

**CAREER  
PATHS**

# Wireless Communications

Sarah Randall  
Jenny Dooley



Express Publishing



**CAREER  
PATHS**

Book

**1**

Sarah Randall  
Jenny Dooley

# Wireless Communications



**Express Publishing**

## Scope and Sequence

Unit	Topic	Reading context	Vocabulary	Function
1	Mobile Devices	Advertisement	advanced, basic, cell phone, device, feature phone, mobile, mobile hotspot, notebook, smartphone, tablet, wireless	Asking for advice
2	Device Features 1	Advice column	battery life, flip phone, numeric keypad, physical keyboard, QWERTY, slider, standby time, touchscreen, usage time, virtual keyboard	Expressing uncertainty
3	Device Features 2	Catalog	alarm clock, camcorder, camera, contact, display, earpiece, HD, megapixel, MP3 player, multimedia, speakerphone, voice command	Expressing a preference
4	Making a Call	Guide	answer, area code, dial, dialing pattern, end, hang up, ignore, on hold, phone number, redial, ring, send, speed dial	Assisting someone
5	Calling Features	Webpage	block (a number), call forwarding, call waiting, caller ID, directory assistance, indicator, no-answer transfer, push-to-talk, three-way calling, voicemail	Adding information
6	Messaging 1	FAQs	abbreviate, character, drafts folder, inbox, limit, multi-tap, predictive text, sent folder, SMS, text	Making a polite request
7	Messaging 2	Handbook chapter	chat, EMS, format, group, instant messaging, MMS, pix message, subscribe to, video chat, video message	Expressing confusion
8	Mobile Data	Memo	browser, data, desktop, email, HTML, internet, megabits per second, mobile web, search engine, search, user	Giving an example
9	Mobile Broadband	Email	access point, built-in, connect, high-speed, mobile broadband, modem, tether, USB, Wi-Fi, wireless router	Confirming a detail
10	Downloading Applications	Manual	app, application store, browse, compatible, download, install, library, subscription, sync, update	Double-checking information
11	Common Applications	Review	entertainment, game, GPS, news feed, photo stream, radio, ringtone, shop, social networking, sports, travel, widget	Expressing a desire
12	Business Applications	Webpage	alert, calendar, mobile banking, organized, productivity, professional, secure, share, sketchpad, streamline, task manager	Expressing enthusiasm
13	Memory	Manual	backup, capacity, cloud, data, external, gigabyte, megabyte, memory, micro SD card, onboard, support, upload, virtual	Addressing a concern
14	Information Security 1	Handbook chapter	face lock, fingerprint lock, hack, password, PIN, reset, security question, sign in, unauthorized, unlock pattern	Making a prediction
15	Information Security 2	Advice column	archive, confirm, dispose of, erase, irretrievable, master reset, personal, recycle, resell, restore to factory settings, wipe	Giving reassurance

# Table of Contents

<b>Unit 1 – Mobile Devices</b> .....	4
<b>Unit 2 – Device Features 1</b> .....	6
<b>Unit 3 – Device Features 2</b> .....	8
<b>Unit 4 – Making a Call</b> .....	10
<b>Unit 5 – Calling Features</b> .....	12
<b>Unit 6 – Messaging 1</b> .....	14
<b>Unit 7 – Messaging 2</b> .....	16
<b>Unit 8 – Mobile Data</b> .....	18
<b>Unit 9 – Mobile Broadband</b> .....	20
<b>Unit 10 – Downloading Applications</b> .....	22
<b>Unit 11 – Common Applications</b> .....	24
<b>Unit 12 – Business Applications</b> .....	26
<b>Unit 13 – Memory</b> .....	28
<b>Unit 14 – Information Security 1</b> .....	30
<b>Unit 15 – Information Security 2</b> .....	32
<b>Glossary</b> .....	34



**CAREER  
PATHS**

Book

**2**

Sarah Randall  
Jenny Dooley

# Wireless Communications



**Express Publishing**

## Scope and Sequence

Unit	Topic	Reading context	Vocabulary	Function
1	History of Cellular Technology	Article	1G, 2G, 3G, 4G, AMPS, analog, cable speed, car phone, dial-up speed, digital, DSL speed, encrypted, kilobits per second, obsolete	Expressing confusion
2	Components of a Cell Phone	Textbook chapter	circuit board, conversion chip, coordinate, digital signal processor, Flash memory, internal clock chip, LCD, microphone, microprocessor, RF amplifier, speaker	Expressing doubt
3	Radio Frequencies 1	Column	adjacent, antenna, bandwidth, cell site, cell, channel, frequency reuse, frequency, full duplex, hexagonal grid, MHz, radio, range, roaming partner	Restating an idea
4	Radio Frequencies 2	Handbook chapter	base station, downlink, handover, interference, mobile switching center (MSC), public switched telephone network (PSTN), regional, transceiver, transfer, uplink	Making a suggestion
5	Networks 1	Course description	access method, CDMA, encryption, GSM, interfere with, multiple access, overlaid, sequence code, spread spectrum, TDMA, time slot, transparent	Expressing confusion
6	Networks 2	Memo	band, dual-band, dual-mode, EDGE, EVDO, GPRS, HSDPA, integration, mode, protocol, quad-band, UMTS	Making a realization
7	Networks 3	Newsletter	backhaul, circuit-switched, data client, deploy, latency, legacy network, LTE, migrate, network architecture, packet-switched, simultaneous, VoIP	Addressing a concern
8	Cell Sites	Webpage	cable, camouflaged, COW, disaster area, grounded, infrastructure, integrate, lattice, receiver, short-term, tower, transmitter	Offering assistance
9	Operating Systems	Webpage	Android, Apple, BES, Blackberry, customize, Google, interface, intuitive, iOS, Microsoft, open source, operating system, software compatibility, Windows	Offering advice
10	Coverage	Review	booster, congestion, coverage, dead zone, in-building, overloaded, populated, reception, rural, service provider, urban	Offering assurance
11	GPS	Webpage	caller location, commercial, directions, Flash SMS, GPS, map, navigation, regulation, satellite, tracking, traffic, turn-by-turn	Correcting a misconception
12	Porting a Number	Handbook chapter	confirm, inter-carrier porting, intra-carrier porting, Inp, Irn, number pooling, numbering protocol, on the back end, pending, port, switch, validate, wireline	Describing order of events
13	Switching Devices	Email exchange	activate, back up, come with, device ID, ESN, insert, MEID, optional, restore, SIM card, swap, test call	Giving instructions
14	International Services 1	Brochure	011, country code, destination, domestic dialing, foreign, incur, international, long distance, mobile terminating charge, received, satellite phone, sent	Giving some guidance
15	International Services 2	Webpage	adapter, business trip, cruise ship, dialing instructions, global roaming, global-capable, rental, restrict, roaming rate, travel, vacation	Asking for assistance

# Table of Contents

<b>Unit 1 – History of Cellular Technology</b> .....	4
<b>Unit 2 – Components of a Cell Phone</b> .....	6
<b>Unit 3 – Radio Frequencies 1</b> .....	8
<b>Unit 4 – Radio Frequencies 2</b> .....	10
<b>Unit 5 – Networks 1</b> .....	12
<b>Unit 6 – Networks 2</b> .....	14
<b>Unit 7 – Networks 3</b> .....	16
<b>Unit 8 – Cell Sites</b> .....	18
<b>Unit 9 – Operating Systems</b> .....	20
<b>Unit 10 – Coverage</b> .....	22
<b>Unit 11 – GPS</b> .....	24
<b>Unit 12 – Porting a Number</b> .....	26
<b>Unit 13 – Switching Devices</b> .....	28
<b>Unit 14 – International Services 1</b> .....	30
<b>Unit 15 – International Services 2</b> .....	32
<b>Glossary</b> .....	34



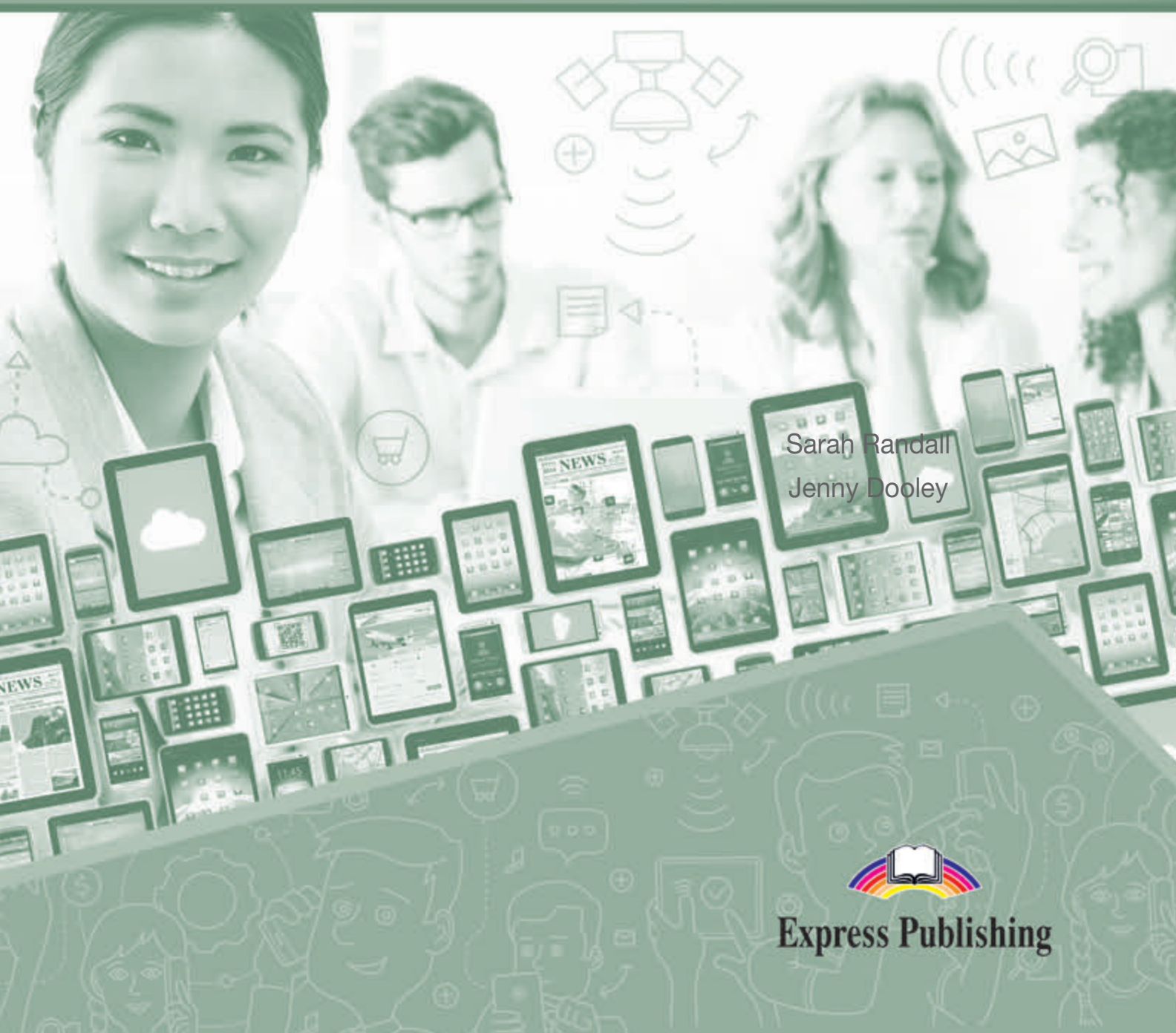
**CAREER  
PATHS**

Book

**3**

Sarah Randall  
Jenny Dooley

# Wireless Communications



Sarah Randall  
Jenny Dooley



**Express Publishing**



## Scope and Sequence

Unit	Topic	Reading context	Vocabulary	Function
1	Common Problems	Replacement policy	blank, dead air, drain, error message, feedback, frozen, hardware, power on, signal, software, static, water damage	Discussing a hypothetical situation
2	Tech Support	Cover letter	adaptable, calm, complicated, creative, detail-oriented, follow up, jargon, logical, patient, problem solver, proficient, tech support, technician	Expressing confidence
3	Troubleshooting Basics	Employee guide	closed question, defective, diagnostic, escalate, intermittent, malfunction, open question, procedure, replace, reproduce, symptom, tier, trouble ticket, troubleshoot, user error	Troubleshooting
4	Troubleshooting Devices	Note	battery, charger, damage, hard reset, outlet, plugged in, port, power cycle, shut off, soft reset, warranty, water damage indicator	Offering advice
5	Troubleshooting Networks	Guide	account, activation, active, bar, coverage area, dropped call, no service, outage, provisioning, reprogram, system settings, unblock	Clarifying information
6	Customer Service	Job posting	assess, call center, customer service, friendly, honesty, personalize, rapport, representative, retail, sales, support, thorough, versatile	Giving a compliment
7	Service Plans	Webpage	allowance, bundle, carrier, contract, credit check, deposit, early termination fee, equipment discount, family plan, monthly, month-to-month, plan, prepaid, single line	Confirming information
8	Selling Devices	Advice column	brand new, educate, free, handset, pre-owned, price range, qualify, recommend, return, upgrade, up-sell	Describing degree
9	Selling Accessories	Webpage	accessory, bluetooth, case, convenience, display protector, dock, earbud, hands-free, headset, holster, scratch, vehicle charger, vehicle mount	Making a recommendation
10	Billing 1	FAQs	data allowance, flat rate, in-network, local, minute allowance, nationwide, night and weekend, overage, pay-per-use, text allowance, unlimited	Showing understanding
11	Billing 2	Email	access, billing cycle, bonus, breakdown, detailed, equipment, fee, percentage, purchase, surcharge, tax, usage	Correcting an error
12	Billing Disputes	Handbook excerpt	activation fee, cancel, courtesy, credit, dispute, error, escalate, free trial, misunderstanding, negotiate, premium sms, rerate, roaming charge, toll call, unauthorized, undisclosed, valid	Asking for permission
13	Payment Issues	Letter	balance, collections, disconnect, due date, grace period, installment, notify, past-due, payment arrangement, penalty, reassign, service interruption, suspend	Describing consequences
14	The Impact of Wireless Technology	Article	augmented reality, dependent, disability, distracted, DIY, emergency response, etiquette, green, healthcare, in person, landline, marketing, mobile office, paperless, resource, substitute	Expressing an opinion
15	Careers	Job listings	analyst, bachelor's degree, electrical engineer, IT, legal, master's degree, MBA, R&D, retail sales, sales representative, software engineer, trainer	Expressing interest

# Table of Contents

<b>Unit 1 – Common Problems</b> .....	4
<b>Unit 2 – Tech Support</b> .....	6
<b>Unit 3 – Troubleshooting Basics</b> .....	8
<b>Unit 4 – Troubleshooting Devices</b> .....	10
<b>Unit 5 – Troubleshooting Networks</b> .....	12
<b>Unit 6 – Customer Service</b> .....	14
<b>Unit 7 – Service Plans</b> .....	16
<b>Unit 8 – Selling Devices</b> .....	18
<b>Unit 9 – Selling Accessories</b> .....	20
<b>Unit 10 – Billing 1</b> .....	22
<b>Unit 11 – Billing 2</b> .....	24
<b>Unit 12 – Billing Disputes</b> .....	26
<b>Unit 13 – Payment Issues</b> .....	28
<b>Unit 14 – The Impact of Wireless Technology</b> .....	30
<b>Unit 15 – Careers</b> .....	32
<b>Glossary</b> .....	34





PQ WiReLess

# Big Coverage at Small Price

Don't miss the winter sale! We have a great selection of **wireless devices**. There's something for everyone on your holiday list!

## Mobile Phones

Everyone needs a **cell phone**, right? Our **feature phones** are perfect for **basic** functions like talking and texting. Or maybe you need something more **advanced**. Try one of our fast, powerful **smartphones**. The new Continental XL-7 is now available. Come check it out!

## Mobile Internet

PQ also has a great lineup of Internet devices. **Tablets** and **notebooks** are the perfect size for traveling. Do you already have a laptop? Then you'll love the XL-110 **mobile hotspot**.

## Get ready!

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

- 1 What is the difference between a feature phone and a smartphone?
- 2 What are some mobile Internet devices?

## Reading

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

- 1  The advertisement recommends a particular feature phone.
- 2  The company is advertising a new model of smartphone.
- 3  Tablets and mobile hotspots are sold together.

## Vocabulary

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

- 1  basic
- 2  mobile
- 3  advanced
- 4  smartphone
- 5  feature phone
- 6  mobile hotspot

- A a device that provides Internet to other devices
- B a cell phone with full Internet capabilities
- C complex, with many features or capabilities
- D easy to carry or transport
- E very simple, without many features or capabilities
- F a cell phone used mostly for voice and text messaging

4 Read the sentences and choose the correct words or phrases.

- 1 A **tablet / feature phone** has advanced Internet browsing capabilities.
- 2 A **notebook / smartphone** is a small laptop computer.
- 3 Basic **mobile hotspots / cell phones** are designed for spoken conversations.
- 4 Some **advanced / wireless** plans only include simple voice service.
- 5 Phones and computers are both electronic **notebooks / devices**.

- 5 Listen and read the advertisement again. What device should a customer purchase if they plan to travel?

## Listening

- 6 Listen to a conversation between a representative and a customer. Choose the correct answers.

- 1 What is the woman looking for?
- A a device with very basic features
  - B a device for use with her laptop
  - C a device that is not expensive
  - D a device that is easy to use
- 2 What does the man recommend?
- A a feature phone
  - B a tablet
  - C a smartphone
  - D a mobile hotspot

- 7 Listen again and complete the conversation.

**Representative:** How can I help you, ma'am?

**Customer:** I need a new 1 \_\_\_\_\_  
\_\_\_\_\_ for my husband.

**Representative:** Sure. What type of phone does  
2 \_\_\_\_\_?

**Customer:** He just has a basic feature phone.  
But I think he's ready for something  
3 \_\_\_\_\_.

**Representative:** Well, we have some great 4 \_\_\_\_\_,  
like the new Continental.

**Customer:** Yeah, I read about that. Do you  
5 \_\_\_\_\_ for a new  
smartphone user?

**Representative:** Absolutely. It's a smartphone, but  
it's 6 \_\_\_\_\_ to use.

## Speaking

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

### USE LANGUAGE SUCH AS:

*How can I help ...?*

*I need a ...*

*Do you recommend ...?*

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

- a product that he or she needs
- what product he or she uses now
- your recommendation

**Student B:** You are a customer. Talk to Student A about a product you need.

## Writing

- 9 Use the advertisement and the conversation from Task 8 and the passage to fill out the customer feedback form.

PQ WiReLess

## Customer Feedback

Please tell us about your experience.

- Why did you come into the store today?  
I needed \_\_\_\_\_.
- What did the representative recommend?  
The representative recommended \_\_\_\_\_  
\_\_\_\_\_.
- Were you happy with the recommendation? Why or why not?  
I was \_\_\_\_\_ with the recommendation  
because \_\_\_\_\_.



# Glossary

- abbreviate** [V-T-U6] To **abbreviate** something is to make a shorter version of it by removing or omitting some parts, usually to use less space.
- access point** [N-COUNT-U9] An **access point** is something that provides an Internet connection to nearby devices.
- advanced** [ADJ-U1] If something is **advanced**, it is complex and has many features or capabilities.
- alarm clock** [N-COUNT-U3] An **alarm clock** is a device or application that makes a noise at a particular time, usually to wake someone or remind someone about something.
- alert** [N-COUNT-U12] An **alert**, or notification, is the process of informing someone about something important.
- answer** [V-T-U4] To **answer** a call is to accept an incoming call and establish a telephone connection.
- app** [N-COUNT-U10] An **app** is an electronic program that performs a particular function or set of functions.
- application store** [N-COUNT-U10] An **application store** is an electronic site where users can download applications, sometimes for free and sometimes at a cost.
- archive** [V-T-U15] To **archive** something is to save old data in a database or other secure location.
- area code** [N-COUNT-U4] An **area code** is a sequence of digits that all phone numbers in a particular region begin with.
- backup** [N-UNCOUNT-U13] **Backup** is the process of duplicating data from a device and storing them elsewhere, so that they are still available if the device fails.
- basic** [ADJ-U1] If something is **basic**, it is very simple and does not have many features or capabilities.
- battery life** [N-COUNT-U2] A **battery life** is the amount of time that a device remains functional without being plugged into an electrical power source.
- block** [V-T-U5] To **block** something is to prevent it from reaching a destination.
- browse** [V-T-U10] To **browse** something is to look through its available items without conducting a search for something particular.
- browser** [N-COUNT-U8] A **browser** is a program that allows a user to navigate the Internet.
- built-in** [ADJ-U9] If something is **built-in**, it is already part of the hardware in a particular device, and does not need to be added separately.
- calendar** [N-COUNT-U12] A **calendar** is a program that stores the dates and times of events or appointments.
- call forwarding** [N-UNCOUNT-U5] **Call forwarding** is a system that sends calls received on one phone number to a different phone number.
- call waiting** [N-UNCOUNT-U5] **Call waiting** is a system that alerts a phone user when he or she is on a call that a second call is being received on the phone.
- caller ID** [N-UNCOUNT-U5] **Caller ID** is a system that displays a caller's phone number or name on the screen of the call recipient's phone.
- camcorder** [N-COUNT-U3] A **camcorder** is a device that captures videos, or moving images.
- camera** [N-COUNT-U3] A **camera** is a device that captures photographs, or still images.
- capacity** [N-UNCOUNT-U13] **Capacity** is the amount of information a device can store or handle.
- cell phone** [N-COUNT-U1] A **cell phone**, or mobile phone, is a telephone that connects wirelessly to a network, and can be easily carried and used in many places.
- character** [N-COUNT-U6] A **character** is a single letter, number, or symbol.
- chat** [V-I-U7] To **chat** is to communicate informally with others, often with written messages through an electronic messaging service, such as text messaging or instant messaging.
- cloud** [N-COUNT-U13] The **cloud** is a system of data storage in which information is saved in a web-based environment and can be accessed by multiple devices or servers at any time.
- compatible** [ADJ-U10] If two things are **compatible**, they are able to function or be used together.
- confirm** [V-T-U15] To **confirm** something is to state definitely that it is true or desired.
- connect** [V-T-U9] To **connect** two things is to bring them together or cause them to communicate with each other.
- contact** [N-COUNT-U3] A **contact** is someone whose personal information, such as a phone number or email address, is stored in a device or database.

**CAREER  
PATHS**

## **WIRELESS Communications**

**Career Paths: Wireless Communications** is a new educational resource for telecommunications professionals who want to improve their English communication in a work environment. 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: Wireless Communications** addresses topics including mobile devices, mobile data, networks, troubleshooting tips, and billing disputes.

The series is organized into three levels of difficulty and offers a minimum of 400 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
- Complete glossary of terms and phrases

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

The **audio CDs** contain all recorded material.



**Express Publishing**

ISBN 978-1-4715-6556-4



9 781471 565564