department is increasing.
- 2 ___ Data Processing employees now encode data.
- 3 ___ Supervisors know the employees' new assignments.

Vocabulary

3 Match the words (1-10) with the definitions (A-J).

- | | |
|----------------------------|-------------------------|
| 1 ___ software | 6 ___ online |
| 2 ___ code | 7 ___ technical support |
| 3 ___ hardware | 8 ___ data |
| 4 ___ data processing | 9 ___ quality assurance |
| 5 ___ information security | 10 ___ encoding |

- A putting secret information into code
B the physical parts of a computer
C connected to the Internet
D numbers entered/held in a computer
E checking products for problems
F the act of using information
G programs/instructions added to computers
H helping people use/understand technology
I program language
J the act of protecting information

- 4 Fill in the blanks with the correct words from the word bank.

Word BANK

data quality assurance encoding

- 1 Enter the _____ into the computer.
- 2 The company uses _____ to protect information.
- 3 _____ finds and fixes problems in new products.

- 5 Listen and read the statement from the DataPro Inc. CEO again. Which section is responsible for helping people to understand technology?

Listening

- 6 Listen to a conversation between a DataPro Inc. employee and her supervisor. Choose the correct answers.

- 1 What is the dialogue mainly about?
 - A asking for a raise
 - B requesting a transfer
 - C assuring product quality
 - D improving hardware
- 2 What can you infer about the employee?
 - A She does not like her new section.
 - B She has experience with hardware.
 - C She does not understand the changes.
 - D She creates valuable software.

- 7 Listen again and complete the conversation.

Employee: Excuse me, Mr. Hopkins? I have a question about the 1 _____.

Hopkins: Please, come in. What's your question?

Employee: Well, I'm now in the 2 _____ section.

Hopkins: Yes. You have a great understanding of hardware.

Employee: Thanks, but I have more experience with 3 _____.

Hopkins: I see. You want a 4 _____, then?

Employee: Exactly. I feel that I'm more valuable there.

Hopkins: Let me 5 _____ it.

Speaking

- 8 With a partner, act out the roles below, based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

I have a question about ...
I'm in the _____ section.
I have more experience with ...

Student A: You are a supervisor. Speak with Student B to find out:

- current section
- desired section
- reason

Student B: You are an employee. Answer Student A's questions.

Make up a name for your supervisor.

Writing

- 9 Use the conversation from Task 8 to fill out the transfer request.

Transfer Request

Employee's Name: _____

Supervisor's Name: _____

Current Section: _____

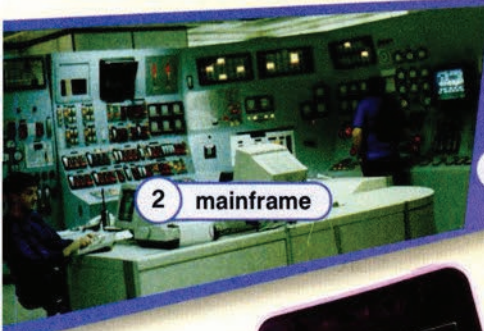
Requested Section: _____

Reason for Transfer Request: _____

Get ready!

1 Before you read the passage, talk about these questions.

- 1 What kind of computers do you use?
- 2 What do you use computers for at work?



2 mainframe



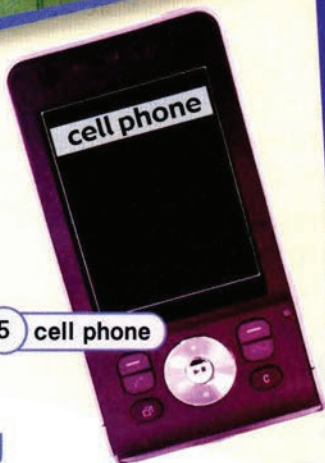
3 workstation



4 PDA



1 desktop computer



5 cell phone

From: bruce.roberts@tei.com
To: chris.carter@techmagazine.net
Re: TEI Computers?

Thanks for including TEI Inc. in your article on workplace technology. We have many types of computers at our disposal. First, all employees receive PDAs and desktop computers. But we only use those for word processing and spreadsheets. Of course, some programs are too powerful for desktops. So many employees use the faster workstations. And we do have a few laptops and handheld PCs. However, employees only use them on business trips. Most employees just answer email with their cell phones. The new server provides access to all printers. Finally, our mainframe processes our largest data files. No need for a supercomputer yet!

Regards,
Bruce Roberts



6 laptop

Reading

2 Read the email about computers available at TEI Inc. Then, choose the correct answers.

- 1 What is the email about?
 - A the types of work employees do
 - B computers that the company sells
 - C what computers the company uses
 - D the installation of a server
- 2 According to the passage, employees use laptops when they _____.
 - A respond to email
 - B work on spreadsheets
 - C process the largest files
 - D work outside of the office
- 3 Which of the following is NOT true?
 - A The company has a mainframe.
 - B Employees get email on their cell phones.
 - C All employees receive desktop computers.
 - D The desktop computers are faster than the workstations.

Vocabulary

3 Read the sentence and choose the correct word.

- 1 My (PDA / mainframe) notifies me when I have a meeting.
- 2 I have a (laptop / supercomputer) to do work on the plane.
- 3 John has a (server / desktop computer) because he only uses simple programs.
- 4 This (computer / server) runs programs, but doesn't have Internet access.
- 5 A (workstation / handheld PC) is smaller than a laptop, but still has a keyboard.
- 6 Connect to the (server / PDA) to use that printer.
- 7 A (supercomputer / handheld PC) is the most powerful machine in the world.

4 Match the words (1-3) with the definitions (A-C).

- 1 ___ workstation 3 ___ cell phone
2 ___ mainframe

- A** large and powerful computer that supports many other computers working at once
B fast computer that is used by one person and has more memory than an ordinary personal computer.
C a device that makes and receives calls

5 Listen and read the email about computers available at TEI Inc. again. Why do some employees not use a desktop?

Listening

6 Listen to a conversation between an IT professional and a new employee. Choose the correct answers.

- 1 Which of the following computers are NOT shared by employees at TEI Inc.?
A the server **C** laptops
B workstations **D** desktop computers
- 2 According to the dialogue, employees use the server to _____.
A open programs
B reserve workstations
C log onto desktop computers
D borrow laptops

7 Listen again and complete the conversation.

- A:** Here's your new office. Jon works in here, too.
B: So, everyone has their own 1 _____. Do we have laptops?
A: Yes. That's your computer there. Laptops are in the 2 _____.
B: Okay, but I also need a 3 _____.
A: Right, you work on some powerful programs. Those are next door.
B: Do I sign up to use them? I mean, how do I get access to one?
A: Just 4 _____ to the server. All computers connect to it. Then, click "5 _____ workstation".
B: Thanks!

Speaking

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

*Ok, but I also need a workstation.
How do I get access to one?
Then click 'reserve workstation'*

Student A: You are a new employee. Ask Student B questions about:

- what computers they have
- where the computers are
- how to access computers

Student B: You are an IT Professional. Answer Student A's questions about the computers.

Writing

9 Use the conversation from Task 8 to fill out the notes.

TEI Inc.

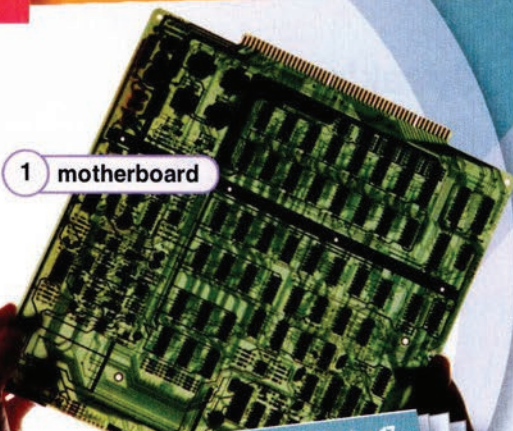
Computers & Locations

1. _____ : Every employee has one in their office.
2. _____ : These are available in the IT department.
3. Server: All computers _____
4. _____ : Log on to the server to reserve these.



2 case

1 motherboard



Assembly Instructions

Step #1: First, gather your parts. These include a motherboard, power supply, processor, case, heat sink, fan, RAM, expansion cards, hard drive, and disk drive.

Step #2: Next, Attach the **motherboard** to the **case**. Then, connect the **processor** to the **motherboard's** primary socket.

Step #3: Attach the **heat sink** and cooling **fan** to the processor.

Step #4: Insert the **RAM** card into an open memory slot. Put any **expansion cards** into the expansion slots.

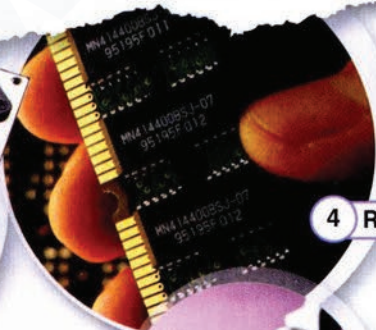
Step #5: Connect your **hard drive** to the motherboard and **power supply**.

Step #6: Close the case and connect the power supply.

3 fan



4 RAM



6 power supply



5 hard drive



Get ready!

1 Before you read the passage, talk about these questions.

- Which components make up a typical desktop computer?
- What do you call a person who repairs computers?

Reading

2 Read the technology guide about computer assembly. Then, choose the correct answers.

- What is the guide mostly about?
 - putting together a computer
 - problems with computer parts
 - uses of expansion cards
 - repairing a broken computer
- When should the hard drive be installed?

A Step #1	C Step #5
B Step #3	D Step #6
- According to the guide, what is NOT an assembly step?
 - collecting parts
 - opening the case
 - connecting the drives
 - installing the RAM card

Vocabulary

3 Match the words (1-6) with the definitions (A-F).

- | | |
|----------------------|-------------------|
| 1 ___ heat sink | 4 ___ processor |
| 2 ___ RAM | 5 ___ hard drive |
| 3 ___ expansion card | 6 ___ motherboard |

- a slotted board with circuits and ports
- a short term, quick memory source
- a part used to cool the processor
- a part used to store large amounts of data
- a part used to increase a computer's functions
- a part that completes tasks for the computer