

CAREER  
PATHS

SECOND  
EDITION

# Computing

Virginia Evans - Jenny Dooley Will Kennedy



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Book

1



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## Scope and Sequence

| Unit | Topic                | Reading context  | Vocabulary  | Function                    |
|------|----------------------|------------------|---|-----------------------------|
| 1    | Types of Computers   | Magazine article | computer, desktop computer, laptop, notebook, personal computer, portable, processing power, server, tablet, workstation                | Making a suggestion         |
| 2    | Monitors             | Article          | aspect ratio, contrast, display, HD, LCD, LED, monitor, resolution, response time, screen   | Making comparisons          |
| 3    | Keyboards            | Blog post        | Alt key, Caps Lock, Control key, diacritical mark, function key, keyboard, numeric keypad, QWERTY, Shift key, type                      | Asking about knowledge      |
| 4    | Mice                 | Product listing  | ball mouse, click, button, cordless, laser mouse, LED mouse, mouse, scroll wheel, scrolling, USB  | Making a recommendation     |
| 5    | Inside the Computer  | Magazine article | case, CPU, disk drive, fan, hard drive, heat sink, motherboard, optical drive, port, power supply, processor, removable drive, USB port | Describing a problem        |
| 6    | Data Storage Devices | Advertisement    | capacity, flash drive, GB, memory, portable hard drive, solid state drive, SSD (Solid State Drive), TB, thumb drive                     | Asking for a recommendation |
| 7    | Printers             | Email            | cartridge, dpi (dots per inch), ink, inkjet printer, laser printer, ppm (pages per minute), print, printer, toner, two-sided            | Agreeing                    |
| 8    | Scanners             | Article          | all-in-one, automatic document feeder, color depth, copy, flatbed, optical resolution, ppi (pixels per inch), scan, scan area, scanner  | Describing features         |
| 9    | Cameras              | Advertisement    | compression, digital camera, digital zoom, JPEG, megapixel, optical zoom, pixel count, SD card, white balance                           | Asking for an opinion       |
| 10   | Smartphones          | User manual      | app, built-in, cell phone, feature, GPS, MP3 player, coverage, smartphone, sync, touchscreen  | Giving instructions         |
| 11   | The User Interface   | User guide       | cursor, desktop, dropdown menu, folder, GUI (Graphical User Interface), icon, organize, right-click, select, user                       | Asking for help             |
| 12   | Email 1              | Article          | address book, drafts folder, email, email address, email client, inbox, junk mail, sent folder, trash folder, webmail                   | Explaining confusion        |
| 13   | Email 2              | Email            | attach, Bcc, Cc, create, forward, recipient, reply, reply all, subject  | Making an apology           |
| 14   | Email 3              | Article          | attachment, bounce back, configure, domain name, exceed, maximum, POP3 server, SMTP server, spam, time out, typo                        | Identifying a problem       |
| 15   | Instant Messaging    | Email            | available, busy, chat, contact list, file transfer, IM (Instant Messaging), one-to-one, provider, real-time, screen name                | Expressing concern          |

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## Scope and Sequence

| Unit | Topic                          | Reading context       | Vocabulary  | Function                       |
|------|--------------------------------|-----------------------|---|--------------------------------|
| 1    | Word Processing: Uses          | Guide                 | agenda, blank, business card, calendar, create, document, memo, report, résumé, template, word processing   | Expressing a lack of knowledge |
| 2    | Word Processing: Actions       | Manual                | close, copy, cut, delete, edit, open, paste, redo, save, save as, select, undo  | Changing your mind             |
| 3    | Word Processing: Formatting    | Memo                  | bold, bullet, center, column, font, format, indent, italic, margin, spacing, spell check, underline   | Making a suggestion            |
| 4    | Spreadsheets: Uses             | Email                 | analyze, balance sheet, budget, data, database, equation, function, sales invoice, spreadsheet, timecard, track, workbook                                       | Asking about a general opinion |
| 5    | Spreadsheets: Actions          | Webpage               | calculate, chart, clear contents, clear formats, equal sign, filter out, formula, formula bar, insert, sort, table, value                                       | Clarifying instructions        |
| 6    | Spreadsheets: Formatting       | Troubleshooting guide | border, cell, column, lock, merge, printing area, row, set, shading, shrink to fit, split, wrap   | Expressing opinion             |
| 7    | Desktop Publishing 1           | Advertisement         | clip art, comprehensive layout, design, DTP (Desktop Publishing), online, on-screen, page layout, in print, publish, WYSIWYG                                    | Offering assistance            |
| 8    | Desktop Publishing 2           | Note                  | A4, convert, find/change, item style, kerning, leading, letter, master page, paper size, PDF, typography  | Describing difficulty          |
| 9    | Image and Design 1             | Advice column         | blurry, design, file format, layer, lossless compression, lossy compression, photo, pixel, raster graphic, sharpening, scaling, thumbnail, vector graphic       | Asking about knowledge         |
| 10   | Image and Design 2             | Instructions          | blur, clone, crop, recompose, red eye, resize, retouch, sharpness, stamp, straighten, trim  | Politely disagreeing           |
| 11   | Web Design and Web Development | Course descriptions   | appearance, coding, content, CSS, functionality, navigation, usability, visibility, web design, web development   | Expressing confusion           |
| 12   | Web Browsing: Parts            | User's guide          | add-on, address bar, browser, bookmark, cookie, history, home page, search bar, tab, URL, webpage, website  | Giving instructions            |
| 13   | Web Browsing: Actions          | Webpage               | bookmark, disable, download, enable, enter, hang, link, load, log in, log out, refresh  | Asking for help                |
| 14   | Video Conferencing             | Advertisement         | audio input, bandwidth, codec, echo cancellation, face-to-face, multipoint, output device, video bridge, video conference, video conference system, video input | Identifying a problem          |
| 15   | Social Media                   | Email                 | advertise, blog, forum, friend, group, handle, link, profile, social media, social networking, trend  | Making a prediction            |

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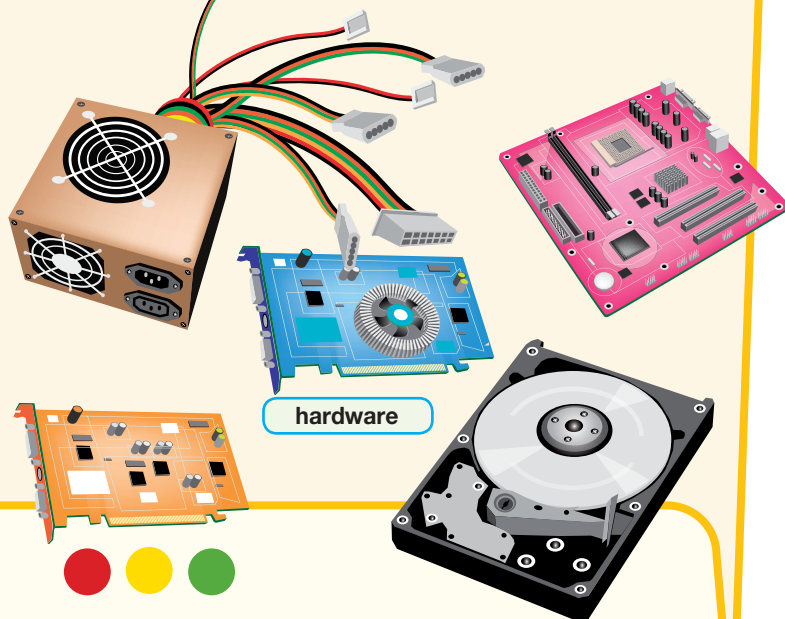
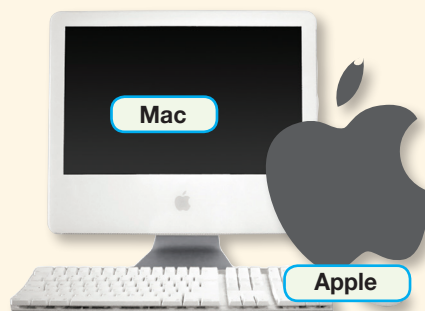


## Scope and Sequence

| Unit | Topic                             | Reading context     | Vocabulary   | Function                    |
|------|-----------------------------------|---------------------|--|-----------------------------|
| 1    | Operating Systems                 | Letter              | Apple®, color matching, customize, hardware, Linux®, MacOS, Mac®, Microsoft®, OS X®, prepress, processing speed, software compatible, upgrade, vulnerable, Windows®  | Justifying a decision       |
| 2    | Media                             | Magazine article    | download, DVD, HD, media player, MP3, MPEG, multimedia, pause, play, stop, stream, upload  | Asking about frequency      |
| 3    | Networking: Devices and Equipment | Product listing     | access point, antenna, cable modem, CAT-5, hub, networking, router, switch, wireless router, wireless network adapter  | Asking for a favor          |
| 4    | Networking: Types of Networks     | Webpage             | broadband, cable Internet, DNS, DSL, Ethernet, hotspot, ISP, LAN, VPN, Wi-Fi®, WLAN  | Discussing options          |
| 5    | Networks: Troubleshooting         | Webpage             | cache, clear, cycle, detect, disconnect, IP address, log in, password, plug in, renew, signal, TCP/IP  | Expressing certainty        |
| 6    | Viruses                           | Magazine article    | host, embed, infect, overwriting virus, piggyback, replicate, resident extension, resident virus, Trojan horse, virus, worm  | Expressing concern          |
| 7    | Internet Crime                    | Email               | backdoor, credit card, fraud, hack, hacker, identity theft, keylogger, malware, pharming, phishing, pretexting, information security, spyware  | Stressing importance        |
| 8    | Anti-virus Software               | Product description | anti-virus software, backup, block, detect, false negative, false positive, pop-up, quarantine, removal, rootkit, update, webpage analysis   | Making a recommendation     |
| 9    | Firewalls                         | FAQs                | access, default, deny, exception, firewall, incoming, packet filtering, permission, permit, settings, traffic, unauthorized  | Expressing confusion        |
| 10   | Online Banking                    | Webpage             | account activity, account number, bill pay, direct deposit, electronic funds transfer, electronic statement, monitor, online banking, payroll, PIN, Site Key, SSL connection   | Clarifying information      |
| 11   | Telecommuting and Remote Access   | Email               | Basecamp™, centralize, conference call, Dropbox®, file sharing, message board, remote access, Skype™, Zoom®, Google Meet®, Microsoft Teams®, telecommute, web-based  | Giving reassurance          |
| 12   | Careers in Computing              | Magazine article    | accounting, administrative assistant, computer literacy, computer science, data entry, digital marketer, IT, management, programmer, sales, social media manager, software engineer, system administrator, tech support, web developer | Asking for more information |
| 13   | Cloud Computing: Types of Clouds  | Magazine article    | back-end, cloud computing, community cloud, elasticity, front-end, hybrid cloud, metered fee, private cloud, public cloud, scalability   | Giving an example           |
| 14   | Cloud Computing: SaaS             | Webpage             | application, deployment, distribution, hosted application management, install, pay-as-you-go, SaaS (Software as a Service), software license, software on demand, software suite   | Expressing opinion          |
| 15   | Cloud Computing: IaaS and PaaS    | Advertisement       | bandwidth, CDN (Content Delivery Network), computing platform, IaaS (Infrastructure as a Service), infrastructure, outsource, PaaS (Platform as a Service), solution stack, storage, switch, utility computing                         | Making an admission         |

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Dear Ms. Jones,

You asked in the meeting whether we should purchase **Mac** computers or PCs that run **Microsoft Windows** or **Linux**. I feel that we would be better off investing in Mac computers.

We are currently using PCs and have had many issues with them. I have to **upgrade** the Windows operating system with patches, which is time-consuming. While PCs are highly **software compatible**, they are also more **vulnerable** to attack, so we need expensive security software.

One advantage to PCs is the vast availability of **hardware** choices. It might be easier to **customize** the computers to meet individual employee needs.

But Macs still meet our needs better than PCs. The **macOS** needs little maintenance. Since our company develops architectural designs, we need computers with good graphics. **Apple** has outstanding **prepress** and **color matching** capability, as well as great **processing speed**.

One main drawback of replacing our current PCs with Macs is that of training. Currently, all of our employees use the Windows operating system. If we purchase Apple computers, we would need to teach our employees how to use macOS.

I hope this helps guide your decision.

Simon Jacobs  
IT Support

## Get ready!

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

- 1 What are the most common operating systems?
- 2 What are some differences between the Apple and Microsoft products?

## Reading

2 Read the letter. Then, mark the following statements as true (T) or false (F).

- 1  The purpose of the email is to recommend what kind of computers to purchase.
- 2  PCs are less vulnerable to attack than Mac computers.
- 3  Apple computers have outstanding color matching capability.

## Vocabulary

3 Match the words or phrases (1-8) with the definitions (A-H).

- |                                    |  |
|------------------------------------|--|
| 1 <input type="checkbox"/> Mac     | 5 <input type="checkbox"/> hardware            |
| 2 <input type="checkbox"/> Windows | 6 <input type="checkbox"/> software compatible |
| 3 <input type="checkbox"/> macOS   | 7 <input type="checkbox"/> processing speed    |
| 4 <input type="checkbox"/> Linux   | 8 <input type="checkbox"/> vulnerable          |

- A a computing device  
 B being able to run different programs  
 C an operating system developed by Apple  
 D an operating system that uses open source software  
 E a measure of how fast a computer operates  
 F an operating system developed by Microsoft  
 G a computer developed by Apple  
 H open to attack

**4** Read the sentence pairs. Choose which word or phrase best fits each blank.

**1 customize / upgrade**

- A** The IT department plans to \_\_\_\_\_ every computer with a new version of the operating system.  
**B** Users cannot \_\_\_\_\_ the drives and cards in Macs, but they can do so with PCs.

**2 color matching / prepress**

- A** I have a \_\_\_\_\_ file ready for printing.  
**B** The \_\_\_\_\_ was poor; the image looked better on the screen.

**5** Listen to and read the letter again. What does the man recommend and why?

## Listening

**6** Listen to a conversation between an IT employee and a manager. Mark the following statements as true (T) or false (F).

- 1 \_\_\_ The company will upgrade the current operating systems on the computers.  
2 \_\_\_ The company's design software only runs on Windows.  
3 \_\_\_ The woman accepted the man's recommendation.

**7** Listen again and complete the conversation.

- Manager:** We're going to buy **1** \_\_\_\_\_ .  
**IT Employee:** Oh really? Why?  
**Manager:** We found that most of our computers are less than two years old. We only need **2** \_\_\_\_\_ a few.  
**IT Employee:** I see. But we'll still **3** \_\_\_\_\_ security software.  
**Manager:** We **4** \_\_\_\_\_ all of the computers to the newest Windows version. It's much less vulnerable.  
**IT Employee:** **5** \_\_\_\_\_ , but since we're a design firm, I thought Macs would be better.  
**Manager:** Not necessarily. Besides, the software we use is **6** \_\_\_\_\_ with Windows.  
**IT Employee:** Oh, it is? Well, Macs can run Windows.

## Speaking

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

**USE LANGUAGE SUCH AS:**

*What did you decide?*

*We found ...*

*That's true, but since I thought ...*

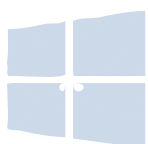
**Student A:** You are a manager. Talk to Student B about:

- upgrading PCs or buying Macs
- what you intend to do
- the benefits of your decision

**Student B:** You are an employee. Talk to Student A about what the company is going to do.

## Writing

**9** Use the letter and the conversation from Task 8 to write an email about operating systems. Include: the benefits of PCs, the benefits of Macs, and which you recommend.



Windows 10



# Glossary

- processing speed** [N-UNCOUNT-U1] **Processing speed** is a measure of how quickly a computer can process information.
- programmer** [N-COUNT-U12] A **programmer** is a person who writes computer programs.
- public cloud** [N-COUNT-U13] A **public cloud** is a cloud system which provides services to the general public.
- quarantine** [V-T-U8] To **quarantine** a file or program is to isolate it from other files to prevent the spread of malware.
- remote access** [N-UNCOUNT-U11] **Remote access** is the ability to access programs, networks, and data from a different location or computer than where they are stored.
- removal** [N-UNCOUNT-U8] **Removal** is the process of eliminating or deleting something.
- renew** [V-T-U5] To **renew** is to make something like new again.
- replicate** [V-T-U6] To **replicate** is to copy.
- resident extension** [N-COUNT-U6] A **resident extension** is an add-on to a computer virus that causes it to become part of the host computer's operating system.
- resident virus** [N-COUNT-U6] A **resident virus** is a type of virus that is not active until triggered by a certain event.
- rootkit** [N-COUNT-U8] A **rootkit** is software that permits a hacker to obtain special access to a system while masking that access from other users.
- router** [N-COUNT-U3] A **router** is a device that forwards information between computer networks.
- SaaS (Software as a Service)** [N-UNCOUNT-U14] **SaaS (Software as a Service)** is a model in which software and the associated data are hosted by a provider and accessed over a network.
- sales** [N-PLURAL-U12] **Sales** is the field dealing with selling products.
- scalability** [N-UNCOUNT-U13] **Scalability** is the ability of a system to accommodate increasing amounts of information in the form of data or processing.
- settings** [N-PLURAL-U9] **Settings** are any values data at which some feature of a computer or computer program can be placed.
- signal** [N-COUNT-U5] A **signal** in electronics is a wave or field used to communicate information from a source to a recipient device.
- Site Key** [N-COUNT-U10] A **Site Key** is an Internet security tool that confirms the validity of a website.
- Skype** [N-UNCOUNT-U11] **Skype** is a software application that allows people to call other computers and have video conferences.
- social media manager** [N-COUNT-U12] A **social media manager** is someone who manages a company's online
- software compatible** [ADJ-U1] **Software compatible** is being able to run multiple types of software on a system.
- software engineer** [N-COUNT-U12] A **software engineer** is an engineer that writes, tests, and evaluates software.
- software license** [N-COUNT-U14] A **software license** is a legal agreement which grants the right to use a program to a buyer.
- software on demand** [N-UNCOUNT-U14] **Software on demand** is a model in which software is rented from a provider as it is needed.
- software suite** [N-COUNT-U14] A **software suite** is a collection of related programs.
- software** [N-UNCOUNT-U14] **Software** is the collection of programs used by a computer.
- solution stack** [N-COUNT-U15] A **solution stack** is a group of software components required to provide a product or service.
- presence through Facebook, Twitter, Instagram etc.
- spyware** [N-UNCOUNT-U7] **Spyware** is the general term for destructive programs that infect a computer for the purposes of financial gain.
- SSL connection** [N-COUNT-U10] An **SSL connection** is a secure connection between two servers.
- stop** [V-T-U2] To **stop** an audio or video file is to end its playback without the option to resume.

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**Career Paths: Computing 2nd Edition** is a new educational resource for all professionals who want to improve their English communication regarding computing. Incorporating career-specific vocabulary and contexts, each unit offers step-by-step instruction that immerses students in the four key language components: reading, listening, speaking, and writing. **Career Paths: Computing 2nd Edition** addresses topics including computer accessories, common programs, operating systems, online communication, and cloud computing.

The series is organized into three levels of difficulty and offers over 500 vocabulary terms and phrases. Every unit includes a test of reading comprehension, vocabulary, and listening skills, and leads students through written and oral production.

**Included Features:**

- A variety of realistic reading passages
- Career-specific dialogues
- 45 reading and listening comprehension checks
- Over 400 vocabulary terms and phrases
- Guided speaking and writing exercises
- Full answer key and audio scripts
- Complete glossary of terms and phrases

The **Teacher's Guide** contains detailed lesson plans, a full answer key and audio scripts.

The **audio CDs** (downloadable) contain all recorded material.



The **Digital** version of the book contains subject specific videos, instant feedback on all tasks and progress monitoring reports.



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