REWARDS®

Secondary, 3rd Edition

Sample Pages Reviewer's Guide

Thank you for downloading samples of the *REWARDS Secondary, 3rd Edition*! This document describes what's included in this file and suggestions on how to approach your review. This PDF file includes bookmarks, which you may find helpful in navigating the sample.

In this file, you'll find the Teacher's Guide front matter along with the two complete lessons. First is a Preskill Lesson, Lesson 4. Next is a Strategy Lesson, Lesson 20.

- *Teacher's Guide* front matter, pages 2-31. The front matter provides a comprehensive overview of the program.

- *Teacher's Guide* pages. The *Teacher's Guide* is the core component of instruction. The Preskill Lesson (Lesson 4) is found on pages 32-51. The Strategy Lesson (Lesson 20) is found on pages 81-114.

- *Lesson and Illustrated Vocabulary Displays*, pages 52-71 for Lesson 4 and pages 115-147 for Lesson 20. Displays are a key ancillary to the teacher-directed instruction. References in the Instructional Steps headers in the *Teacher's Guide* pages guide their usage.

- *Student Book* pages, pages 72-77 for Lesson 4 and pages 148-156 for Lesson 20. Each student in *REWARDS Secondary* needs a print, consumable *Student Book*.

- Progress Monitoring *Check-up*, pages 77-80 for Lesson 4 and pages 157-160 for Lesson 20. These assessments are administered at the end of each unit with data used to guide instruction.

VOYAGER SOPRIS
LEARNING

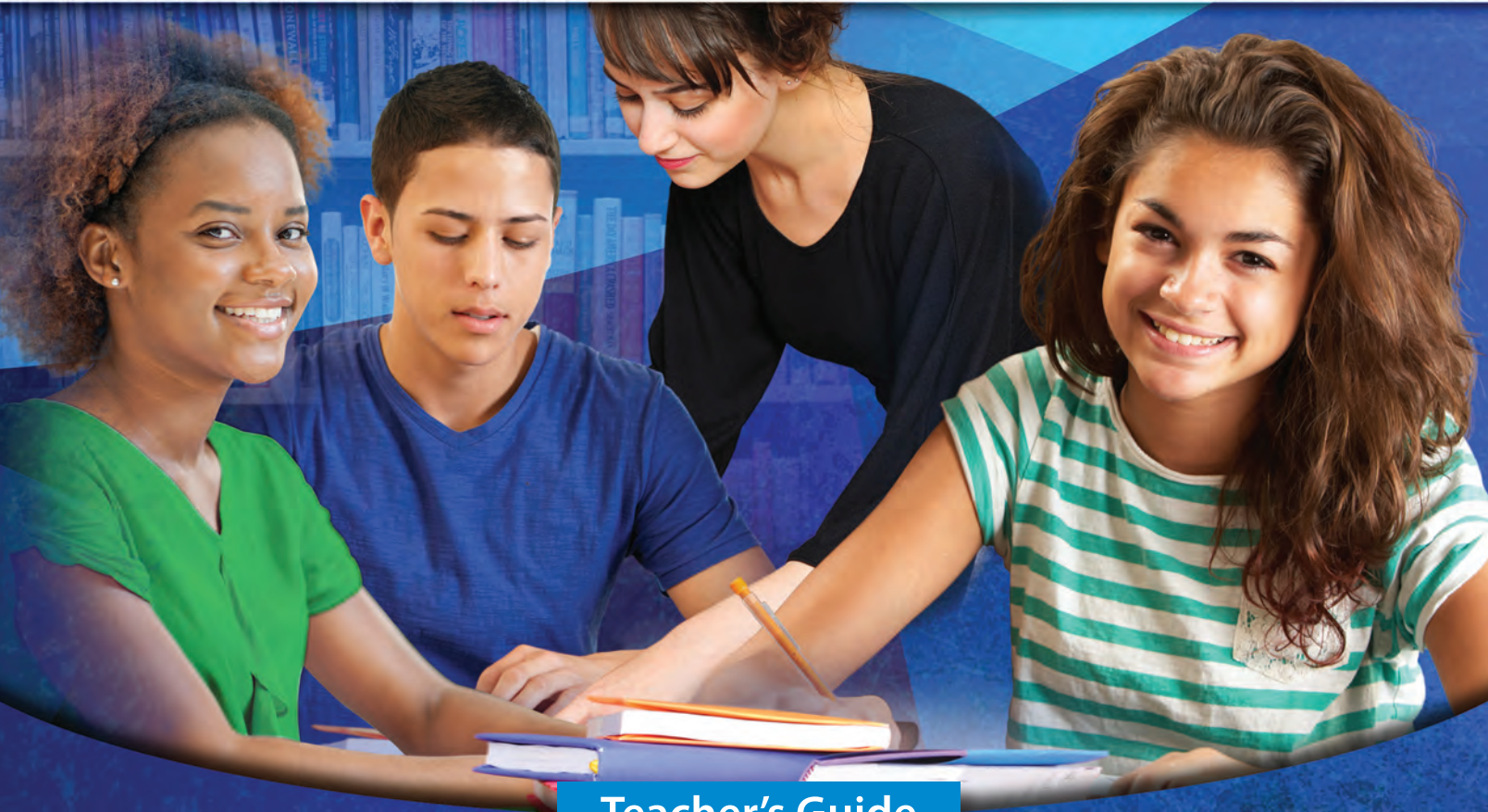# Reading Excellence: Word Attack & Rate Development Strategies

REWARDS®

SECONDARY

3rd EDITION

Rate Development for Fluency

Multisyllabic Word Reading

Academic Vocabulary

Teacher's Guide

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Welcome to *REWARDS*

REWARDS Secondary 3rd Edition is a research-validated, specialized reading program designed for middle and high school students in 6th grade or above.

Designed as a six-week intensive course, *REWARDS Secondary*:

- Teaches students a flexible strategy for decoding grade-level multisyllabic words,

- Increases their oral and silent reading rate (fluency),

- Expands their knowledge of general academic and domain-specific vocabulary, and

- Allows students to gain confidence in their reading ability.

Students gain competency in decoding, fluency, and vocabulary through the systematic application of explicit instruction (I do it. We do it. You do it.) and the gradual release of responsibility leading to independent strategy use.

Lessons are delivered daily: Preskill Lessons (1–12) can be completed in approximately 50–60 minutes each. Strategy Lessons (13–20) require 90 minutes each, or two class periods.

REWARDS stands for:

R—Reading
E—Excellence:
W—Word
A—Attack and
R—Rate
D—Development
S—Strategies.

Research studies have shown that students in *REWARDS Secondary*, including English Language Learners, make significant gains in decoding of multisyllabic words and reading rate (fluency) when taught in a wide variety of settings, including general education classrooms and small group interventions.

This new 3rd edition of *REWARDS Secondary* includes:

- Common Core State Standards alignment
- Meanings of prefixes and suffixes
- Expanded instruction on academic and content-area vocabulary
- Text-dependent comprehension questions
- An updated lesson format that supports ease of instruction
- Notations on explicit instruction procedures
- Progress monitoring assessments
- Digital tools and resources

Who Benefits from *REWARDS Secondary*

REWARDS Secondary is designed for use with students who:

- Are in grade 6 or above in middle school or high school.
- Have mastered the basic reading skills associated with first- and second-grade expectations.
- Read at the third-grade level or above but are unable to accurately and fluently read grade-level passages.
- Read at least 60 correct words per minute.
- Would benefit from systematic decoding, fluency, and vocabulary instruction.

REWARDS Secondary and the CCSS

As a result of participation in this program, students will:	Related Standards:
Apply the *REWARDS* strategies to decode previously unknown multisyllabic words containing two to eight word parts.	*(CCSS Foundational Skills Standards #3 and #3a)*
Accurately read more multisyllabic words found in grade-level science, social studies, and health textbooks and other classroom materials.	*(CCSS Foundational Skills Standards #3 and #3a)*
Expand their general academic and domain-specific vocabulary.	*(CCSS Language Standards #4 and #6)*
Read narrative and informational text not only accurately but also with an appropriate rate.	*(CCSS Foundational Skills Standard #4)*
Experience increased comprehension as their decoding accuracy, reading rate, vocabulary knowledge, and facility with text-dependent comprehension questions increase.	*(CCSS Informational Text Standard #1)*
Accurately spell more multisyllabic grade-level words.	*(CCSS Language Standard #2)*

As middle and high school students complete *REWARDS Secondary*, they develop the skills represented by the Common Core State Standards (CCSS) listed above and on the Unit Dividers. Most of the standards are from the sixth-, seventh-, and eighth-grade CCSS. A few are from the fifth-grade CCSS because the sixth-, seventh-, or eighth-grade CCSS assumes them. Students typically enter the *REWARDS Secondary* program reading at third-, fourth-, or fifth-grade reading levels. As they progress through the program, their skills improve up to two grade levels. On the Unit Dividers, these facts are represented by the phrase "Grade Levels 6-8; Reading Levels 3-5."

Settings Where *REWARDS Secondary* Can Be Taught

Because *REWARDS Secondary* is a six-week intervention program, it has been taught in several settings including:

1. **General Education Classes (Response to Intervention (RTI) - Tier 1, Core Instruction)**

   REWARDS Secondary has been used at the beginning of the school year to review and expand the decoding, fluency, and vocabulary skills of secondary students in general education classes in middle schools. The skills resulting from this word study allowed students more ease in reading informational and narrative text selections.

2. **Intervention Classes (Response to Intervention (RTI) - Tier 2 and Tier 3)**

   REWARDS Secondary has also been used with struggling readers in intervention classes, special education resource rooms, and specialized tutoring programs in middle schools and high schools. However, if these older students would benefit from a more gradual introduction to skills, easier passages, and more practice, a parallel program, *REWARDS Intermediate*, can be used in intervention classes.

3. **Intensive Intervention Programs (summer school programs, after-school programs)**

   REWARDS Secondary has proven to be a very effective intervention program when used after school or during summer school. Because the program consists of only 20 lessons, it is a perfect match to summer school.

Instructional Sequence

This chart outlines the sequence of skills introduced in *REWARDS Secondary 3rd Edition*. The Unit Dividers specify how the instructional activities in *REWARDS Secondary* align with the *Common Core State Standards for English Language Arts.*

	Unit 1				Unit 2				Unit 3				
	1	2	3	4	5	6	7	8	9	10	11	12	
	Preskill Lessons (1–12)												
Decoding – Prerequisite Skills													
Pronunciation of Vowel Sounds	■	■	■	■	■	■	■	■	■	■	■	■	
Pronunciation of Prefixes & Suffixes	■	■	■	■	■	■	■	■	■	■	■	■	
Guided Reading of Multisyllabic Words	■	■	■	■	■	■	■	■	■	■	■	■	
Decoding – Multisyllabic Word Reading Strategy													
Strategy Instruction													
Guided Strategy Practice													
Unguided Strategy Practice													
Strategy Application in Sentences and Passages													
Encoding – Spelling of Multisyllabic Words													
Spelling Dictation	■	■	■	■	■	■	■	■	■	■	■	■	
Fluency – Rate Development													
Word Reading	■	■	■	■	■	■	■	■	■	■	■	■	
Sentences													
Passages													
Vocabulary													
Meanings of Prefixes and Suffixes	■	■	■	■	■	■	■	■	■	■	■	■	
General Academic Vocabulary	■	■	■	■	■	■	■	■	■	■	■	■	
Word Families	■	■	■	■	■	■	■	■	■	■	■	■	
Use of Context Clues													
Domain-Specific Vocabulary													
Comprehension													
Vocabulary	■	■	■	■	■	■	■	■	■	■	■	■	
Sentences													
Informational Text Passages													
Progress Monitoring													
Check-ups				■			■				■		
Fluency Timings													

	Unit 4				Unit 5			
	13	14	15	16	17	18	19	20
	Strategy Lessons (13–20)							

REWARDS Secondary Components

REWARDS Secondary consists of three major components:
1) *Student Book*, 2) *Teacher's Guide*, and 3) Online Materials, including Lesson and Illustrated Vocabulary Displays.

Student Book

The *Student Book* contains the student material used in the 20 teacher-directed lessons, including the Preskill Lessons (1–12) and the Strategy Lessons (13–20). All student materials needed for the lessons are found in the *Student Book*. Prefix and Suffix Reviews and Check-ups will be needed for the review and progress monitoring activities. They can be found online at **https://rewards.voyagersopris.com**. See pages F24–F25 for more information on *REWARDS Secondary* Online Teacher Resources.

Preskill Lesson Activities (Lessons 1–12)

In this program, students are taught a flexible strategy for decoding long words based on two realities of the English language: (1) Eighty percent of multisyllabic words contain at least one prefix or suffix; and (2) All decodable parts of a word contain vowels. Thus, the students are taught to identify prefixes, suffixes, and letters representing vowel sounds in the rest of the word to assist them in segmenting the word into manageable, decodable "chunks." The students are then taught to say the word parts and to say the whole word. No decoding strategy in English will yield accurate pronunciation of every word. Instead, the goal is to achieve a close approximation to the actual pronunciation and to correct that pronunciation using oral-aural language and context.

In *REWARDS Secondary*, students are initially taught a strategy containing overt behaviors (circling and underlining) so the teacher can monitor whether students are recognizing prefixes, suffixes, and vowels.

The steps of this *overt strategy* include:

Overt Strategy
1. Circle the prefixes.
2. Circle the suffixes.
3. Underline the vowels.
4. Say the parts of the word.
5. Say the whole word.
6. Make it a real word.

Because students would not be expected to stop reading when encountering a multisyllabic word in order to circle the prefixes and suffixes and underline the vowels, circling and underlining behaviors are gradually faded. In the end, students use the following *covert strategy*.

The steps of this strategy include:

Covert Strategy
1. Look for prefixes, suffixes, and vowels.
2. Say the parts of the word.
3. Say the whole word.
4. Make it a real word.

As you would expect, many students would have difficulty learning this strategy, not because of the strategy's complexity, but rather because of unknown preskills, sometimes referred to as prerequisite skills. To apply these strategies, the students must be able to:

1. Say the correct vowel sound (phoneme) when shown the corresponding letter or letters (grapheme).

2. Say the sound (short sound) and name (long sound) for single vowel letters.

3. Underline vowel graphemes within words.

4. Sound out parts of words containing various vowel graphemes.

5. Say the correct pronunciation for common prefixes and suffixes.

6. Circle prefixes and suffixes.

7. Blend orally presented word parts into a word.

8. Adjust incorrect pronunciations of longer words when the words are presented in context.

In preparation for learning the *REWARDS* strategy for decoding multisyllabic words, the activities in Lessons 1–12 are dedicated to teaching the strategy's underlying preskills, thus heightening student success. The structure of the activities is held constant in each of the Preskill Lessons with only the content varying from lesson to lesson. The consistent activities and instructional procedures benefit both the teacher and the students. The teacher becomes more and more adept at delivering the lessons using a brisk pace, and the students can attend to the content of the lesson rather than the instructional procedures.

Preskill Lesson Activities (Lessons 1–12) continued

Each preskill activity in Lessons 1–12 is described on pages F12–F14, using the Lesson 4 activities from the *Student Book* as examples. Allow approximately 50–60 minutes for each Preskill Lesson.

Activity A: Oral Activity - Blending Word Parts into Words

- *Activity*: Students blend orally presented word parts (e.g., the teacher says *re con sid er*) into real words (e.g., the students say "reconsider"). The practice words are later included in decoding activities.

- *Rationale*: The ability to orally blend word parts into words directly transfers to decoding of multisyllabic words in which each part is decoded and pronounced and then the parts are blended into a real word.

Activity B: Vowel Combinations

- *Activity*: Students say the major sounds for high-frequency vowel combinations (**ay, ai, au, er, ir, ur, ar, a-e, o-e, i-e, e-e, u-e, oi, oy, or, ee, oa, ou**) and the major and minor sounds for **ow** (*low, down*), **oo** (*moon, book*), and **ea** (*meat, thread*). See Appendix C for two charts that show vowel combinations and corresponding key words; one is alphabetized, and the other lists vowel sounds in the same order as they are introduced across lessons.

- *Rationale*: Students are more likely to make errors on vowel sounds than on consonant sounds. Thus, vowel combinations are explicitly taught and reviewed to promote accurate and quick production of vowel sounds when decoding multisyllabic words.

Activity C: Vowel Conversions

- *Activity*: Students say the sound (short sound) and then the name (long sound) for the vowel letters **a**, **i**, **o**, **u**, and **e**. (This order of introduction was used to separate the easily confused sounds of **i** and **e**.)

- *Rationale*: When these single vowel letters occur in words, the word is generally recognized using the sound (short sound) of the letter. When the word is not recognized, the name (long sound) for the letter can be used instead while applying the flexible *REWARDS* strategy. The short vowels sounds and their key words are also listed on the two charts in Appendix C.

Lesson 4

ACTIVITY A: Oral Activity—Blending Word Parts Into Words

ACTIVITY B: Vowel Combinations

oi	oy	or
(join)	(boy)	(torn)

1	ay	oy	ai	er	ar	or
2	au	oi	ur	i - e	oy	ai
3	ir	e - e	oy	o - e	u - e	au

ACTIVITY C: Vowel Conversions

i	u	o	a

ACTIVITY D: Reading Parts of Real Words

1	moil	saunt	lert	bord
2	ploy	mur	stub	do*
3	ster	cott	port	scape
4	tor	stroy	vide	mu*

Lesson 4   REWARDS Student Book **15**

Activity D: Reading Parts of Real Words

- *Activity*: Students read parts of real words (e.g., *plete, tise, crim*) that contain previously taught vowel sounds. Although these appear to be nonsense words, they are actually parts of multisyllabic words that students will encounter later in the program.

- *Rationale*: The purpose of this activity is to provide students with decoding practice using recently introduced vowel graphemes in short word parts before using the knowledge in more challenging multisyllabic words.

Activity E: Underlining Vowels in Words

- *Activity*: Students locate and underline vowel graphemes within multisyllabic words (e.g., b<u>a</u>ckgr<u>ound</u>, t<u>u</u>rm<u>oil</u>). Then the teacher guides the students in reading the words by looping under each word part while asking students to say the parts and then the whole word.

- *Rationale*: Because each part of a long word contains a vowel grapheme, locating the vowel graphemes is very helpful in segmenting a word into decodable chunks. Thus, practice in reading long words, supported by careful teacher scaffolding, begins in the preskill lessons.

Activity F: Oral Activity - Correcting Close Approximations Using Context

- *Activity*: The teacher intentionally mispronounces a word in a manner similar to common decoding errors (e.g., *hot el*, stressing the *hot* in *hotel*), repeats the mispronunciation within a sentence (We stayed in a *hot el*.), and asks students to produce the accurate pronunciation of the word.

- *Rationale*: While enjoying this "detective" game activity, students are learning a critical decoding skill—the words we read must be real words that other English speakers have said or heard. Decoding of unknown words often yields a pronunciation that is a close approximation to the word, but not the exact pronunciation. These close approximations must be turned into real words using oral/aural language in conjunction with the passage context.

ACTIVITY E: Underlining Vowels in Words

1	turmoil	saunter	borderline
2	oyster	murmur	partnership
3	tornado	transport	landscape
4	topsoil	boycott	asteroid
5	sirloin	stubborn	corduroy

ACTIVITY F: Oral Activity—Correcting Close Approximations Using Context

ACTIVITY G: Prefixes and Suffixes

(per)mit	per
(un)fair	un
(a)fraid	a

Prefixes

1	pro	a	pre	com	re	un
2	in	ab	mis	con	pre	dis
3	be	com	a	de	ad	per
4	un	a	con	com	im	pre

Activity G: Prefixes and Suffixes

- *Activity*: Students listen to the pronunciation of prefixes and suffixes, practice saying these affixes, and review previously introduced affixes—the goal being accurate and quick pronunciation. Because many of these affixes are not pronounced as you would expect, they are introduced with a key word. See Appendix C for two charts showing affixes and corresponding key words; one list is alphabetized, and the other lists affixes in the same order as they are introduced across lessons.

- *Rationale*: About 80 percent of multisyllabic words have one or more affixes. Thus, the ability to quickly identify and pronounce prefixes (e.g., **re**, **un**, **dis**) and suffixes (e.g., **tion**, **al**, **able**) facilitates the accurate, fluent decoding of long words. Knowledge of prefixes and suffixes also supports the spelling of multisyllabic words, determining the meanings of words and, in some cases, determining a word's part of speech.

Activity H: Circling Prefixes and Suffixes

- *Activity*: Students identify, circle, and pronounce prefixes and suffixes embedded within multisyllabic words. Then—with teacher assistance in segmenting—read words with prefixes and suffixes.
- *Rationale*: "Peeling off" the prefixes and suffixes is a critical part of the decoding strategy taught in this program that makes the task of reading long words significantly easier.

Activity I: Meanings of Prefixes and Suffixes

- *Activity:* Students are explicitly taught the meanings of high-frequency prefixes and suffixes and asked to locate words when given a definition that stresses the meaning of the affix (e.g., **not** loyal – **dis**loyal).
- *Rationale*: This activity shows students how the addition of a prefix or suffix to a root (base word, stem) can systematically alter the meaning of a word.

Activity J: Spelling Dictation

- *Activity:* The teacher dictates a lesson word; the students say the parts in the word and then write the word. The students then compare their spellings with the correct spelling of the word and cross out and rewrite any misspellings.
- *Rationale:* Many students who have poor decoding skills also have low spelling knowledge and are intimidated by long words. Decoding and encoding are also reciprocal processes; practice with one strengthens the other.

Activity K: Academic Vocabulary

- *Activity*: The meanings of four academic words are taught using the following instructional steps: 1) introduce the word, 2) provide a student-friendly explanation, 3) illustrate with examples, and 4) check for understanding.
- *Rationale*: Given that reading comprehension in the upper grades is highly related to a student's vocabulary, academic words (high-frequency words that occur in many domains) must be systematically taught and reviewed.

Alternative Activity K: Illustrated Academic Vocabulary

- *Activity:* Teachers may choose an alternative activity to replace the activity described above. The meanings of the four words are illustrated with photos and treated in more depth. Students receive additional information in this activity: a) part of speech, b) synonyms/antonyms, and c) a word family and a paragraph that includes the target word.
- *Rationale:* Many students will benefit from experiencing greater depth and the concreteness of photos while learning new vocabulary.

ACTIVITY H: Circling Prefixes and Suffixes

1	persist	unafraid	discomfort
2	unfit	provide	uncertain
3	record	umpire	undertake
4	predict	pertain	reconstruct
5	accuse	confirm	misconduct
6	invalid	portray	imperfect
7	alert	contrast	advertise

ACTIVITY I: Meanings of Prefixes and Suffixes

un = *not, opposite of*
in = *not, opposite of*
im = *not, opposite of*

a   (Line 2) **not fit**; not healthy

_____

b   (Line 6) **not valid**; not true or not acceptable, such as a driver's license that has expired

_____

c   (Line 6) **not perfect**; having flaws, such as a solution to a problem when the solution is not helpful

_____

Lesson 4   **REWARDS** Student Book   **17**

ACTIVITY J: Spelling Dictation

1		3	
2		4	

ACTIVITY K: Academic Vocabulary

1   **persist**—If you **persist** in doing something, you continue to do it, even though it is difficult or other people are against it.

2   **record**—If you **record** a piece of information or an event, you write it down, photograph it, or put it into a computer so that you or others can refer to it in the future.

3   **predict**—If you **predict** an event, you say ahead of time that it will happen.

4   **contrast**—If you **contrast** one thing with another, you show or tell about the differences between the two things.

Review

1   **betray**
2   **confine**
3   **respond**
4   **propose**

Strategy Lesson Activities (Lessons 13–20)

In Lessons 13–20, systematic review of the following preskills is provided to enhance student mastery: (1) saying sounds for vowel combinations, (2) saying the two sounds for single letter vowels, and (3) pronouncing prefixes and suffixes. Instruction on the meanings of affixes, academic vocabulary, and spelling of long words continues. Most importantly, all of the preskills are incorporated into the flexible decoding strategy that is the heart of this program. Students practice the strategy using word lists, complex sentences, and informational passages. The strategy activities included in Lessons 13–20 are described on pages F15–F19. Allow approximately 90 minutes for each Strategy Lesson.

Strategy Instruction (Lesson 13, Activity D)

- *Activity*: In this activity, the teacher demonstrates each step in the overt strategy, showing students the strategy steps while thinking out loud. Next, the teacher guides students in applying the strategy steps to the decoding of additional multisyllabic words.

- *Rationale*: When teaching any new skill or strategy, explicit instruction should be provided that includes modeling followed by guided practice. Because this is the most important activity in the program, you will need to carefully read the instructional procedures to ensure clarity.

Guided Strategy Practice (Lesson 13, Activity E)

- *Activity*: Students circle prefixes and suffixes, underline the vowels in the rest of the word, and read the words by parts, thus applying the strategy with less teacher assistance.

- *Rationale*: As with teaching any new strategy or skill, there should be a gradual release of responsibility in which teacher assistance is carefully faded. Also, an adequate amount of practice is necessary to take the skill beyond accuracy to automaticity.

ACTIVITY D: Strategy Instruction

1	propeller	construction
2	infection	suddenness
3	befuddle	inartistic
4	exterminate	generosity

ACTIVITY E: Guided Strategy Practice

1	expansion	mobility
2	container	effective
3	performance	consultant
4	excellence	intensity
5	distinction	instruction

ACTIVITY F: Spelling Dictation

1		3
2		4

Lesson 13   REWARDS Student Book **53**

Strategy Lesson Activities (Lessons 13–20) continued

Unguided Strategy Practice (Lesson 16, Activity E)

- *Activity*: In this activity, which begins in Lesson 16, students visually examine long words, looking for prefixes, suffixes, and vowels and determining the pronunciation of the word.

- *Rationale*: As an extension of the concept of "gradual release of responsibility," students use the covert *REWARDS* strategy to decode words independently, followed by teacher feedback on the pronunciation. If students have difficulty, they are encouraged to pick up their pencils and circle the prefixes and suffixes and underline the vowels so that they can segment the word into decodable chunks.

ACTIVITY D: Guided Strategy Practice

1	completely	immediately
2	tentatively	decompression
3	absorbent	discriminate
4	laminate	inflammable

ACTIVITY E: Unguided Strategy Practice

1	apartment	glamorously
2	impanel	refreshment
3	premature	dissatisfaction
4	reduction	astonishingly
5	distrustful	unmanageable

ACTIVITY F: Spelling Dictation

1		3
2		4

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ACTIVITY G: Meanings of Prefixes and Suffixes

in = in, into
im = in, into
pre = before

a (Activity D) **able to be** quickly **in flames**; could catch fire easily and burn rapidly, such as paper or gasoline

_____

b (Activity E) to enroll **in a panel**; to choose people to serve, such as on a jury

_____

c (Activity E) **before** it is **mature**; too early or not time yet, such as a baby born too early or naming the winner of an election before everyone has voted

_____

Word Reading Review (Lesson 16, Activity H)

- *Activity:* In this unguided practice activity, students read multisyllabic words that were introduced in previous lessons, figuring out the pronunciation of the words by examining the affixes and vowels within the words. If students have difficulty on any word, they can use the overt strategy of circling the affixes and underlining the vowel letters.

- *Rationale*: This activity promotes movement from the overt *REWARDS* strategy of circling and underlining to the metacognitive, covert decoding strategy that will be used in daily reading even after finishing the *REWARDS* program.

ACTIVITY H: Word Reading Review

1	instructor	investigation
2	amendment	unreasonable
3	informative	intermission
4	intolerable	unprofessional
5	potential	administrative

Sentence and Passage Reading (Generalization Activities)

- As you have probably already experienced when teaching various strategies to your students, the challenge is not always teaching the strategy but getting students to use the strategy. For this reason, specific generalization activities are included to promote generalization of the strategy to daily reading. In Lessons 13–20, students practice reading sentences laden with multisyllabic words. In the same eight lessons (13–20), students practice their multisyllabic word reading strategies while reading interesting informational passages.

Sentence Reading (Lesson 13, Activity H)

- *Activity*: Initially, the generalization practice involves reading sentences containing many multisyllabic words that either were introduced in the lessons or could easily be figured out with the skills that students learned in the first 12 lessons. With each sentence, students first read silently, allowing them time to apply the *REWARDS* strategy to any particularly difficult words. Then students read orally so the teacher and students can monitor their reading accuracy and provide feedback. Three oral reading options are suggested: choral reading with the teacher, partner reading, and calling on an individual to read if the group size is small. Two optional procedures can augment the sentence reading: a) responding to text-dependent questions on sentence content, and b) determining the meaning of an unfamiliar word using the context clues.

- *Rationale*: This activity provides additional word reading practice within sentences similar to those found within textbooks and other classroom materials, promoting generalization of the *REWARDS* strategies to daily reading.

ACTIVITY H: Sentence Reading

1. The dancer's performance was so artistic that I was sure I had never seen such excellence.

2. Although the propeller had been effective, it stopped with great suddenness.

3. The inspector checked the construction for perfection before we moved into the house.

4. Once the infection has spread, everyone needs instruction on how to get well.

5. Although scientists have learned a lot about hurricane prediction, they cannot predict the intensity of these storms.

6. Can you exterminate the ants before they consume all the food?

7. The expert told the basketball players how to befuddle the other team.

8. The container leaked; it was not effective for liquid matter.

9. An inartistic person completed that awful painting!

10. Seemingly, the new construction will result in expansion of the school.

*11. The food <u>consultant</u> helped the students plan a delicious dinner.

*12. The city awarded a medal of <u>distinction</u>, or excellence, to the police department for marvelous crime prevention.

Content-Area Vocabulary (Lesson 13, Activity I)

- *Activity*: Prior to passage reading, the teacher tells students the pronunciation of some difficult words and leads them in applying the *REWARDS* strategy to other difficult-to-pronounce words. In addition, explanations of all of the words are presented, with more extensive instruction given on four word meanings critical to the passage.

- *Rationale*: Given that passage comprehension is related to both accuracy of decoding and knowledge of vocabulary, students are explicitly taught the pronunciation of challenging words and the meaning of difficult academic and domain-specific vocabulary.

ACTIVITY I: Content-Area Vocabulary

List 1

1	caribou	*n.*	**Caribou** are members of the deer family, related to reindeer and elk.
2	Porcupine caribou	*n.*	**Porcupine caribou** were named after the Porcupine River.
3	ecosystem	*n.*	An **ecosystem** includes all the plants and animals that live in a certain area along with the relationships they have with each other and with their environment.
*4	organisms	*n.*	**Organisms** are plants or animals, including ones so small you cannot see them without using a microscope.
5	endangered species	*n.*	An **endangered species** is a species, or specific kind of animal or plant, that may die out.
6	lichen	*n.*	A **lichen** is a simple plant that forms a branching or crust-like growth on rocks, tree trunks, or walls.
*7	resources	*n.*	**Resources** are things such as land, minerals, plants, and animals that people have available to them and can use to meet their needs.

List 2

1	century	*n.*	A **century** is 100 years.
2	migrate	*v.*	When birds, fish, or animals **migrate**, they move from one place to another, usually during a particular season, to find a place for breeding or to find food.
3	populate	*v.*	If people or animals **populate** an area, those people or animals live there, often in large numbers.
4	survive	*v.*	If you **survive** in difficult circumstances, you manage to live or continue in spite of those circumstances.
5	predator	*n.*	A **predator** is an animal that kills and eats other animals (its prey).
*6	balance	*n.*	A **balance** is a situation in which all the parts are equal in strength or importance.
*7	appear	*v.*	If someone or something **appears**, they become visible or come into your sight.

Passage Reading and Comprehension (Lesson 13, Activity J)

- *Activity*: After the passage preparation, students are guided in reading the passage. They read the passage segment by segment, first reading each segment silently and then orally and answering foundation and higher-order, text-dependent questions by identifying evidence or information in the passage.

- *Rationale*: The purpose of this activity is to promote generalization of the decoding and comprehension strategies to grade-level informational text reading.

Rate Development (Lesson 13, Activity K)

- *Activity*: After practicing the passage for the purpose of accuracy, the students whisper-read the passage for a one-minute Cold Timing, noting their ending point. This is then repeated one or two times, with students trying to read beyond their initial ending point. Next, students exchange books, listen to their partners read for a one-minute Hot Timing, noting their ending point again. At the close of this activity, students graph their Cold and Hot timings on the Progress Monitoring Graph at the back of the *Student Book.*

- *Rationale*: Oral reading rate can be increased through multiple rereadings of passages for which the reader already has a high level of accuracy. Several studies have determined that students' oral reading rate is correlated with reading comprehension. As students read words more fluently, they can turn their attention from decoding to comprehension.

ACTIVITY J: Passage Reading and Comprehension

Ecosystems and Porcupine Caribou

Each member of an ecosystem has a part to play. In a stable
13 ecosystem, predators and prey must stay in balance. For example,
23 when snakes eat mice, the snakes help keep the numbers of mice in
36 check. On the other hand, if the snakes eat too many mice, it will
50 affect all of the animals that depend on mice for food. **(#1)**
61 All organisms must get their needs met so they can survive. For each
74 species in an ecosystem, survival of the population depends on food,
85 shelter, and safety. If the members of a species don't find enough to eat,
99 the number of animals decreases. If predators kill too many animals in
111 the species, the number also decreases. A species that decreases too
122 much could become an endangered species. These are likely problems
132 for any ecosystem. Let's look at caribou as an example. **(#2)**
142 Caribou are larger than deer but smaller than elk. Even though
153 caribou belong to the deer family, both males and females have
164 antlers. Many types of caribou live in the Arctic. The Porcupine
175 caribou herd lives near the Porcupine River, which is how they got
187 their name. The river runs through the northwestern part of Canada
198 and the northeastern part of Alaska. When the Porcupine caribou
208 migrate, many thousands of caribou move back and forth between the
219 mountains in Canada and the coastal plains in Alaska. They cross the
231 Porcupine River. **(#3)**
233 Porcupine caribou mainly eat plants called *lichen*, which they
242 find by digging holes in the snow. When the snow is too deep in the
257 mountains, it is difficult for them to find lichen and other plants. The
270 deep snow, as well as their hunger, spurs them to move in order to
284 survive. Being able to find food is critical. So, in the spring, the caribou
298 come down from the mountains and travel north to the coastal plains
310 to find food and have their calves. They head for a specific calving
323 area on the northern coast of Alaska. In this area, the snow tends to
337 melt the earliest and new plants appear soonest. There will be plenty
349 for the mothers and baby caribou to eat. **(#4)**
357 But, new caribou calves also means food for grizzly bears and other
369 predators that live in the mountains. Calves are easier to catch than
381 adult caribou. So the bears follow the Porcupine caribou to the calving
393 area and wait for the calves to be born. If the grizzlies kill too many
408 calves, it disturbs the ecosystem. **(#5)**

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413 For centuries, a group of humans has also depended upon the
424 Porcupine caribou herd for survival. The group goes by the name
435 Gwich'in, which means *the people*. The Gwich'in are First Nation
445 members whose villages are situated along the Porcupine caribou's
454 migration route. The Gwich'in hunt the caribou as they go by. They
466 rely on the caribou's meat as a major source of food for the long,
480 cold, snowy winter. They also need the caribou as a resource for
492 making shelters, clothes, and tools. The Gwich'in, scientists, and
501 others are concerned that the Porcupine caribou's numbers are in
511 decline. If the caribou were to disappear, the Gwich'in would lose
522 their way of life. **(#6)**
526

ACTIVITY K: Rate Development

Cold Timing ⬚   Practice 1 ⬚

Practice 2 ⬚   Hot Timing ⬚

Student Book Resources

At the end of the *Student Book*, a number of resources are provided for students to use as they complete lessons, study for the progress monitoring Check-ups, or apply the strategies to other reading experiences. These resources include:

- **Strategies for Reading Long Words**: A chart listing the steps in the overt and covert *REWARDS* decoding strategies
- **Student Reference Chart: Prefixes, Suffixes, and Vowel Sounds**: To be used if necessary when applying the overt *REWARDS* decoding strategy
- **Spelling Words**: To be used to review spellings of words in anticipation of a Check-up
- **Meanings of Prefixes and Suffixes**: To be used to determine meanings of unknown words containing high frequency affixes and to be used to study for Check-ups
- **Vocabulary Log**: **Academic Vocabulary**: To be used to review and study vocabulary
- **Vocabulary Log**: **Content-Area Vocabulary**: To be used to review and study vocabulary
- **Progress Monitoring Graph**: To record one-minute timings and Check-up scores

Teacher's Guide

The *Teacher's Guide* contains 20 teacher-directed lessons, including the Preskill Lessons (1–12) and the Strategy Lessons (13–20), unit dividers, and appendices containing additional resources that support teaching the program and monitoring student progress. The *Teacher's Guide* is provided in print format or as a digital e-book.

Teacher-Directed Lessons

Twenty comprehensive teacher-directed lessons provide information for the teacher to ensure successful implementation of the program. Each lesson activity contains the following:

- **Objectives**
  The objectives state the student outcomes expected from the activity.

- **Activity Summaries**
  These summaries list in general terms the teacher actions during each activity.

- *Student Book* **Replications**
  When looking at the *Teacher's Guide* pages, you will see exactly what the students are seeing in the *Student Book*.

- **Display Icons**
  Each lesson requires teaching stimuli that are found in the Online Displays. When the Display icon is shown at the beginning of each lesson activity, the teacher must refer students to the Display. The nature of the Displays and how to use them are carefully explained on pages F25, F28–F29.

- **Instructional Steps**
  The Instructional Steps are scripts that outline suggested teacher wording and student responses. The scripts were developed for the formal research projects and field-testing of the REWARDS program to ensure fidelity of treatment among teachers. Similarly, use of the Instructional Steps strengthens implementation of the program. While it is not necessary to match the wording of the script perfectly, the closer your teaching is to the Instructional Steps the more likely the desired results will occur.

- **Corrections**
  When an individual student or member of the group makes an error, follow the correction procedures suggested in the sidebars. All errors should be corrected immediately and students should be asked to make an accurate response following the correction.

ACTIVITY D: Guided Strategy Practice

Student Objective: under teacher guidance, to circle prefixes and suffixes, underline vowels, and read long words, first part by part silently and then as a whole word aloud

Activity Summary

- Have students circle prefixes and suffixes and underline the vowels.
- Assist students in checking their work.
- Have students sound out each word to themselves and then say the whole word aloud.

1	completely	immediately
2	tentatively	decompression
3	absorbent	discriminate
4	laminate	inflammable

Instructional Steps / Display 16.1

1. Look at page 77. Find Activity D.
2. It's your turn to use the *REWARDS* strategy. Circle prefixes and suffixes and underline the vowels. Look up when you are done. Pause and monitor.
3. Show Display 16.1. Check and fix any mistakes. Pause and monitor.
4. Go back to the first word. Pause. Sound out the word to yourself. Put your thumb up when you can read the word. Be sure that it is a real word. Pause. What word? **completely**
5. Next word. Pause. What word? **immediately**
6. Repeat Step 5 with the remaining words in Activity D.
7. Optional Have students read a line to the group or to a partner.

CORRECTION

If students make an error on the whole word but it's close, prompt them to make it a real word. Otherwise, tell them the word and have them repeat it. Then loop under each word part and ask students to read the parts and then the whole word.

EFFECTIVE INSTRUCTION

Guiding student performance: In the "I do it." "We do it." "You do it." instructional framework, the "We do it" process is designed to promote student success. However, this guided practice must be gradually faded until students can perform without scaffolding.

- **Effective Instruction**
  Throughout the *Teacher's Guide*, reminders about effective and efficient instruction are provided in the sidebars. You can use these reminders when teaching these and all other lessons in the classroom.

Unit Dividers

The 20 lessons have been divided into 5 units, each beginning with a Unit Divider. On the unit dividers you will find a listing of: **A** the *objectives* for the lesson, **B** the corresponding *Common Core State Standards*, **C** a description of the *Check-up* to be administered at the end of the unit, **D** the *vocabulary instruction* options, **E** the *preparations* to make for the lessons that comprise the unit, including the Displays and the Prefix and Suffix Review Sheets to download, and **F** *text treatment* descriptions that explain the uses of black, blue, bold, and italic text in the *Teacher's Guide*.

Unit 1: Lessons 1–4

Content of Lessons	❶	❷	❸	❹	Related Common Core State Standards (Grade Levels 6-8; Reading Levels 3-5)
Decoding—Prerequisite Skills					*REWARDS*: Students are taught preskills for reading multisyllabic words as referred to in Foundational Skill #3 and #3a.
Pronunciation of Vowel Sounds	✓	✓	✓	✓	**RF.5.3**: Know and apply grade-level phonics and word analysis skills in decoding words.
Pronunciation of Prefixes & Suffixes	✓	✓	✓	✓	**RF.5.3a**: Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
Guided Reading of Multisyllabic Words	✓	✓	✓	✓	
Encoding					*REWARDS*: Students are taught a strategy for spelling grade-level multisyllabic words as outlined in Language Standard #2.
Spelling of Multisyllabic Words	✓	✓	✓	✓	**L.5.2e**: Spell grade-appropriate words correctly, consulting references as needed.
Fluency—Rate Development					*REWARDS*: Students reread multisyllabic words to build reading rate as outlined in Foundational Skill #4.
Word Reading Rate Building	✓	✓	✓	✓	**RF.5.4**: Read with sufficient accuracy and fluency to support comprehension.
Vocabulary					*REWARDS*: Students are directly taught the meaning of parts of words, general academic vocabulary, and related words in response to Language Standard #4 and #6.
Meanings of Prefixes & Suffixes	✓	✓	✓	✓	**L.6.4, L.7.4, L.8.4**: Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 (or grade 7 or 8) reading and content, choosing flexibly from a range of strategies.
General Academic Vocabulary	✓	✓	✓	✓	**L.6.6, L.7.6, L.8.6**: Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Lessons 1–4

A

B — **RF.5.3**: Know and apply grade-level phonics and word analysis skills in decoding words.

RF.5.3a: Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.

Progress Monitoring Check-up

At the end of Lesson 4, you will be giving students a Progress Monitoring Check-up that covers the content of Lessons 1-4. As you and the students complete these four lessons, you may wish to provide extra practice and rehearsal on some items in preparation for the Check-up. Students can study the Spelling Words and Vocabulary Logs in the back of the *Student Book*. In addition, have students review the meanings of prefixes and suffixes using the review sheets provided. Both the Check-up and the Prefix and Suffix Review Sheets can be found in the Online Teacher Resources.

C

D

Vocabulary Instruction Options

There are two versions of Academic Vocabulary instruction, varying on the intensity of the instruction and the amount of embedded practice. Select the version that matches your students' needs and the amount of instructional time you have.

Option 1: Less Intensive Instruction. If your instructional time is limited and/or your students' primary challenge with words is decoding rather than meaning, teach "Activity K: Academic Vocabulary" as outlined in the *Teacher's Guide* and parallel student materials.

Option 2: More Intensive Instruction. If your students would benefit from expanded vocabulary instruction and visual representations of the words, select the second version labeled "Alternative Activity K: Illustrated Academic Vocabulary." This activity is also outlined in the *Teacher's Guide* and parallel student materials, but you must download online displays to accompany the activity.

Note: If you select Option 2, you may choose to teach Option 1 the next day in order to review.

Preparation Needed

- Examine the *Student Book*, pages 1 to 18.
- Review Lessons 1–4 in the *Teacher's Guide*, pages 3 to 78.
- Secure a stopwatch or stopwatch app to use for the timed activity.

Log onto the Online Teacher Resources to:
- Download Lesson Displays.
- (For Vocabulary Option 2) Download Lesson and Illustrated Vocabulary Displays (combined).
- Download Prefix and Suffix Review Sheets for Lessons 2 and 4.
- Download the Check-up and make one copy for each student.

E

Text Treatment Notes

- Black text signifies teacher script (exact wording to say to students).
- Blue text signifies directions or prompts for the teacher.
- Blue text that is bold signifies correct student responses.
- Blue text that is italic signifies possible student responses when variable.

F

Teacher's Guide Resources

In the appendices of the *Teacher's Guide*, you will find the following resources. For more detailed explanations of these resources, see the corresponding page numbers. These resources are also available at **https://rewards.voyagersopris.com**. See pages F24–25 for more information on *REWARDS Secondary* Online Teacher Resources.

- **Thumbnails of Lesson Displays**, Appendix A, page A1. Includes all the Lesson Displays except for Illustrated Vocabulary Displays, which are only available online

- **Strategies for Reading Long Words**, Appendix B, page A41. A replica of the classroom poster, which can be copied and distributed to students at the beginning of Lesson 13

- **Reference Charts: Prefixes, Suffixes, and Vowel Sounds**, Appendix C, page A43. Includes (1) a Student Reference Chart, a replica of the classroom poster, which can be copied and distributed to students at the beginning of Lesson 13, and (2) a Teacher Reference Chart, with prefixes, suffixes, and vowel sounds listed in the order that they are introduced

- **San Diego Quick Assessment**, Appendix D, page A48. Used for screening appropriate students to be placed in the program. See Assessment, page F31.

- **Progress Monitoring Assessments**, Appendix E, page A53. Includes Multisyllabic Word Reading Fluency Pretest/Posttest, Passage Reading Fluency Pretest/Posttest, Pretest/Posttest Summary Chart, and Progress Monitoring Graph. See Assessment, page F31.

- **Active Participation**, Appendix F, page A64. Increase student engagement with Best Practices for Eliciting Responses and Alternative Practice Activities

- **Word List for *REWARDS Secondary***, Appendix G, page A67. A list of all multisyllabic words used in the program

- **Research on *REWARDS***, Appendix H, page A84. Current research base for all *REWARDS* reading programs
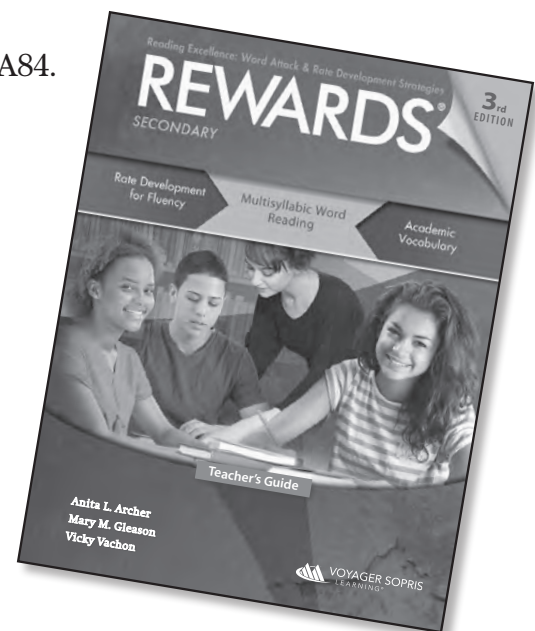
Online Teacher Resources

A number of essential and ancillary materials can be accessed online at **https://rewards.voyagersopris.com**. These materials are licensed at the individual user level and a license is provided with the purchase of the *Teacher's Guide.* If you did not receive instructions on how to access, please contact **support@voyagersopris.com**. Use the online material to prepare for class, maximize instruction, and monitor student progress.

Assessments

Throughout the program (see Unit Dividers), students are given unit Check-ups that tap the following skills: reading of multisyllabic words, spelling of multisyllabic words, recognizing meanings of academic vocabulary, and applying meanings of prefixes and suffixes. The Check-ups can be printed out and administered in a group setting, allowing the teacher to monitor student progress.

In preparation for the Check-ups, students will benefit from (a) studying by using the resources in the back of the *Student Book* and (b) completing Review Sheets found online that assist students in reviewing the application of the meanings of prefixes and suffixes. The Pretest/Posttest and San Diego Quick Assessment can also be found online at **https://rewards.voyagersopris.com**.

Displays

Lesson and Illustrated Vocabulary Displays essential to teaching *REWARDS Secondary* are available online as electronic files at **https://rewards.voyagersopris.com**. Displays are organized online by unit. See pages F28 and F29 for flexible options of how to access and use Displays for classroom instruction.

Lesson Displays

- In lessons, this Display icon will indicate when you need to utilize a Lesson Display for modeling, guided practice, or feedback.

Display icon >

Display 10.2

ACTIVITY H: Circling Prefixes and Suffixes

1. in(flu)ence, im(port)ance, postpone(ment),
2. re(bell)(ion), in(ex)pen(sive), dis(in)fect(ant),
3. im(medi)(ate), de(pend)ent, in(con)veni(ent)ly,
4. con(tin)ent, in(form)al(ity), pre(limin)ary,
5. en(dur)ance, ex(ub)er(ant), en(tertain)ment,
6. difficult(y), in(cid)ent(al)ly, de(termina)tion,
7. ex(peri)ence, in(herit)ance, un(employ)ment,

Display 11.10

strenuous — word family

- strenuous *–adjective*
- strenuously *–adverb*

Even though Samuel is used to exercise, playing basketball and riding a bike uphill are **strenuous** for him. He really sweats when he **strenuously** lifts boxes or shovels snow.

Illustrated Vocabulary Displays

- In Lessons 1-12, electronic Displays are provided for teaching the four academic vocabulary words. These optional Displays provide expanded vocabulary instruction and use pictures to illustrate the definitions, examples, and word families. In the last eight lessons, Displays are provided for teaching the content-area, domain-specific vocabulary.

Additional Teacher Resources

Additional Teacher Resources, including Reference Charts, replicas of the two classroom posters, and the Certificate of Completion are also found online at **https://rewards.voyagersopris.com**.

VPORT Data management for *REWARDS* is offered through Voyager Sopris Learning's robust online VPORT data management system. If you are interested in online data management for *REWARDS*, please contact our support team at **support@voyagersopris.com**.

Getting Started

Screen and/or Pretest

As previously stated, *REWARDS Secondary* was designed for secondary students in grade 6 or above who would benefit from instruction focused on a) decoding long words, b) increasing reading rate, and c) expanding academic vocabulary. Students participating in this program should read at the third-grade reading level or higher and read at least 60 correct words per minute.

Any form of assessment that allows you to designate a grade level for students' current skills (e.g., Woodcock Reading Mastery Tests, Gates-MacGinitie Reading Test) can be used to determine the appropriateness of *REWARDS Secondary* for your students. If you do not have grade-level reading data, administer the *San Diego Quick Assessment* (Appendix D), carefully following the prescribed administration procedures.

Similarly, you can utilize any assessment of reading fluency (rate) that yields the number of correct words per minute when reading grade-level text. If you do not have fluency scores, administer the *Passage Reading Fluency Pretest/Posttest* (Appendix E), following the directions provided.

If students read below the 3.0 reading level or read fewer than 60 words per minute, they should not be placed in *REWARDS Secondary*. Instead, these students would benefit from a program that explicitly and systematically increases their word identification skills for one- and two-syllable words and provides them with fluency practice at their instructional level before moving into *REWARDS Secondary*.

Form Instructional Groups

The size of a *REWARDS* instructional group is dependent on the students that you are serving. When *REWARDS Secondary* has been used in general education classes, all of the students with the exception of those that read below the third-grade level participate in the lessons. However, when *REWARDS Secondary* is used as a Tier 2 or Tier 3 intervention, you should increase the intensity of instruction by limiting the size of the group to 2 to 12 students.

Collect Pretest Data

In order to determine the students' growth from this program, we suggest that you give each student two one-minute assessments before and after program implementation:

- The *Multisyllabic Word Reading Fluency Pretest/Posttest*, a specially designed measure of multisyllabic word reading fluency in which students read a list of long words for one minute, and
- The *Passage Reading Fluency Pretest/Posttest*, a one-minute assessment of passage reading fluency in which each student orally reads a grade-level passage while you record errors and determine the number of correct words read in a minute. The necessary materials and directions for administration of both summative assessments are found in Appendix E, page A53.

NOTE: If your school systematically collects passage reading fluency data throughout the year, you can use that data for the passage reading fluency pretest and posttest.

Prepare for the First Lessons

Because of the sequential nature of *REWARDS Secondary*, all students begin on the first lesson and the lessons must be taught in order. Before teaching the first four lessons, prepare by following these steps.

Step 1:   Procure the materials needed for instruction.

In order to provide instruction on this program, you will need a *Teacher's Guide*, one *Student Book* for each student, a stopwatch or stopwatch application, the online Displays and other online materials, and equipment needed for projecting the Displays on a screen (e.g., projector, computer, document camera, electronic tablet, overhead projector).

Step 2:   Decide on the intensity of vocabulary instruction.

Before you begin teaching *REWARDS Secondary*, make a decision concerning the intensity of the vocabulary instruction. If your instructional time is limited and vocabulary (the meaning of academic vocabulary) is not your students' primary challenge, teach the academic vocabulary as outlined in Activity K. However, if you are teaching English Language Learners or students with limited vocabulary, teach the Alternative Activity K: *Illustrated Academic Vocabulary* using the online Displays that provide pictures to augment each word's explanation, examples, and word families. If time permits, you may wish to teach both the Activity K and the Alternative Activity K: *Illustrated Academic Vocabulary* on subsequent days. Teaching both activities would provide multiple exposures to each word and increase the probability of mastery.

Step 3:   Follow these directions as listed on the first Unit Divider (pages 1 and 2).

a. Examine the lessons in the *Student Book* (pages 1 to 18).

b. Review the lessons in the *Teacher's Guide* (pages 3 to 78). Read through the lessons, attending particularly to the Instructional Steps. Following the Instructional Steps carefully in the initial lessons will strengthen the quality of instruction as you become familiar with the program.

c. Determine how you will use the Displays and access them.

There are a number of ways that the Displays can be used depending on the size of your group and the technology available to you. All alternatives require that a) students can view the Displays with ease, and b) you can write on the Displays as you model or provide feedback.

You will find the Displays within the Online Teacher Resources located at **https://rewards.voyagersopris.com**. See pages F24–F25 for more information on *REWARDS Secondary* Online Teacher Resources. You may download them by unit or by lesson. If you decided in Step 2 to teach the *Illustrated Academic Vocabulary*, you will download the Lesson and Illustrated Vocabulary Displays (combined). Otherwise, download only the Lesson Displays.

- **Download and project from your device:** Download the Displays directly to your computer or electronic tablet. Then use your preferred method to project the Displays and deliver instruction.

- **Download, print, and project from your device:** Download the Displays to your device. Then print the Displays and project them with a document camera or projector. This will allow you to write on the hard copies of the Displays as you model strategies or provide feedback. If your classroom is equipped with an overhead projector, you can transfer the hard copies of the Displays to overhead transparencies.

d. Download the Prefix and Suffix Review Sheets and make one copy for each student. Each unit has two review sheets that will assist students in practicing the use of prefix and suffix meanings in preparation for that part of the Unit Check-up. Directions and answer keys are provided online.

e. Download the Check-up and make one copy for each student.

f. Secure a stopwatch or stopwatch application. You will be using this during timed activities.
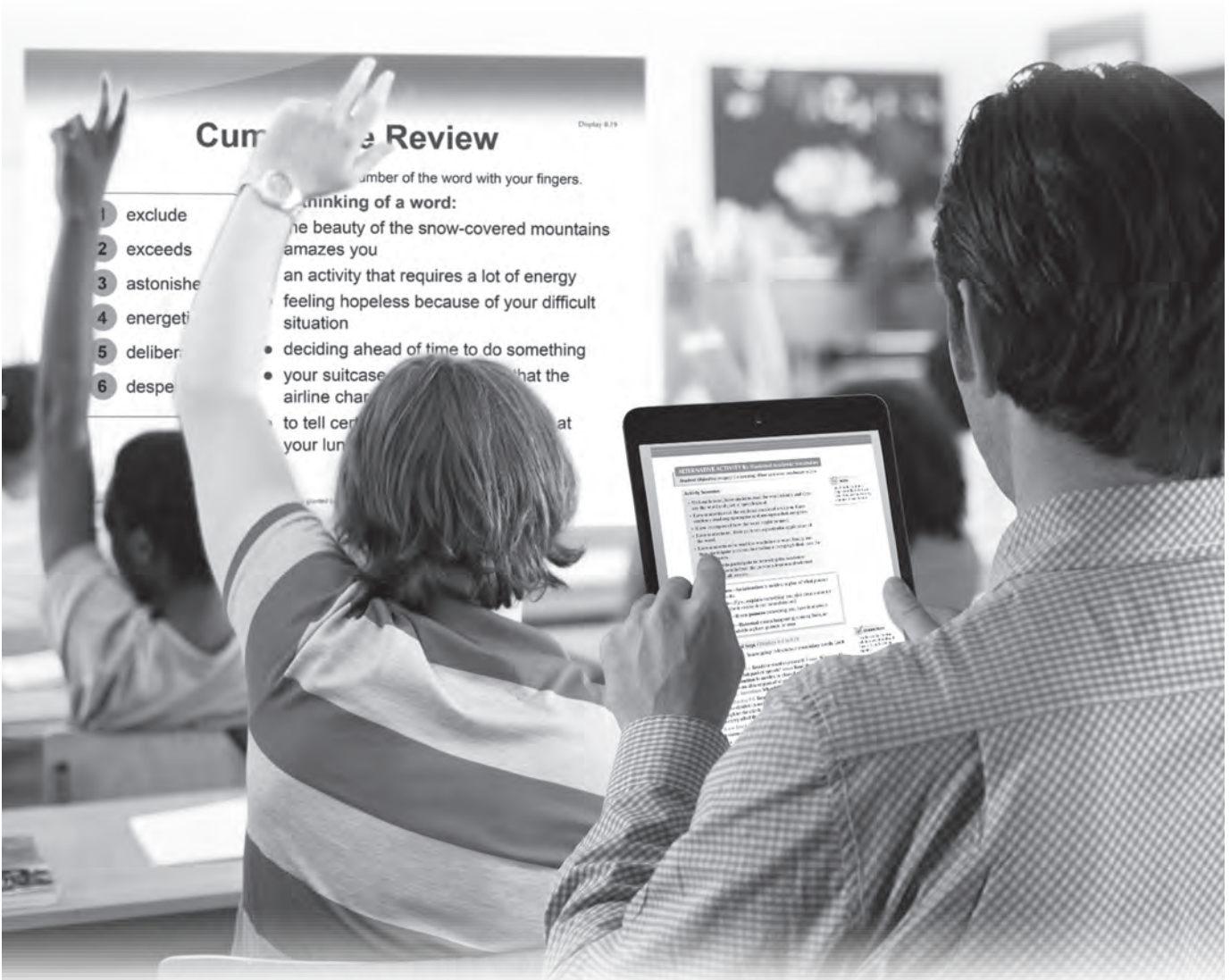
Teach the Lessons

The instruction provided in *REWARDS Secondary* is based on the following principles of explicit instruction (Archer & Hughes, 2011).

Principle ❶: Provide systematic instruction.

To optimize student gains, systematic instruction is embedded in all lessons and activities. This is particularly evident in the instructional routines used for teaching program skills and vocabulary. These are instructional routines that you can use when teaching other content.

When teaching skills and strategies (how to do something) to students, the following instructional steps are used:

a. **I do it**. The teacher carefully demonstrates the skill or strategy while articulating each step using clear and concise language.

b. **We do it**. The teacher guides students in performing the steps in the skill, initially providing a great deal of assistance and then gradually fading assistance as students demonstrate more proficiency. Approaches that fade assistance are often referred to as the gradual release of responsibility.

c. **You do it**. Next, the students perform the skill or strategy under the watchful eye of the teacher.

When vocabulary terms (what something is) are introduced, the instructional strategy contains the following steps:

a. Introduce the word, ensuring that students can correctly pronounce the word.

b. Provide a student-friendly explanation, a sentence explanation containing known words that is easy to understand.

c. Illustrate the word's meaning with verbal or visual examples.

d. Check students' understanding by asking questions on the word's use.

Principle ❷: Elicit frequent responses.

Throughout the lessons, students are frequently asked to respond to teacher questions or directives by saying, writing, or doing something. A number of active participation procedures are used for responding to questions (choral responses, partner responses, written responses) and for reading passages (choral reading, partner reading, individual turns). See Appendix F for descriptions of active participation procedures. Again, these practices can be used when teaching *REWARDS Secondary* and other content.

Principle ❸: Carefully monitor responses and provide feedback.

While teaching the program, carefully listen to and visually examine students' responses. When students are saying answers to partners or writing answers, move around the room, circulating and monitoring responses. When a student or a number of students make an error, provide a correction for the error using the correction procedures highlighted in the *Teacher's Guide*. Of course, acknowledgment for effort and consistent correct responses should also be provided.

Principle ❹: Maintain a brisk pace.

Use a rate of presentation that is brisk, but be sure to give a reasonable amount of thinking time when waiting for student responses. The pace should not be so slow that students get bored or so quick that students can't follow the instruction. A brisk pace is a product of thorough preparation and avoidance of digressions.

Principle ❺: Provide judicious practice.

In order to promote accuracy and automaticity in skill performance and subsequent retention, a great deal of practice is furnished in *REWARDS Secondary*. However, you may need to increase the amount of practice when students are having difficulty by having students reread a row after incorrect responses or engaging students in one of the auxiliary practice activities described in Appendix F. Based on performance data, you will adjust the lessons, proceeding forward when responses are accurate and providing additional review and practice when errors are occurring. While we do not recommend the repeating of whole lessons, adjusting the amount of practice and review within lessons and/or repeating certain parts of lessons is beneficial.

Assessment

When *REWARDS Secondary* is taught with fidelity, students can make significant improvement in their ability to decode multisyllabic words and read these words, as well as sentences and passages, with increasing fluency and comprehension. *REWARDS Secondary* provides the following assessment tools to help you place and track student progress throughout the program.

Screening	Progress Monitoring		
	Before program	**During program**	**After program**
• San Diego Quick Assessment	• Multisyllabic Word Reading Fluency Pretest/ Posttest	• Unit Check-ups covering the content of the lessons are provided after Lessons 4, 8, 12, 16, and 20.	• Multisyllabic Word Reading Fluency Pretest/Posttest
• Passage Reading Fluency Pretest/ Posttest	• Passage Reading Fluency Pretest/Posttest	• Fluency timings of passages in Lessons 13 through 20	• Passage Reading Fluency Pretest/Posttest

These assessments are available in the back of this *Teacher's Guide* and/or within the Online Teacher Resources at **https:// rewards.voyagersopris.com**. See pages F24–F25 for more information on *REWARDS Secondary* Online Teacher Resources.

Screening

San Diego Quick Assessment, Appendix D, page A48. This assessment tool can be used to gain a quick appraisal of a student's reading level to determine if they read at least at the third-grade reading level, the minimum level that is appropriate for this program. Use this assessment or any other that allows you to designate a grade level for students' current skills to determine which students would benefit from *REWARDS Secondary*.

Passage Reading Fluency Pretest/Posttest, Appendix E, page A59. Use this or any assessment of reading fluency (rate) that yields the number of correct words per minute when reading grade-level text in order to determine a student's reading level. Students need to be reading at least 60 correct words per minute or at the third-grade reading level to be placed in *REWARDS Secondary*.

Progress Monitoring

Before and After *REWARDS Secondary*

Multisyllabic Word Reading Fluency Pretest/Posttest, Appendix E, page A53. This tool is sensitive to student growth in the ability to read multisyllabic words both accurately and quickly. The words include words taught in the program as well as generalization words that contain the same elements (e.g., vowels, prefixes, suffixes) as those taught in the program. This one-minute timed reading should be given before and after the program to monitor student decoding growth.

Passage Reading Fluency Pretest/Posttest, Appendix E, page A59. The second major purpose of *REWARDS Secondary* is to increase reading rate as a step toward enhanced comprehension. Students' reading rates can be checked before and after the program using the grade-level passage provided. Another assessment of fluency rate can also be used.

Pretest/Posttest Summary Chart, Appendix E, page A61. Use this chart to record data from the Multisyllabic Word Reading Fluency Pretest/Posttest and the Passage Reading Fluency Pretest/Posttest or other fluency assessment given before and after the program.

During *REWARDS Secondary* Instruction

Progress Monitoring Graph, Appendix E, page A62. Use this chart to graph student progress. A sample completed graph is available online.

Unit Check-ups covering the content of the lessons are provided after Lessons 4, 8, 12, 16, and 20. These assessments can be accessed and printed out at **https://rewards.voyagersopris.com**. See pages F24–F25 for more information on *REWARDS Secondary* Online Teacher Resources. In preparation for taking these Check-ups, Review Sheets for reviewing prefixes and suffixes can also be found at this same website. Students can also study the Spelling Words and the Vocabulary Logs at the back of the *Student Book*.

Sustain and Extend Program Gains

Once students have successfully completed *REWARDS Secondary*, the skills and strategies they have learned can be maintained by continuing to teach the reading of classroom passages using the structure of the final lessons as outlined in the following chart.

1 **Before Passage Reading**

- Guide students in applying the *REWARDS* decoding strategies to difficult-to-pronounce words.

- Introduce the meaning of critical academic and content-area vocabulary words.

- Introduce critical background knowledge.

- Preview the passage by reading the title, headings, and subheadings.

2 **During Passage Reading**

- Have students read a segment of the passage silently.

- Then have students reread the segment orally using choral reading, cloze reading, partner reading, or individual responses (if the group size is small).

- Ask students text-dependent questions on the passage content.

    ▲ Before asking higher-order questions, scaffold or support students' successful responding by asking foundation questions.
    ▲ Ask "big idea questions," often referred to as higher-order questions.

3 **After Passage Reading**

- Select and initiate one or more of these summary activities:

    ▲ Rereading passage for purpose of rate development
    ▲ Discussing passage content
    ▲ Writing a summary
    ▲ Answering written questions

Once students have completed *REWARDS Secondary*, you may choose to extend students' learning using the structured lessons in *REWARDS PLUS*, a more advanced program that follows this structure using Social Studies and Science passages. For more information, visit **www.soprislearning.com.**

Teacher Pages for Lesson 4

Lesson 4

ACTIVITY A: Oral Activity—Blending Word Parts Into Words

Student Objective: to blend orally presented word parts into words

✔ CORRECTION

If students make an error, say the word and have them repeat it.

Activity Summary

- Say each word, pausing between the word parts.
- Have students blend the parts together and say the whole word.

Instructional Steps

1. Open your *Student Book* to Lesson 4, page 15.
2. Listen. I am going to say the parts of a word. You are going to say the whole word. Say the word, pausing completely between the word parts. nov el ist. What word? **novelist**
3. I'll say the parts. You say the word. Listen. Say the word, pausing between the parts. ec o nom ic. What word? **economic**
4. Continue with the following examples.
a ston ish es	**astonishes**
un em ploy ment	**unemployment**
in de pen dent ly	**independently**
de part ment al	**departmental**
ex pec ta tion	**expectation**

ACTIVITY B: Vowel Combinations

Student Objectives:
- to say the sound for the vowel combinations **oi**, **oy**, and **or**
- to review previously introduced vowel sounds

Activity Summary

- With each vowel combination, have students point to the letters.
- Tell students the sound as it is pronounced in the key word and have them repeat it.
- Have students say the new sounds again.
- Have students say the new and previously learned sounds.

oi	oy	or
(join)	(boy)	(torn)

1	ay	oy	ai	er	ar	or
2	au	oi	ur	i - e	oy	ai
3	ir	e - e	oy	o - e	u - e	au

Instructional Steps

1. Find Activity B.
2. Look at the first box. Point to the letters **o·i**. The sound of these letters is usually /oi/. What sound? **/oi/**
3. Point to the letters **o·y**. The sound of these letters is usually /oi/. What sound? **/oi/**
4. Point to the letters **o·r**. The sound of these letters is usually /or/. What sound? **/or/**
5. Go back to the beginning of the line. Say the sounds again. What sound? **/oi/** Next sound? **/oi/** Next sound? **/or/**
6. Point to the first letters in Line 1. What sound? **/ā/** Next sound? **/oi/** Next sound? **/ā/** Next sound? **/er/** Next sound? **/ar/** Next sound? **/or/**
7. Repeat Step 6 with the letters in Lines 2 and 3.

> ✓ **CORRECTION**
>
> If students make an error, say the sound and have them repeat it.

> ⦿ **EFFECTIVE INSTRUCTION**
>
> **Promoting accuracy, then automaticity:** Students need accuracy and automaticity with sounds before sounding out long words. Whenever students make errors on sounds, have them practice the whole row again. Once students are accurate, repeat the row at a faster pace.

ACTIVITY C: Vowel Conversions

Student Objective: to review the sounds and names for the letters **a**, **i**, **o**, and **u**

Activity Summary

- With each letter, have students practice saying the sound and then the name.
- Have students practice saying the sounds and names again.

i	u	o	a

Instructional Steps

1. Find Activity C. When you are reading words and see these letters, what should you try first, the sound or the name? **the sound** If it doesn't make a real word, what should you try? **the name**

2. Point to the first letter. What sound? **/ĭ/** What name? **/ī/**

3. Point to the next letter. What sound? **/ŭ/** What name? **/ū/**

4. Point to the next letter. What sound? **/ŏ/** What name? **/ō/**

5. Point to the next letter. What sound? **/ă/** What name? **/ā/**

6. First letter again. What sound? **/ĭ/** What name? **/ī/**

7. Next letter. What sound? **/ŭ/** What name? **/ū/**

8. Repeat Step 7 with the remaining letters.

ACTIVITY D: Reading Parts of Real Words

Student Objective: to read parts of real words that contain previously taught vowel sounds

Activity Summary

- Have students say each word part, first to themselves and then aloud.
- Whenever there is an asterisk under the vowel, ask students to say the name, and then ask them to say the word part.

1	moil	saunt	lert	bord
2	ploy	mur	stub	do*
3	ster	cott	port	scape
4	tor	stroy	vide	mu*

Instructional Steps

1. Find Activity D. You are going to read parts of real words. Most of these word parts are not real words by themselves.

2. Line 1. Read the first word part to yourself. Put your thumb up when you can say the part. Pause. What part? **/moil/**

3. Next word part. Thumb up when you are ready. Pause. What part? **/sawnt/**

4. Next word part. Pause. What part? **/lert/**

5. Next word part. Pause. What part? **/bord/**

6. Line 2. First word part. What part? **/ploi/**

7. Next word part. Pause. What part? **/mer/**

8. With all remaining word parts, ask: What part? With a part that has an asterisk under the vowel, ask: What name? What part?

9. **Optional** Have students read a line to the group or to a partner.

✓ **CORRECTION**

If students make an error, say the name or word part and have students repeat it.

◉ **EFFECTIVE INSTRUCTION**

Having students use cues: When students raise their hand, it is distracting to students who are still thinking. Have students use alternative cues to show they have finished. In this activity, having students put their "thumb up" communicates to you that they are ready to say the word part.

ACTIVITY E: Underlining Vowels in Words

Student Objectives:
- within words, to underline the letters that represent vowel sounds
- with teacher support, to sound out long words

Activity Summary

- With three words, show students how to find the vowels. Have students say the sounds and tell how many word parts.
- Have students underline the vowels in all of the words.
- With each word, have students say the sounds and word parts aloud. Have students say the whole word aloud.

1	turmoil	saunter	borderline
2	oyster	murmur	partnership
3	tornado * *	transport	landscape
4	topsoil	boycott	asteroid
5	sirloin	stubborn	corduroy

✓ CORRECTIONS

If students mispronounce a sound or word part, say the sound or word part and have students repeat it.

If students mispronounce the whole word but it's close, prompt them to make it a real word. If students still can't say the word, tell them the word and have them repeat it.

◉ EFFECTIVE INSTRUCTION

Providing scaffolding: When students are learning a strategy that has many prerequisite skills, provide teacher support on the parts of the strategy that are new or that continue to pose a challenge to students. Let students respond to those questions for which they know the answers.

Instructional Steps / Display 4.1

1. Turn to page 16. Find Activity E. Listen. What does each word part have? **one vowel sound**

2. Watch me find the vowels in these words. Cover all lines on Display 4.1 except Line 1. Trace over the lines under the vowels in **turmoil** while you ask: What sound? **/er/** What sound? **/oi/** How many vowel sounds? **two** So, how many word parts? **two**

3. Watch again. Trace over the lines under the vowels in **saunter** while you ask: What sound? **/aw/** What sound? **/er/** How many vowel sounds? **two** So, how many word parts? **two**

4. Watch one more. Trace over the lines under the vowels in **borderline** while you ask: What sound? **/or/** What sound? **/er/** What sound? **/ī/** How many vowel sounds? **three** So, how many word parts? **three**

5. Now, you underline the vowels in the words in Line 1. Pause and monitor. Now underline the vowels in the rest of the words. Look up when you are done. Pause and monitor.

6. Show the rest of the display. Check to see if you underlined all the vowels. Fix any mistakes. Pause and monitor.

7. When students are done checking, assist them in reading the words on the display, beginning with the first word in Line 1. Remember that students should say the name when they see an asterisk under the vowel. Look up here.

With each word:

a. Trace over the lines under the vowels while you ask: What sound? What sound? What sound?

b. Trace over the loops indicating word parts while you ask: What part? What part? What part?

c. Run your finger under the whole word and ask: What word?

8. **Optional** Have students read a line to the group or to a partner.

ACTIVITY F: Oral Activity—Correcting Close Approximations Using Context

Student Objective: to correct the pronunciation of orally presented words that are intentionally mispronounced

Activity Summary

- Pronounce each word incorrectly as shown, first by itself and then in the sentence.
- Ask students to use the context of the sentence to make the word into a real word.

Instructional Steps

1. Make these words into real words. Listen. I read the word "prin **cī** păl." Change the word to make sense in this sentence: "At the beginning of the school day, the prin **cī** păl made announcements." What should the word be? **principal**

2. Continue with the following examples.

   pŏll **ŭ** tion   The river was dirty and full of pŏll **ŭ** tion.

   dē **sper** āte   After the hurricane, the people were dē **sper** āte for food.

   ē lev **ă** tor   She went to the sixth floor in an ē lev **ă** tor.

   im poss **īble**   Reading long words is not im poss **īble**.

✔ CORRECTION

If students are not able to make it a real word, tell them the word and have them repeat it.

◉ EFFECTIVE INSTRUCTION

Providing a model during corrections: Models are used for initial instruction—sometimes they are also helpful when providing a correction. In this activity, ask students to use the context of the sentence and their own language to make a mispronounced word into a real word. If they can't do it, tell them the word and have them repeat it.

ACTIVITY G: Prefixes and Suffixes

Student Objectives:
- to pronounce the prefixes **per**, **un**, and **a**
- to review previously introduced prefixes

Activity Summary

- With each prefix, tell students the word and have them repeat it.
- Tell students the circled prefix and have them repeat it.
- Have students pronounce the new prefixes in isolation.
- Have students practice saying the new and previously learned prefixes.

(per)mit	per
(un)fair	un
(a)fraid	a

Prefixes

1	pro	a	pre	com	re	un
2	in	ab	mis	con	pre	dis
3	be	com	a	de	ad	per
4	un	a	con	com	im	pre

Instructional Steps

1. Find Activity G. You are going to learn more prefixes. Where do we find prefixes? **at the beginning of words**

2. Point to the first column in the first box. The first word is **permit**. What word? **permit** Point to the circled prefix. The prefix is **per**. Say it. **per**

3. Point to the next word. The word is **unfair**. What word? **unfair** Point to the circled prefix. The prefix is **un**. Say it. **un**

4. Point to the next word. The word is **afraid**. What word? **afraid** Point to the circled prefix. The prefix is **a**. Say it. **a**

5. Find the second column. Read the prefixes. What prefix? **per** Next? **un** Next? **a**

6. Go to Line 1 in the next box. Point to the first prefix. What prefix? **pro** Next? **a** Next? **pre** Next? **com** Next? **re** Next? **un**

7. Repeat Step 6 with the prefixes in Lines 2–4.

8. The parts of words you just practiced come at the beginning of words. What are they called? **prefixes** In the next activity, you are going to circle all the prefixes you have learned.

✓ CORRECTION

If students make an error, say the prefix and have them repeat it.

⊙ EFFECTIVE INSTRUCTION

Promoting accuracy, then automaticity: Students need accuracy and automaticity with affixes before sounding out long words. Whenever students make errors on prefixes, and later, suffixes, have them practice the whole row again. Once students are accurate, repeat the row at a faster pace.

ACTIVITY H: Circling Prefixes and Suffixes

Student Objectives:
- to identify and circle prefixes in long words
- with teacher support, to sound out long words that contain prefixes

Activity Summary

- Have students find prefixes and circle them.
- Assist students in checking their work and reading the words, first part by part and then the whole word.

1	persist	unafraid	discomfort
2	unfit	provide	uncertain
3	record	umpire	undertake
4	predict	pertain	reconstruct
5	accuse	confirm	misconduct
6	invalid	portray	imperfect
7	alert	contrast	advertise

CORRECTIONS

If students make an error on a word part, say the word part and have them repeat it.

If students make an error on the whole word but it's close, ask them to make it a real word. Otherwise, tell them the word and have them repeat it.

EFFECTIVE INSTRUCTION

Ensuring skill mastery: Students will be more successful with more complex strategies if they first master the prerequisite skills. In all activities in this program, make sure students say the correct answers most of the time (80% to 90% correct).

Instructional Steps / Display 4.2

1. Look at page 17. Find Activity H. Circle all the prefixes you have learned. Remember, some words have no prefixes, and some words have one or more prefixes. Look up when you are done. Pause and monitor.

2. Show Display 4.2. Now check to see if you circled all the prefixes. Fix any mistakes. Pause and monitor.

3. When students are done checking, assist them in reading the words, beginning with the first word in Line 1. Look up here.

   With each word:

   a. Trace over the loops indicating word parts while you ask: What part? What part? What part?

   b. Run your finger under the whole word and ask: What word?

4. Have each student read all the words to a partner or one line to the group.

ACTIVITY I: Meanings of Prefixes and Suffixes

Student Objectives:
- to state the meanings of common prefixes
- to use the meanings of the prefixes to determine the meanings of long words

Activity Summary

- Read the meanings of the three prefixes and explain how the meanings help unlock the meanings of unknown words.
- With each target word, have students read the explanation aloud with you.
- Have students find the word that matches the explanation and write it on the line provided.
- Have students apply the meaning of the word with assigned partners or with the whole class.

> ***un*** = *not, opposite of*
> ***in*** = *not, opposite of*
> ***im*** = *not, opposite of*
>
> **a** (Line 2) **not fit**; not healthy
> unfit
>
> **b** (Line 6) **not valid**; not true or not acceptable, such as a driver's license that has expired
> invalid
>
> **c** (Line 6) **not perfect**; having flaws, such as a solution to a problem when the solution is not helpful
> imperfect

Instructional Steps

1. Find Activity I. Look at the first prefix. **Un** means *not* or *opposite of.* So, if you heard someone call Jayden **ungainly**, even if you didn't know what **gainly** meant, you could guess that **ungainly** is the opposite of something. **Gainly** means *graceful*, so **ungainly** means _____. **the opposite of graceful** Yes, and the opposite of graceful is clumsy, so **ungainly** means _____. **clumsy**

2. Look at the second and third prefixes. In Lesson 2, you learned that **in** and **im** sometimes mean *in* or *into*. In this lesson, you're learning that **in** and **im** sometimes mean *not* or *opposite of*. So, when you see an **in** or **im** at the beginning of a word, you will have to decide which meaning makes more sense. Listen. If you could see that Nathan was feeling **impatient**, how was Nathan feeling? **not patient** Good, here **im** means *not*. Let's learn the meanings of words that have the prefixes **un** and **in** or **im**.

3. Look at **a**. Read the explanation with me: "**not fit**; not healthy." Find the word and write it. Pause and monitor. What word means "**not fit**"? **unfit** What do you call someone who is unhealthy? **unfit**

4. Look at **b**. Read the explanation with me: "**not valid**; not true or not acceptable, such as a driver's license that has expired." Find and write the word. Pause and monitor. What word means "**not valid**"? **invalid** If you failed to renew your library card, the card would probably be _____. **invalid**

5. Look at **c**. Read with me: "**not perfect**; having flaws, such as a solution to a problem when the solution is not helpful." Find the word and write it. Pause and monitor. What word means "**not perfect**"? **imperfect** So, if your computer had a scratch down the middle of the screen, your computer would be _____. **imperfect** If your plan for figuring out a math problem didn't work, your plan was _____. **imperfect**

> *Conduct the Prefix and Suffix Review for Lesson 4 now or at the end of the lesson.*

ACTIVITY J: Spelling Dictation

Student Objectives:
- to orally segment a word into parts
- to spell four long words

Activity Summary

- With each word, tell students the word and have them repeat it.
- Have students say the parts of the word with you as they tap on their desk for each part.
- Have students say the parts to themselves as they write the word.
- Display the word and have students compare their words with your word.
- Have students cross out and rewrite any misspelled words.

1	imperfect	**3**	unafraid
2	reconstruct	**4**	predict

Instructional Steps / Display 4.3

1. Turn to page 18. Find Activity J. Please cover up the rest of the page.
2. The first word is **imperfect**. What word? **imperfect** Tap on your desk and say the parts in **imperfect** with me. **im per fect** Say the parts in **imperfect** to yourself as you write the word. Pause and monitor.
3. Using Display 4.3, show **imperfect**. Check **imperfect**. If you misspelled it, cross it out and write it correctly.
4. The second word is **reconstruct**. What word? **reconstruct** Tap and say the parts in **reconstruct** with me. **re con struct** Say the parts in **reconstruct** to yourself as you write the word. Pause and monitor.
5. Show **reconstruct**. Check **reconstruct**. If you misspelled it, cross it out and write it correctly.
6. Repeat Steps 4–5 with **unafraid** and **predict**.

> **For The Next Activity, Choose To Teach Either:**
> *Academic Vocabulary* on page 72 or
> *Alternative Illustrated Academic Vocabulary* on page 75.

✓ **CORRECTION**

If students make an error, have them cross out the misspelled word and rewrite the entire word correctly.

◉ **EFFECTIVE INSTRUCTION**

Actively involving students: When instruction is interactive and students constantly have something to say, write, or do, you keep their attention. In this activity, keep students engaged by asking for verbal and physical actions as they break each word into parts.

ACTIVITY K: Academic Vocabulary

Student Objective: to apply the meaning of four academic vocabulary words

Activity Summary

- With each word, have students read the word silently and then say the word aloud.
- Have students read the explanation aloud with you.
- Give examples of how the word might be used.
- Have students participate with you and/or tell their partners applications of the word.
- Have students review the academic vocabulary words from the previous lesson.

1. **persist**—If you **persist** in doing something, you continue to do it, even though it is difficult or other people are against it.

2. **record**—If you **record** a piece of information or an event, you write it down, photograph it, or put it into a computer so that you or others can refer to it in the future.

3. **predict**—If you **predict** an event, you say ahead of time that it will happen.

4. **contrast**—If you **contrast** one thing with another, you show or tell about the differences between the two things.

Instructional Steps

1. Find Activity K. You're going to learn four vocabulary words. Look at Line 1. Pause. Read the word to yourself. Pause. What word? **persist**

2. Read the explanation with me: "If you **persist** in doing something, you continue to do it, even though it is difficult or other people are against it."

3. When you keep trying again and again to read a long word, you _____. **persist**

4. When you keep practicing and practicing a song on the piano, you _____. **persist**

5. Find Line 2. Pause. Read the word to yourself. Pause. What word? **record**

6. Read the explanation with me: "If you **record** a piece of information or an event, you write it down, photograph it, or put it into a computer so that you or others can refer to it in the future."

7. If you videotaped the school play so you could show it to your sister at home, you _____. **recorded it**

8. Think. What things might you **record**? Give ample thinking time. Partner 1, tell your partner things you might **record**. See how many you can list in 20 seconds. I'll time you. Partner 2, you count. Time students for 20 seconds and then say "Stop."

9. Find Line 3. Pause. Read the word to yourself. Pause. What word? **predict**

10. Read the explanation with me: "If you **predict** an event, you say ahead of time that it will happen."

11. If you said that the Detroit Lions would win the Super Bowl, and they did win, you _____. **predicted it**

12. Think. What football, soccer, or basketball team do you forecast or **predict** will win a championship this year? Give ample thinking time. Partner 2, tell your partner. Begin by saying: The team that I **predict** will win a championship this year is . . . Monitor as students share. Then call on one student.

13. Find Line 4. Pause. Read the word to yourself. Pause. What word? **contrast**

14. Read the explanation with me: "If you **contrast** one thing with another, you show or tell about the differences between the two things."

15. If you point out the differences between an orange and an apple, you **contrast** the orange with the_____. **apple**

16. If you **contrast** football and soccer, what is it you tell about them? **the differences**

17. Think. How would you **contrast** a dog and a cat? Give ample thinking time. Partner 2, **contrast** a dog and a cat to your partner. Begin by saying: Here's how I would **contrast** a dog and a cat. A dog . . . Monitor as students share. Then call on one student.

Review

1. **betray**

2. **confine**

3. **respond**

4. **propose**

---

18. Find the word "Review" and look at the four words. I will tell you about a word I am thinking about. Form the number with your fingers on your desk. When I say "Show me," hold up your fingers.

- I am thinking of a word: "when a phone rings, you react by answering it." Form the number of fingers on your desk. Pause. Show me. Look to see that students are holding up three fingers. Say the word. **respond**

- I am thinking of a word: "to suggest an idea." Form the number on your desk. Pause. Show me. Students hold up four fingers. Say the word. **propose**

- I am thinking of a word: "to keep a horse from leaving by putting it inside a fenced pasture." Form the number on your desk. Pause. Show me. Students hold up two fingers. Say the word. **confine**

- I am thinking of a word: "someone you trust hurts you." Form the number on your desk. Pause. Show me. Students hold up one finger. Say the word. **betray**

> ✓ A Check-up that tests material learned in Lessons 1-4 is provided online. Have students complete the Check-up before proceeding to Lesson 5.

ALTERNATIVE ACTIVITY K: Illustrated Academic Vocabulary

Student Objective: to apply the meaning of four academic vocabulary words

Activity Summary

- With each word, have students read the word silently and then say the word and part of speech aloud.
- Have students read the explanation aloud with you. Have students read any synonyms and antonyms that are given.
- Show examples of how the word might be used.
- Have students tell their partners a particular application of the word.
- Have students echo read the words in the word family and then participate with you in reading a paragraph that uses the related words.
- Have students participate in reviewing the academic vocabulary words from the previous lesson and selected words from all lessons.

1. **persist**—If you **persist** in doing something, you continue to do it, even though it is difficult or other people are against it.
2. **record**—If you **record** a piece of information or an event, you write it down, photograph it, or put it into a computer so that you or others can refer to it in the future.
3. **predict**—If you **predict** an event, you say ahead of time that it will happen.
4. **contrast**—If you **contrast** one thing with another, you show or tell about the differences between the two things.

Instructional Steps / Displays 4.4 to 4.19

1. Find Activity K. You're going to learn four vocabulary words. Look up here.
2. Show Display 4.4. Read the word to yourself. Pause. What word? **persist** What part of speech? **verb** Read the explanation with me: "If you **persist** in doing something, you continue to do it, even though it is difficult or other people are against it." So, if you keep doing something, even though it is difficult, you _____. **persist** What phrase is a synonym for **persist**? **keep going** What phrase is an antonym for **persist**? **give up**

CORRECTION

If students make an error, tell them what they should have said and have them repeat it.

3. Show Display 4.5. Read the example with me: "The runner **persisted** by practicing for many months and learning to run faster. Because the runner **persisted**, he won the race."

4. Show Display 4.6. Read the question with me: "If Jenn **persists** with her studies, what will be some benefits? Pause. Partner 1, tell your partner your answer. Begin by saying: If Jenn **persists** with her studies, some benefits will be . . . Monitor as students share. Then call on one student.

5. Show Display 4.7. Here are some words that belong to the **persist** word family. Echo read the word and part of speech. Persist - verb. **persist - verb** Persistent - adjective. **persistent - adjective** Persistence - noun. **persistence - noun**

6. Look at the picture and follow along as I read the paragraph. When I stop, say the bold word: Chen wanted to play violin in the youth symphony. He had to **persist**. He was **persistent**, practicing every day and taking weekly lessons. Because of his **persistence**, Chen was asked to audition for (try out for) the youth symphony.

7. Show Display 4.8. Read the word to yourself. Pause. What word? **record** What part of speech? **verb** Read the explanation with me: "If you **record** a piece of information or an event, you write it down, photograph it, or put it into a computer so that you or others can refer to it in the future." So, if you write down a piece of information, you _____. **record it** What phrase is a synonym for **record**? **write down**

8. Show Display 4.9. Read the first example with me: "A student could **record** notes in a class." Next example: "A scientist could **record** observations." Last example: "A storeowner could **record** items that were sold." In every example, someone **recorded** information.

9. Show Display 4.10. Read the question with me: "When Emily is in class, what should she **record**?" Pause. Partner 2, tell your partner your answer. Begin by saying: Emily should **record** . . . Monitor as students share. Then call on one student.

10. Show Display 4.11. Read the word to yourself. Pause. What word? **predict** What part of speech? **verb** Read the explanation with me: "If you **predict** an event, you say ahead of time that it will happen." So, if you say ahead of time that something will happen, you _____. **predict it** What are synonyms for **predict**? **forecast, tell in advance**

11. Show Display 4.12. Read the example with me: "The ability to **predict** the weather has improved quite a bit in the last fifty years. Because of computers, scientists can now forecast future weather much more accurately."

12. Show Display 4.13. Read the question with me: "People like to **predict** what will happen in the future. What are some changes you **predict** for the world?" My turn first. One change I **predict** for the world is more technology. Partner 2, your turn. Begin by saying: One change I **predict** for the world is . . . Monitor as students share. Then call on one student.

13. Show Display 4.14. Here are some words that belong to the **predict** word family. Echo read the word and part of speech. Predict - verb. **predict - verb** Predictions - noun. **predictions - noun** Predictable - adjective. **predictable - adjective** Unpredictable - adjective. **unpredictable - adjective**

14. Look at the picture and follow along as I read the paragraph. When I stop, say the bold word: Earthquakes are devastating, so scientists want to **predict** them. Unfortunately, scientists can make only general **predictions** about earthquakes. The exact time of an earthquake is not **predictable**. Except for large earthquakes occurring along well-known fault lines, the next earthquake is **unpredictable**.

15. Show Display 4.15. Read the word to yourself. Pause. What word? **contrast** What part of speech? **verb** Read the explanation with me: "If you **contrast** one thing with another, you show or tell about the differences between the two things." So, if you tell about the differences between two things, you _____. **contrast them** What phrase is a synonym for **contrast**? **tell apart**

16. Show Display 4.16 and point to the first two pictures at the top. Read the first example with me: "When you **contrast** these pictures, you tell about the differences." So, if you **contrast** two pictures, will you be looking for how they are the same or different? **different** Point to the picture of the sisters at the bottom. Read the second example with me: "When you **contrast** the two sisters, you point out the differences in their features so that someone can tell them apart."

17. Show Display 4.17 and point to both pictures. Read the question with me: "When you **contrast** these two photos, what are some of the differences you notice?" My turn first. When I **contrast** these two photos, some of the differences I notice include: the number of people (none versus two) and what the ducks are doing (one is landing on the water and the others are walking). Partner 1, your turn. Begin by saying: When I **contrast** these two photos, some of the differences I notice include . . . Monitor as students share. Then call on one student.

18. Show Display 4.18. Look up here. Let's review the vocabulary words you learned in the last lesson. I will tell you about a word I am thinking about. Form the number with your fingers on your desk. When I say "Show me," hold up your fingers.

- I am thinking of a word: "when a phone rings, you react by answering it." Form the number of fingers on your desk. Pause. Show me. Look to see that students are holding up three fingers. Say the word. **respond**
- I am thinking of a word: "to suggest an idea." Form the number on your desk. Pause. Show me. Students hold up four fingers. Say the word. **propose**
- I am thinking of a word: "to keep a horse from leaving by putting it inside a fenced pasture." Form the number on your desk. Pause. Show me. Students hold up two fingers. Say the word. **confine**
- I am thinking of a word: "someone you trust hurts you." Form the number on your desk. Pause. Show me. Students hold up one finger. Say the word. **betray**

19. Use Display 4.19 to continue the same format you used in Step 18 with selected academic vocabulary words from the first three lessons. This cumulative review will assist students to prepare for the four-lesson Check-up at the end of this lesson. Begin each item below by saying: I am thinking of a word . . . Watch for the correct number of fingers and listen for the accompanying answer.

I am thinking of a word:	Number of Fingers	Word
shapes that generally look like people	3	**abstract**
someone opening the door takes all the students' attention away from what they are doing	1	**distract**
too upset to make up your mind about something	2	**distraught**
you get rid of things you no longer need	5	**discard**
someone takes responsibility for running a company	6	**administers**
what you'd think if you saw an elephant flying	4	**absurd**

✓ A Check-up that tests material learned in Lessons 1-4 is provided online. Have students complete the Check-up before proceeding to Lesson 5.

Displays for Lesson 4

ACTIVITY E: **Underlining Vowels in Words**

1 turmoil saunter borderline

2 oyster murmur partnership

3 tornado transport landscape

4 topsoil boycott asteroid

5 sirloin stubborn corduroy

ACTIVITY H: Circling Prefixes and Suffixes

1 (per)sist   (un)(a)fraid   (dis)(com)fort

2 (un)fit   (pro)vide   (un)certain

3 (re)cord   umpire   (un)dertake

4 (pre)dict   (per)tain   (re)(con)struct

5 (a)ccuse   (con)firm   (mis)(con)duct

6 (in)valid   portray   (im)(per)fect

7 (a)lert   (con)trast   (ad)vertise

ACTIVITY J: **Spelling Dictation**

1	**imperfect**
2	**reconstruct**
3	**unafraid**
4	**predict**

persist*(verb)*— explanation

If you **persist** in doing something, you continue to do it, even though it is difficult or other people are against it.

Synonym - keep going
Antonym - give up

persist — example

The runner **persisted** by practicing for many months and learning to run faster. Because the runner **persisted**, he won the race.

persist — check for understanding

If Jenn **persists** with her studies, what will be some benefits?

Begin by saying:

If Jenn **persists** with her studies, some benefits will be . . .

persist — word family

- persist *–verb*

- persistent *–adjective*

- persistence *–noun*

Chen wanted to play violin in the youth symphony. He had to **persist**. He was **persistent**, practicing every day and taking weekly lessons. Because of his **persistence**, Chen was asked to audition for (try out for) the youth symphony.

record *(verb)* — explanation

If you **record** a piece of information or an event, you write it down, photograph it, or put it into a computer so that you or others can refer to it in the future.

Synonym - write down

record — examples

A student could **record** notes in a class.

A scientist could **record** observations.

A storeowner could **record** items that were sold.

record — check for understanding

When Emily is in class, what should she **record**?

Begin by saying:

Emily should **record** . . .

predict *(verb)* —— explanation

If you **predict** an event, you say ahead of time that it will happen.

Synonyms - forecast, tell in advance

predict — example
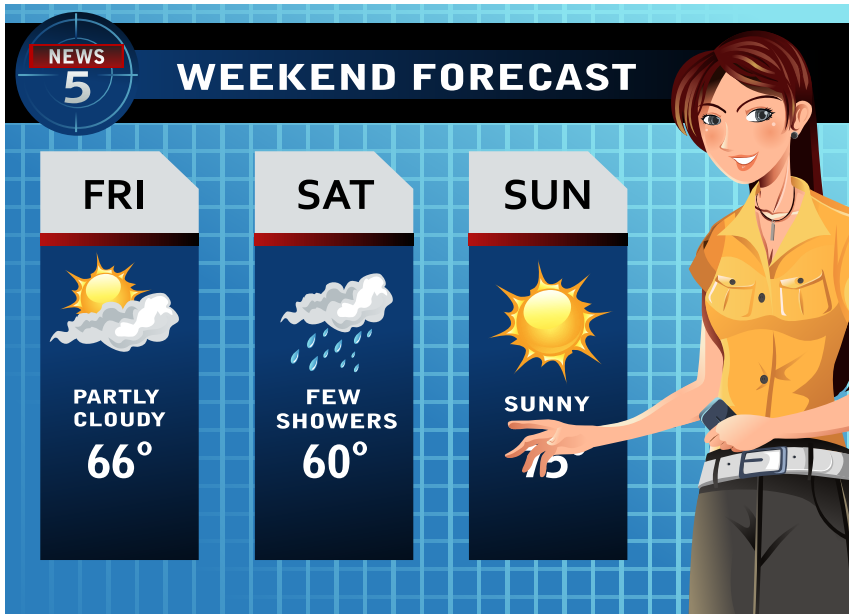
The ability to **predict** the weather has improved quite a bit in the last fifty years. Because of computers, scientists can now forecast future weather much more accurately.

predict — check for understanding

People like to **predict** what will happen in the future. What are some changes you **predict** for the world?

Begin by saying:

One change I **predict** for the world is . . .

predict —
word family

- predict *–verb*
- predictions *–noun*
- predictable *–adjective*
- unpredictable *–adjective*

Earthquakes are devastating, so scientists want to **predict** them. Unfortunately, scientists can make only general **predictions** about earthquakes. The exact time of an earthquake is not **predictable**. Except for large earthquakes occurring along well-known fault lines, the next earthquake is **unpredictable**.

contrast *(verb)* ── explanation

If you **contrast** one thing with another, you show or tell about the differences between the two things.

Synonym - tell apart

contrast — examples

When you **contrast** these pictures, you tell about the differences.

When you **contrast** the two sisters, you point out the differences in their features so that someone can tell them apart.

contrast — check for understanding

When you **contrast** these two photos, what are some of the differences you notice?

Begin by saying:

When I **contrast** these two photos, some of the differences I notice include . . .

Review

Show me the number of the word with your fingers.

I am thinking of a word:

- When a phone rings, you react by answering it

- to suggest an idea

- to keep a horse from leaving by putting it inside a fenced pasture

- someone you trust hurts you

1 betray

2 confine

3 respond

4 propose

Cumulative Review

1	distract
2	distraught
3	abstract
4	absurd
5	discard
6	administers

Show me the number of the word with your fingers.

I am thinking of a word:

- shapes that generally look like people

- someone opening the door takes all the students' attention away from what they are doing

- too upset to make up your mind about something

- you get rid of things you no longer need

- someone takes responsibility for running a company

- what you'd think if you saw an elephant flying

Student Pages for Lesson 4

ACTIVITY A: **Oral Activity—Blending Word Parts Into Words**

ACTIVITY B: **Vowel Combinations**

oi	oy	or
(join)	(boy)	(torn)

1	ay	oy	ai	er	ar	or
2	au	oi	ur	i - e	oy	ai
3	ir	e - e	oy	o - e	u - e	au

ACTIVITY C: **Vowel Conversions**

i	u	o	a

ACTIVITY D: **Reading Parts of Real Words**

1	moil	saunt	lert	bord
2	ploy	mur	stub	do ∗
3	ster	cott	port	scape
4	tor	stroy	vide	mu ∗

ACTIVITY E: Underlining Vowels in Words

1	turmoil	saunter	borderline
2	oyster	murmur	partnership
3	tornado * *	transport	landscape
4	topsoil	boycott	asteroid
5	sirloin	stubborn	corduroy

ACTIVITY F: Oral Activity—Correcting Close Approximations Using Context

ACTIVITY G: Prefixes and Suffixes

(per)mit   per

(un)fair   un

(a)fraid   a

Prefixes

1	pro	a	pre	com	re	un
2	in	ab	mis	con	pre	dis
3	be	com	a	de	ad	per
4	un	a	con	com	im	pre

ACTIVITY H: Circling Prefixes and Suffixes

1	persist	unafraid	discomfort
2	unfit	provide	uncertain
3	record	umpire	undertake
4	predict	pertain	reconstruct
5	accuse	confirm	misconduct
6	invalid	portray	imperfect
7	alert	contrast	advertise

ACTIVITY I: Meanings of Prefixes and Suffixes

un = *not, opposite of*
in = *not, opposite of*
im = *not, opposite of*

a (Line 2) **not fit**; not healthy

_____

b (Line 6) **not valid**; not true or not acceptable, such as a driver's license that has expired

_____

c (Line 6) **not perfect**; having flaws, such as a solution to a problem when the solution is not helpful

_____

ACTIVITY J: Spelling Dictation

1		**3**	
2		**4**	

ACTIVITY K: Academic Vocabulary

1 **persist**—If you **persist** in doing something, you continue to do it, even though it is difficult or other people are against it.

2 **record**—If you **record** a piece of information or an event, you write it down, photograph it, or put it into a computer so that you or others can refer to it in the future.

3 **predict**—If you **predict** an event, you say ahead of time that it will happen.

4 **contrast**—If you **contrast** one thing with another, you show or tell about the differences between the two things.

Review

1 betray

2 confine

3 respond

4 propose

✓ **Time for a Check-up!**

Assessment

Progress Monitoring Assessments
End-of-Unit Check-up

At the end of each unit, you will be giving students a Progress Monitoring Check-up that covers the content of the lessons just completed. Before students do the Check-up, you may have them do as much practice and studying as you think they need. However, the Check-up is a closed-book assessment. Students should not have access to Spelling Words, Vocabulary Logs, or other resources while taking the Check-up. If you have posted a classroom poster of the prefixes, suffixes, and vowel sounds, you may wish to cover the poster as well. None of the sections on the Check-up are timed.

Directions:

1. Reproduce one blank copy of the Check-up for each student. Have the Answer Key ready.

2. You may elect to begin with Part 4 first. If so, see direction #4 below. Otherwise, read the directions for Part 1 with students. Tell them to practice reading all the words in all four lines, and then start over and practice all the words again. Tell students that you will go around the room and listen to each student read one line of words, randomly chosen. Confine your feedback to praising the student's effort. Do not correct errors. When a student has finished reading to you, give that student a score to record for Part 1.

3. When students in the class have practiced all the words twice, stop listening to individual students read. Read the directions for Parts 2 and 3 with all the students. Explain to students how to do the Bonus section. Tell students to go ahead and work while you continue to listen to individuals read words in Part 1.

4. For Part 4, dictate the spelling words to the whole class: say each word and have students repeat the word. Tell students they may put their fingers up and say the parts to themselves just as they learned to do in the lessons in the Spelling Dictation activity.

5. Using your Answer Key, assist students in checking their test and recording their scores, or collect the papers and check the tests yourself.

6. Have students record their Check-up score on the Progress Monitoring Graph found at the back of their *Student Book*, or use the VPORT data management system* for recording student scores. Bonus points are not included in the progress monitoring score but may be used for other purposes, such as raising a letter grade being given for the unit.

*For more information on VPORT, please contact our support team at **support@soprislearning.com**.

Name _____ **Date** _____ **Total Points of 100** _____

Part 1. Decoding Multisyllabic Words

Points _____/25

Practice reading all the words in each line. The teacher will ask you to read one line.
Each word is worth 5 points for a total of 25 points.

A.	complaint	permit	record	misbehave	disband
B.	provide	disturb	misfit	destroy	preprogram
C.	inlaid	defraud	display	prescribe	misinform
D.	confirm	extreme	abstract	imprint	unafraid

Part 2. Academic Vocabulary

Points _____/30

Circle the letter next to the words that best express the vocabulary word's meaning.
Be sure to pick the **best** answer. Each correct answer is worth 3 points for a total of 30 points.

1. admit a. tell a lie (b.) tell the truth c. tell about a book d. tell about something new	**6. confine** a. suggest it b. throw away (c.) keep from leaving d. say what will happen
2. betray a. be someone's good friend b. give someone a gift (c.) hurt someone d. write something down	**7. persist** a. buy something b. give up c. stop working (d.) keep on working
3. discard (a.) throw away b. put in a drawer c. see clearly d. play cards	**8. absurd** (a.) silly b. sad c. old d. seen clearly
4. contrast a. tell the truth b. tell a story c. tell what is old (d.) tell what is different	**9. record** a. tie together b. throw something away c. give something up (d.) write something down
5. distract a. take to your friend's house (b.) take attention away c. take to the store d. keep on working	**10. distinct** a. not seen (b.) seen clearly c. foggy d. silly

Part 3. Meanings of Prefixes and Suffixes

Points _____/30

Fill in the blanks. Each answer is worth 3 points for a total of 30 points.

1. What part of the word "invalid" means *not*? __**in**__

   So, "invalid" means __**not valid**__

2. What part of the word "disclaim" means *opposite of*? __**dis**__

   So, "disclaim" means __**to do the opposite of claim**__

3. What part of the word "preplan" means *before*? __**pre**__

   So, "preplan" means __**to plan before an event happens**__

4. What part of the word "mislaid" means *wrong*? __**mis**__

   So, "mislaid" means __**laid down in the wrong place**__

5. What part of the word "unfit" means *not*? __**un**__

   So, "unfit" means __**not fit**__

Part 4. Spelling

Points _____/15

Write each word the teacher dictates. Each word is worth 5 points for a total of 15 points.

1. __**abstract**__

2. __**discard**__

3. __**conclude**__

Bonus Points. Forming Word Families

Points _____/5

This section is worth extra points. Each word is worth 1 point for a total of 5 points.

Use the parts below to make five words that you've heard before. You may use some parts more than once.

dis	claim	re	pre
pay	im	mis	print

__**disclaim**__   __**reclaim**__   __**prepay**__

__**imprint**__   __**reprint**__

Also accept: **repay, misprint**

Points to be recorded on Progress Monitoring Graph: _____/100

90–100 **A** or **Excellent**   80–89 **B** or **Very Good**   70–79 **C** or **Good**   69 or below **Needs Improvement**

Bonus points: _____/5

Teacher Pages for Lesson 20

ACTIVITY A: Vowel Combinations Review

Student Objective: to review the vowel sounds learned in the first 12 lessons

Activity Summary

- Have students point to each vowel combination and say the sound.
- Whenever the vowel combination has a box around it, ask students to say both sounds.

1	a - e	oo	oi	ay	ee	au
2	ar	o - e	or	i - e	ow	oy
3	ai	ea	u - e	ou	e - e	oa

✓ **CORRECTION**

If students make an error, say the sound and have them repeat it.

Instructional Steps

1. Open your *Student Book* to Lesson 20, page 108.
2. Find Activity A. Let's review vowel combinations.
3. Point to the first letters in Line 1. What sound? **/ā/** Boxed letters. What sound would you try first? **/ōō/** What sound would you try next? **/ŏŏ/** Next sound? **/oi/** Next sound? **/ā/** Next sound? **/ē/** Next sound? **/aw/**
4. Continue Step 3 with the letters in Lines 2 and 3. Remember, whenever you come to boxed letters, ask: What sound would you try first? What sound would you try next?

ACTIVITY B: Vowel Conversions Review

Student Objective: to review the sounds and names for the letters **a**, **i**, **o**, **u**, and **e**

Activity Summary

- With each letter, have students say the sound and then the name.

e	o	i	a	u

Instructional Steps

1. Find Activity B. When you are reading words and see these letters, what should you try first, the sound or the name? **the sound**

2. Point to the first letter. What sound? **/ĕ/** What name? **/ē/**

3. Next letter. What sound? **/ŏ/** What name? **/ō/**

4. Next letter. What sound? **/ĭ/** What name? **/ī/**

5. Next letter. What sound? **/ă/** What name? **/ā/**

6. Next letter. What sound? **/ŭ/** What name? **/ū/**

> ✓ **CORRECTION**
>
> If students make an error, say the sound or name and have students repeat it.

ACTIVITY C: Prefixes and Suffixes Review

Student Objective: to review the prefixes and suffixes learned in the first 12 lessons

Activity Summary

- Have students say the prefixes and suffixes aloud.

Prefixes					
1	re	ab	con	im	de
2	pro	per	dis	com	ad

Suffixes					
3	le	ence	tial	ance	tious
4	al	ism	cial	ary	ly
5	cious	able	ible	ic	ate

✓ **CORRECTION**

If students make an error, say the prefix or suffix and have students repeat it.

Instructional Steps

1. Find Activity C.
2. Point to the first prefix in Line 1. What prefix? **re** Next? **ab** Next? **con** Next? **im** Next? **de**
3. Repeat Step 2 with the prefixes in Line 2.
4. Point to the first suffix in Line 3. What suffix? **le** Next? **ence** Next? **tial** Next? **ance** Next? **tious**
5. Repeat Step 4 with the suffixes in Lines 4 and 5.

ACTIVITY D: Guided Strategy Practice

Student Objective: under teacher guidance, to circle prefixes and suffixes, underline vowels, and read long words, first part by part silently and then as a whole word aloud

Activity Summary

- Have students circle prefixes and suffixes and underline the vowels.
- Assist students in checking their work.
- Have students sound out each word to themselves and then say the whole word aloud.

1	graphical	indestructibility
2	significance	unimaginatively
3	deliberation	inconspicuous
4	repercussion	surreptitiously

Instructional Steps / Display 20.1

1. Look at page 109. Find Activity D.
2. Circle prefixes and suffixes and underline the vowels. Look up when you are done. Pause and monitor.
3. Show Display 20.1. Check and fix any mistakes. Pause and monitor.
4. Go back to the first word. Pause. Sound out the word to yourself. Put your thumb up when you can read the word. Be sure that it is a real word. Pause. What word? **graphical**
5. Next word. Pause. What word? **indestructibility**
6. Repeat Step 5 with the remaining words in Activity D.
7. **Optional** Have students read a line to the group or to a partner.

✓ CORRECTION

If students make an error on the whole word but it's close, prompt them to make it a real word. Otherwise, tell them the word and have them repeat it. Then loop under each word part and ask students to read the parts and then the whole word.

ACTIVITY E: Unguided Strategy Practice

Student Objective: to use the *REWARDS* covert strategy to read long words

Activity Summary

- Have students figure out each word to themselves. Give ample thinking time.
- Have students say the word aloud.

1	tremendously	indispensable
2	particularly	impressionistic
3	examination	unattractiveness
4	masterfully	inconsistently
5	capitalism	insurmountable

✓ CORRECTION

If students make an error on the whole word, use Display 20.3. Trace over the loops indicating word parts. Have students read the parts and then the whole word.

Instructional Steps / Displays 20.2 to 20.3

1. Show Display 20.2. Look down at your book and find Activity E. Find the first word in Line 1. Pause. Look carefully for prefixes and suffixes. Look for vowels in the rest of the word. If you have difficulty figuring out the word, use your pencil. Put your thumb up when you can say the word. Give ample thinking time.

2. When students have decoded the word, ask: What word? **tremendously**

3. Next word. Put your thumb up when you can say the word. Pause. What word? **indispensable**

4. Repeat Step 3 with the remaining words in Activity E.

5. Optional Have students read a line to the group or to a partner.

ACTIVITY F: Spelling Dictation

Student Objectives:
- to orally segment a word into parts
- to spell four long words

Activity Summary

- With each word, tell students the word and have them repeat it.
- Have students say the parts of the word with you and then say the parts to themselves as they write the word.
- Display the word and have students compare their words with your word.
- Have students cross out and rewrite any misspelled words.

1	tremendously	**3**	significance
2	insurmountable	**4**	particularly

Instructional Steps / Display 20.4

1. Find Activity F. Please cover up the rest of the page.
2. The first word is **tremendously**. What word? **tremendously** Tap and say the parts in **tremendously** with me. **tre mend ous ly** Say the parts in **tremendously** to yourself as you write the word. Pause and monitor.
3. Using Display 20.4, show **tremendously**. Check **tremendously**. If you misspelled it, cross it out and write it correctly.
4. The second word is **insurmountable**. What word? **insurmountable** Tap and say the parts in **insurmountable** with me. **in sur mount able** Say the parts in **insurmountable** to yourself as you write the word. Pause and monitor.
5. Show **insurmountable**. Check **insurmountable**. If you misspelled it, cross it out and write it correctly.
6. Repeat Steps 4–5 with **significance** and **particularly**.

> ✓ **CORRECTION**
>
> If students make an error, have them cross out the misspelled word and rewrite the entire word correctly.

ACTIVITY G: Meanings of Prefixes and Suffixes

Student Objective: to use the meanings of prefixes and suffixes learned in earlier lessons to determine the meanings of long words

Activity Summary

- With each target word, have students read the explanation aloud with you.
- Have students find the word that matches the explanation and write it on the line provided.
- Have students apply the meaning of the word with assigned partners or with the whole class.

> **a**   (Activity D) the quality of not being able to be destroyed
> indestructibility
>
> **b**   (Activity D) in a manner that is not imaginative
> unimaginatively
>
> **c**   (Activity E) in a manner that is not consistent or not in agreement
> inconsistently

CORRECTION

If students make an error, tell them what they should have said and have them repeat it.

Instructional Steps

1. Turn to page 110. Find Activity G. You are going to find words that match the meanings without reminders or words in bold. Remember, if you need help, look at page 122 toward the end of your *Student Book*.

2. Look at **a**. Read with me: "the quality of not being able to be destroyed." Find the word and write it. Pause and monitor. What word means "the quality of not being able to be destroyed"? **indestructibility** Large bridges that span more than a mile, such as the Golden Gate Bridge, are amazing examples of _____. **indestructibility**

3. Look at **b**. Read with me: "in a manner that is not imaginative." Find the word and write it. Pause and monitor. What word means "in a manner that is not imaginative"? **unimaginatively** Even though the studio tried to market the new movie's special effects as innovative, they weren't; the special effects were used _____. **unimaginatively**

4. Look at **c**. Read with me: "in a manner that is not consistent or not in agreement." Find the word and write it. Pause and monitor. What word is "in a manner that is not consistent"? **inconsistently** When an employer is nice to one employee who is late every day and scolds another employee who is late every day, the employer is treating them _____. **inconsistently** Partner 1, tell your partner about situations in which people are treated inconsistently. Begin by saying: Some situations in which people are treated inconsistently are . . . Monitor as students share. Then call on one student.

> *Conduct the Prefix and Suffix Review for Lesson 20 now or at the end of the lesson.*

ACTIVITY H: Word Reading Review

Student Objectives:
- with teacher support, to use the *REWARDS* covert strategy for the decoding process by looking for prefixes, suffixes, and vowels without circling and underlining
- to build decoding automaticity by reading previously introduced words

Activity Summary

- Have students figure out each word to themselves and then say it aloud.

1	financial	misinformation
2	impracticality	environmentally
3	evaluation	circumstantial
4	incorruptible	incomprehensible
5	preventable	impressionable

✔ CORRECTION

If students make an error on a word but it's close, prompt them to read it part by part and then make it a real word. Otherwise, tell them the word and have them repeat it.

Instructional Steps

1. Find Activity H. These are words that you have already practiced.

2. Find the first word in Line 1. Say the word to yourself. Look carefully for prefixes and suffixes. Look for vowels in the rest of the word. If you have difficulty figuring out the word, use your pencil. Put your thumb up when you can say the word. Pause and monitor.

3. When students have decoded the word, ask: What word? **financial**

4. Next word. Put your thumb up when you can say the word. Give ample thinking time. What word? **misinformation**

5. Repeat Step 4 with the remaining words.

6. Optional Have students read a line to the group or to a partner.

ACTIVITY 1: Sentence Reading

Student Objective: to apply the multisyllabic word reading strategy to long words in sentences

Activity Summary

- Have students read a sentence to themselves.
- Choose from several options of having students read the sentence together, to partners, or individually to the class.
- **Optional** Ask the comprehension question that follows each sentence.
- **Optional** If there is time, have students reread Sentences 11 and 12 and use word analysis and context clues to determine the meaning of the underlined word in each sentence.

1   It is a wonderful victory to masterfully read long words. *How does it feel to read long words?*

2   Unfortunately, the family's debt rose to an insurmountable level during the recession. *During the recession, did the family's debt increase a little or a lot?*

3   Art that is impressionistic expresses an idea of something rather than showing the thing as we really see it. *Does someone see the objects in impressionistic art as realistic or abstract?*

4   For most professions, consistency and perseverance are good qualities to have. *If an employer hires someone with these qualities, is the employer valuing reliability and persistence or changeability and inconsistency?*

5   Rather than rushing the patient examination, the emergency room doctor completed her task with deliberation. *Did this doctor take time examining the patient or complete the exam quickly?*

6   Most corporations strive for effective organization and environmentally safe conditions. *What are the goals of these corporations, safety and efficiency or productivity and profit?*

7   Misinformation and attempts to foil communication were used to boost the movie's sinister plot. *Did the movie become more thrilling because the plot became more understandable or more complicated?*

8 The spectators did not realize the repercussions of their presence in the area; they were the ones who were delaying the rescue operations. *Were the spectators being in the way or being helpful?*

9 In my estimation, if a dog is your best friend, its name deserves your thought and imagination, but some dogs are unimaginatively named "Fido." *Is it the speaker's opinion that the name Fido for a dog is interesting or uninteresting?*

10 You can find all the baseball statistics you want (batting, pitching, fielding, attendance) on the graphical history of baseball website. *Would this website present interesting baseball statistics by showing you or telling you?*

11 The children watched the performance from behind the curtains, trying to be <u>inconspicuous</u>. *From where did the children watch the performance?*

12 Even though the instructor's methods were <u>unconventional</u>, they were tremendously effective; the results were fantastic. *Did the students learn a little or a lot in this instructor's class?*

Instructional Steps

1. Look at page 111. Find Activity I. These sentences include words you practiced in some of the lessons as well as words you might have to figure out by using your *REWARDS* strategy.

2. Read Sentence 1 to yourself. When you can read all of the words in the sentence, put your thumb up. Pause and monitor.

3. When students can read the sentence, use one of the following options:

   a. Ask students to read the sentence together (i.e., choral reading).

   b. Have students read the sentence to their partners. Then call on one student to read the sentence to the group.

   c. Ask one student to read the sentence to the group.

4. Optional Ask a comprehension question about the sentence.

5. Repeat Steps 2–4 with the remaining sentences. With each sentence, be sure that you give ample thinking time for decoding all of the words.

6. Optional Go back to Sentence 11. Read the sentence again to yourself and notice the underlined word. Pause. What does the word **inconspicuous** mean? Does any part of the word give a clue? Partner 1, tell your partner your answer. Monitor partner work. Then call on one student. Accept an answer such as: *In other*

lessons, we learned that in *means "not." We also learned that* ous *tells us the word is an adjective and* ous *means "full of." But, we don't know what it would be "full of."* So, we're thinking of an **adjective**. You're right, we can't always figure out what the English root word means because it probably came from another language. In this case, the "con" and the "spicu" parts of the word came from a Latin word. So, let's ask the second question. Do other words in the sentence give clues? Partner 2, tell your partner your answer. Monitor partner work. Then call on one student. Accept an answer such as: *The children were watching the performance from behind the curtains. This sounds like they wanted to hide. The sentence also uses the word "trying," so it sounds like they were trying hard to hide, to stay out of sight.* Yes, the Latin word that "con" and "spicu" comes from means "to be visible." Add on the "in" meaning "not" and the "ous" that indicates an **adjective** and we end up with **inconspicuous** as an **adjective** that means **not visible**, or **not attracting notice**.

7. **Optional** Go back to Sentence 12. Read the sentence again to yourself and notice the underlined word. Pause. What does the word **unconventional** mean? Does any part of the word give a clue? Partner 2, tell your partner your answer. Monitor partner work. Then call on one student. Accept an answer such as*: In other lessons, we learned that* un *means "not." We also learned that* tion *indicates a noun. But, there's another suffix after* tion, *so it's probably not a noun.* You remembered—good. Yes, when "tion" has another suffix after it, the word isn't a **noun** anymore. Adding on another suffix, in this case "al," changes the word to another part of speech. **Unconventional** is actually an **adjective**. So, let's ask the second question. Do other words in the sentence give clues? Partner 1, tell your partner your answer. Monitor partner work. Then call on one student. Accept an answer such as: *The sentence sounds like the results are unexpected—the results are fantastic even though the instructor's methods are unconventional. So, unconventional must have something to do with "not what you would expect."* Yes, the methods are not what you would expect; they are not traditional. So, **unconventional** is an **adjective** that means **not traditional**. Even though the instructor's methods were not traditional, the method was effective.

For The Next Activity, Choose To Teach Either:

Content-Area Vocabulary on page 482 or
Alternative Illustrated Content-Area Vocabulary on page 487.

ACTIVITY J: Content-Area Vocabulary

Student Objectives:
- to pronounce and remember a list of content-area vocabulary words that will be included in an informative passage (List 1)
- to apply the *REWARDS* multisyllabic word reading strategy to a second list of words that will be included in the passage (List 2)
- to understand the meanings of the words on both lists, thus increasing passage comprehension
- to gain background knowledge that can be activated and used while reading and comprehending the passage

Content-Area Vocabulary, List 1
(Tell students the pronunciation)

NOTE

Read the Instructional Steps carefully before you teach because the wording changes in each lesson.

Activity Summary

- Use the display to do the following with each word:
  a) Tell students the pronunciation of the word and have them repeat it.
  b) Have students read the part of speech and explanation aloud with you.
- Have students look at their *Student Book* and reread the words in List 1 aloud.
- Use the scripted wording to provide additional study of the two starred words in List 1.

List 1

1   frontier   *n.*   a.   A **frontier** is the boundary between land that has been settled and land that has not been explored, developed, or settled.

                                                 b.   A **frontier** is the limit of knowledge or accomplishment in a field of knowledge beyond which there is more to explore, learn, and accomplish.

2   quest   *n.*   A **quest** is a search for something; it's often a long and difficult search.

****3**   accomplishment   *n.*   An **accomplishment** is the successful completion of a task or the achievement of a goal.

4   miniature   *n.*   A **miniature** is something that is very small; often it's a smaller version of something that is normally much larger.

5   capsule   *n.*   A **capsule** is a small, closed container or compartment.

6   nanotechnology   *n.*   **Nanotechnology** is the science of understanding and controlling things at the atomic level.

****7**   intrigues   *v.*   If something **intrigues** you, especially if it's something strange or unusual, that thing interests you and you want to know more about it.

Instructional Steps / Display 20.5

1. Show Display 20.5. Look up here. Before we read the passage, let's read some difficult words.

2. Point to **frontier**. The first word is **frontier**. What word? **frontier** Now read the part of speech and the first explanation with me: "Noun. A **frontier** is the boundary between land that has been settled and land that has not been explored, developed, or settled." Read the second explanation with me: "A **frontier** is the limit of knowledge or accomplishment in a field of knowledge beyond which there is more to explore, learn, and accomplish." In the passage, you will read about many **frontiers**, the boundaries between what is already known and what we still want to learn.

CORRECTION

If students make an error on the pronunciation of a word, tell them the word and have them repeat it.

3. Point to **quest**. This word is **quest**. What word? **quest** Read the part of speech and explanation with me: "Noun. A **quest** is a search for something; it's often a long and difficult search." Human beings have an insatiable **quest** for knowledge in all kinds of areas. In the passage, you will read about a few of these areas.

4. Point to **accomplishment**. This word is **accomplishment**. What word? **accomplishment** Read the part of speech and explanation with me: "Noun. An **accomplishment** is the successful completion of a task or the achievement of a goal." Continue with the remaining words in List 1.

5. Now turn to page 112 in your *Student Book*. Let's read the words in List 1 again. Pause. First word. **frontier** Next word. **quest** Next word. **accomplishment** Continue with the remaining words in List 1.

6. Let's study two of the words a little more. Find word #3 again. Pause. What word? **accomplishment** If you complete a task or achieve a goal, you have an _____. **accomplishment** If you and your family spent the whole day cleaning out your garage, you might say that straightening up the garage was an _____. **accomplishment** If writing is difficult for you and you finished writing an entire essay, that would be an _____. **accomplishment** When you read the passage, you will see that frontiers have a lot to do with **accomplishments**.

7. Find word #7 again. Pause. What word? **intrigues** So, if something interests you and you want to learn more about it, that thing _____. **intrigues me** If one of NASA's Mars Exploration Rovers **intrigues** you, you can go online and learn how that rover is exploring the surface of Mars and what that rover is finding. When you get done reading the passage, you may want to go online and investigate other topics that **intrigue** you.

Content-Area Vocabulary, List 2
(Guide students in application of the strategy)

Activity Summary

- In their *Student Book*, have students circle prefixes and suffixes and underline the vowels of all words in List 2.
- Using the display, assist students in checking their work. Then do the following with each word:
  - a) Have students read the word aloud, first part by part and then as a whole word.
  - b) Have students read the part of speech and explanation aloud with you.
- Have students look at their *Student Book* and reread the words in List 2 aloud.
- Use the scripted wording to provide additional study of the two starred words in List 2.

List 2

1	boundary	*n.*	A **boundary** is an imaginary line that separates one area from other areas.
2	explore	*v.*	If you **explore** a place or an idea, you find out what it is like.
*** 3**	speculate	*v.*	If you **speculate** about something, you make guesses about its nature or about what might happen.
*** 4**	innovation	*n.*	An **innovation** is a new thing or a new method of doing something.
5	mantle	*n.*	In geology, the **mantle** is the part of the earth that lies between the crust and the core.
6	manipulate	*v.*	If you **manipulate** something that requires skill, such as a certain tool or a complicated piece of equipment, you move, operate, or control it.
7	maneuver	*v.*	If you **maneuver** something into or out of an awkward or unusual position, you skillfully move it there.

Instructional Steps / Display 20.6

1. Look at page 113. With each word, circle the prefixes and suffixes and underline the vowels. Look up when you are done. Pause and monitor.

2. Show Display 20.6. Now check and fix any mistakes. Pause and monitor.

3. When students are done checking, assist them in reading the words on the display, beginning with the first word in List 2. Look up here. With each word:

    a. Loop under each word part while you ask: What part? What part? What part? What part?

    b. Run your finger under the whole word and ask: What word?

    c. Have students read the part of speech and explanation with you.

4. Let's read the words again. Go back to the first word in List 2. Pause. First word. **boundary** Next word. **explore** Next word. **speculate** Continue with the remaining words in List 2.

5. Let's study two of the words a little more. Find word #3 again. Pause. What word? **speculate** So, when you make a guess about what something is like or about what might happen, you _____. **speculate** Before NASA began its Mars Exploration Rover project, scientists could only **speculate** about the surface of Mars. Now the rovers have provided evidence that water once flowed on the Mars surface. In the passage, you will read about some **speculations** made by a famous physicist, Richard Feynman, about something that people can't even see with the naked eye, sometimes called the unaided eye.

6. Find word #4 again. Pause. What word? **innovation** So, if people design a new way of doing something, they have designed an _____. **innovation** People who would rather that things didn't change can be heard complaining about _____. **innovations**. Frequently, **innovations** solve problems in our lives or bring new excitement to our lives, so most people feel positively about them. When you read the passage, you will learn that frontiers have a lot to do with **innovations**.

The next activity is Passage Reading and Comprehension. Continue the lesson on page 494.

ALTERNATIVE ACTIVITY J: Illustrated Content-Area Vocabulary

Student Objectives:
- to pronounce and remember a list of content-area vocabulary words that will be included in an informative passage (List 1)
- to apply the *REWARDS* multisyllabic word reading strategy to a second list of words that will be included in the passage (List 2)
- to understand the meanings of the words on both lists, thus increasing passage comprehension
- to gain background knowledge that can be activated and used while reading and comprehending the passage

Content-Area Vocabulary, List 1 (Tell students the pronunciation)

Activity Summary

- Use the corresponding displays to do the following with each word:
  a) Tell students the pronunciation of the word on the display and have them repeat it.
  b) Have students read the part of speech and explanation aloud with you.
  c) Provide examples, check for understanding, and introduce word families.
  d) Engage students by having them read all information on the displays.
- Have students look at their *Student Book* and reread the words in List 1 aloud.

List 1

1	frontier	*n.*	a. A **frontier** is the boundary between land that has been settled and land that has not been explored, developed, or settled.
			b. A **frontier** is the limit of knowledge or accomplishment in a field of knowledge beyond which there is more to explore, learn, and accomplish.
2	quest	*n.*	A **quest** is a search for something; it's often a long and difficult search.
3	accomplishment	*n.*	An **accomplishment** is the successful completion of a task or the achievement of a goal.
4	miniature	*n.*	A **miniature** is something that is very small; often it's a smaller version of something that is normally much larger.
5	capsule	*n.*	A **capsule** is a small, closed container or compartment.
6	nanotechnology	*n.*	**Nanotechnology** is the science of understanding and controlling things at the atomic level.
7	intrigues	*v.*	If something **intrigues** you, especially if it's something strange or unusual, that thing interests you and you want to know more about it.

✓ **CORRECTION**

If students make an error on the pronunciation of a word, tell them the word and have them repeat it.

Instructional Steps / Displays 20.7 to 20.18

1. Show Display 20.7. Look up here. Before we read the passage, let's read some difficult words.

2. Point to **frontier**. The first word is **frontier**. What word? **frontier** Now read the part of speech and explanation with me: "Noun. A **frontier** is the boundary between land that has been settled and land that has not been explored, developed, or settled." Read the example with me: "This imaginary boundary line between land that has been settled and land that has not been settled or explored indicates the **frontier**."

3. Show Display 20.8. Point to **frontier**. This is a second explanation for the noun **frontier**. Read the explanation with me: "A **frontier** is

the limit of knowledge or accomplishment in a field of knowledge beyond which there is more to explore, learn, and accomplish." Read the example with me: "The diagram to the left illustrates the concept of a **frontier**. Examine it carefully." So, let's look at the **frontier** of earth science. On the left side of the boundary we have what? Read it with me: "Knowledge and accomplishments that have been made in earth science." On the other side of the boundary, we have what? Read it with me: "What has not been explored, learned, or accomplished." In the passage, you will read about many **frontiers**, the boundaries between what is already known and what we still want to learn.

4. Show Display 20.9. Point to **quest**. This word is **quest**. What word? **quest** Read the part of speech and explanation with me: "Noun. A **quest** is a search for something; it's often a long and difficult search." Read the example with me: "These scientists are on a **quest** to find a cure for cancer. Humans have an insatiable **quest** for knowledge in all kinds of areas."

5. Show Display 20.10. Point to **accomplishment**. This word is **accomplishment**. What word? **accomplishment** Read the part of speech and explanation with me: "Noun. An **accomplishment** is the successful completion of a task or the achievement of a goal."

6. Show Display 20.11. Read the first example with me: "When an eighth grader learns to read long words, that is an **accomplishment**." Read the second example with me: "When a ninth grader writes a long essay, that is an **accomplishment**." When you read the passage, you will see that frontiers have a lot to do with **accomplishments**.

7. Show Display 20.12. Here are some words that belong to the **accomplishment** word family. Echo read the word and the part of speech. Accomplished - adjective. **accomplished - adjective** Accomplishing - verb. **accomplishing - verb** Accomplishment - noun. **accomplishment - noun**

8. Follow along as I read. When I stop, say the bold word: It takes many years to become an **accomplished** musician. **Accomplishing** this goal requires a lot of practice. But, it's worth it. To play beautiful music is a wonderful and rewarding **accomplishment**.

9. Show Display 20.13. Point to **miniature**. This word is **miniature**. What word? **miniature** Read the part of speech and explanation with me: "Noun. A **miniature** is something that is very small; often it's a smaller version of something that is normally much larger." Read the example with me: "The racecar in this photo is a **miniature** of a sports car that may have been raced in Europe. The process of making things on a small scale is called **miniaturization**." So, in creating the **miniature** of a racecar, the manufacturers have used a process called _____. **miniaturization**

10. Show Display 20.14. Read the example with me: "In the upper photo, you see the Statue of Liberty, a massive monument. In the lower photo, you see a six-inch **miniature** of the Statue of Liberty."

11. Show Display 20.15. Point to **capsule**. This word is **capsule**. What word? **capsule** Read the part of speech and explanation with me: "Noun. A **capsule** is a small, closed container or compartment." Read the example with me: "Medicine was put into each blue and white **capsule**."

12. Show Display 20.16. Read the example with me: "One type of miniaturization results in making smaller versions of things. Because of this type of miniaturization, researchers and engineers are putting other things besides medicines into **capsules**. For example, they are putting miniature cameras into **capsules** for a patient to swallow so the doctor can see the patient's insides."

13. Show Display 20.17. Point to **nanotechnology**. This word is **nanotechnology**. What word? **nanotechnology** Read the part of speech and explanation with me: "Noun. **Nanotechnology** is the science of understanding and controlling things at the atomic level." Read the example with me: "**Nanotechnology** is another type of miniaturization in which things are made so small that you cannot see them with the unaided eye. In this drawing, an artist has created an imaginary example of **nanotechnology**: A futuristic nanobot (tiny robot) has been sent into a human body to attack cancer cells and destroy them."

14. Show Display 20.18. Point to **intrigues**. This word is **intrigues**. What word? **intrigues** Read the part of speech and explanation with me: "Verb. If something **intrigues** you, especially if it's something strange or unusual, that thing interests you and you want to know more about it." Read the example with me: "If one of NASA's Mars Exploration Rovers **intrigues** you, you can go online and learn how that rover is exploring the surface of Mars and what that rover is finding." When you get done reading the passage, you may want to go online and investigate other topics that **intrigue** you.

15. Now turn to page 112 in your *Student Book*. Let's read the words in List 1 again. Pause. First word. **frontier** Next word. **quest** Next word. **accomplishment** Continue with the remaining words in List 1.

Content-Area Vocabulary, List 2
(Guide students in application of the strategy)

Activity Summary

- In their *Student Book*, have students circle prefixes and suffixes and underline the vowels of all words in List 2.
- Using the display that shows List 2 with circling and underlining, assist students in checking their work. Have students read each word aloud, first part by part and then as a whole word.
- Use the corresponding displays to do the following with each word:
  a) Have students read the word, the part of speech, and the explanation aloud with you.
  b) Provide examples, check for understanding, and introduce word families.
  c) Engage students by having them read all information on the displays.
- Have students look at their *Student Book* and reread the words in List 2 aloud.

List 2

1	boundary	*n.*	A **boundary** is an imaginary line that separates one area from other areas.
2	explore	*v.*	If you **explore** a place or an idea, you find out what it is like.
3	speculate	*v.*	If you **speculate** about something, you make guesses about its nature or about what might happen.
4	innovation	*n.*	An **innovation** is a new thing or a new method of doing something.
5	mantle	*n.*	In geology, the **mantle** is the part of the earth that lies between the crust and the core.
6	manipulate	*v.*	If you **manipulate** something that requires skill, such as a certain tool or a complicated piece of equipment, you move, operate, or control it.
7	maneuver	*v.*	If you **maneuver** something into or out of an awkward or unusual position, you skillfully move it there.

CORRECTIONS

If students make an error on a word part, say the word part and have them repeat it.

If students make an error on the whole word but it's close, prompt them to make it a real word. Otherwise, tell them the word and have them repeat it.

1. Look at page 113. With each word in List 2, circle the prefixes and suffixes and underline the vowels. Look up when you are done. Pause and monitor.

2. Show Display 20.19. Now check and fix any mistakes. Pause and monitor.

3. When students are done checking, assist them in reading the words on the display, beginning with the first word in List 2. Look up here.

   With each word:

   a. Loop under each word part while you ask: What part? What part? What part? What part?

   b. Run your finger under the whole word and ask: What word?

4. Show Display 20.20. Now let's learn the meanings of these words. Point to **boundary**. What word? **boundary** Read the part of speech and explanation with me: "Noun. A **boundary** is an imaginary line that separates one area from other areas." Read the example with me: "The lines on this U.S. map represent **boundaries** that separate one state from another state."

5. Show Display 20.21. Point to **explore**. What word? **explore** Read the part of speech and explanation with me: "Verb. If you **explore** a place or an idea, you find out what it is like." Read the example with me: "At the frontier of space **exploration**, we don't know what astronauts are going to **explore** in the future."

6. Show Display 20.22. Point to **speculate**. What word? **speculate** Read the part of speech and explanation with me: "Verb. If you **speculate** about something, you make guesses about its nature or about what might happen." Read the example with me: "Before NASA began its Mars Exploration Rover project, scientists could only **speculate** about the surface of Mars. Now the rovers have provided evidence that water once flowed on Mars." So, when you make a guess about what something is like or about what might happen, you _____. **speculate** In the passage, you will read about some **speculations** made by a famous physicist, Richard Feynman, about something that people can't even see with the naked eye, sometimes called the unaided eye.

7. Show Display 20.23. Point to **innovation**. What word? **innovation** Read the part of speech and explanation with me: "Noun. An **innovation** is a new thing or a new method of doing something." Read the example with me: "Technology constantly brings us new **innovations**." So, if people design a new way of doing something, they have designed an _____. **innovation** Frequently, **innovations** solve problems in our lives or bring new excitement to our lives, so most people feel positively about them. When you

read the passage, you will learn that frontiers have a lot to do with **innovations**.

8. Show Display 20.24. Read the question with me: "Humans are constantly dreaming of **innovations** in order to solve problems in their lives, in their homes, or elsewhere in the world. What idea do you have for an **innovation** and what problem does it solve?" Partner 2, tell your partner. Begin by saying: My idea for an **innovation** is . . . to solve the problem of . . . Monitor as students share. Then call on one student.

9. Show Display 20.25. Point to **mantle**. What word? **mantle** Read the part of speech and explanation with me: "Noun. In geology, the **mantle** is the part of the earth that lies between the crust and the core." Read the example with me: "This illustration of the Earth's structure shows the layers of the earth's interior, including the crust, the **mantle**, the outer core, and the inner core."

10. Show Display 20.26. Point to **manipulate**. What word? **manipulate** Read the part of speech and explanation with me: "Verb. If you **manipulate** something that requires skill, such as a certain tool or a complicated piece of equipment, you move, operate, or control it." Read the example with me: "When you play video games, you **manipulate** buttons and joysticks on the game's controller."

11. Show Display 20.27. Here are some words that belong to the **manipulate** word family. Echo read the word and the part of speech. Manipulate - verb. **manipulate - verb** Manipulation - noun. **manipulation - noun** Manipulated - verb. **manipulated - verb**

12. Follow along as I read. When I stop, say the bold word: In the electronics industry, technicians frequently have to **manipulate** tools in order to repair machine parts, such as circuit boards. Because of how small some of the components are on the circuit board, this **manipulation** takes skill and practice. This technician has successfully **manipulated** his soldering iron to repair a circuit.

13. Show Display 20.28. Point to **maneuver**. What word? **maneuver** Read the part of speech and explanation with me: "Verb. If you **maneuver** something into or out of an awkward or unusual position, you skillfully move it there." Read the example with me: "The driver of the red car had to have excellent driving skills to **maneuver** it into this parking space."

14. Look down at your *Student Book*. Let's read the words in List 2 again. Pause. First word. **boundary** Next word. **explore** Next word. **speculate** Continue with the remaining words in List 2.

> *The next activity is Passage Reading and Comprehension. Continue the lesson on page 494.*

ACTIVITY K: Passage Reading and Comprehension

Student Objectives:
- to accurately read an informative passage containing many long words
- to formulate accurate, coherent answers to questions about the passage content

Activity Summary

- With each passage section, have students read the section silently to the embedded number and then reread the same section orally to a partner, together as a group, or individually.

- After students have finished reading the section orally, ask the corresponding comprehension question or questions as follows:

  a) Decide whether to ask the scaffolding questions (when provided).

  b) Ask the main question, provide thinking time, and then have students share their answers with their partners by using a complete statement. Finally, call on individuals and discuss their answers.

Instructional Steps / Displays 20.29 to 20.34

1. Turn to page 114. Find Activity K. You are going to read a passage and answer questions about what you've read. Today's passage is about frontiers. Read the title with me: "Frontiers of Tomorrow."

2. Find #1 in the passage. Pause. Read down to #1 silently. Look up when you are done. Monitor silent reading.

3. While students are reading silently, move around the room and ask individual students to whisper-read to you.

4. When the majority of students have completed the silent reading, have them reread the section by reading orally to a partner (partner reading), reading together orally as a group (choral reading), or reading aloud individually.

5. Show Display 20.29. If your students have difficulty with comprehension, ask the scaffolding questions before asking the main question.

6. Have students read the main question and think of the answer, or you may select to have students write the answer before sharing. Then have students read the sentence starter and tell the answer to their partner, using a complete statement. For Section #1, it might sound like this: Read the main question with me: "What are some areas of knowledge that have 21st century frontiers?" Think of the answer (or write the answer). Be sure to use information from the article. Provide thinking time. Read the sentence starter with me:

✓ **CORRECTION**

If students have difficulty answering the main question, use the scaffolding questions to prompt students for the answer.

"Some areas of knowledge that have 21st century frontiers include _____. Twos, then Ones, say (or read) the answer to your partner. Use the sentence starter. Circulate and monitor student responses. Then ask a few students to share their sentence answers.

7. Repeat Steps 2–5 for all sections of the passage, using Displays 20.30–20.34. Use a new display for each section.

Section #1

	Frontiers of Tomorrow
	The word *frontier* has traditionally meant the boundary between
9	land that has been settled and land that has not been explored,
22	developed, and settled. Today, people are more likely to use *frontier*
33	to mean the limit of knowledge or accomplishment in a field of study
46	beyond which there is more to explore, learn, and accomplish; for
57	example, *frontiers of medicine* or *frontiers of engineering*. Let's
66	examine a few of many 21st century frontiers. **(#1)**

Section #1 Key Details - Scaffolding Questions:

a. How is the term *frontier* used when talking about land? *The term "frontier" means the boundary between land that has been settled and land that has not been explored, developed, and settled.*

b. How is the term *frontier* used when talking about knowledge in a field of study? *The term "frontier" means the boundary between what is known in a field of study and what can still be explored, learned, and accomplished.*

c. What are some examples of frontiers of knowledge? *Some examples are "frontiers of medicine" and "frontiers of engineering."*

Section #1 Main Question: *(Note to teacher: You may select to have students write out answers to main questions before sharing with their partners and the class.)*

What are some areas of knowledge that have 21st century frontiers? Begin your answer by saying (or writing): Some areas of knowledge that have 21st century frontiers include _____. Answers will vary considerably: *Some areas of knowledge that have 21st century frontiers include: medicine, engineering, technology, space travel, neuroscience, art, food production, etc.*

Section #2

74	Miniaturization is pushing the frontiers in manufacturing as
82	people take larger things (such as cameras) and make them smaller
93	and smaller. Miniaturization is also pushing the frontiers of physics,
103	chemistry, and biology. Humans are making things that have never
113	existed before. These things are so tiny that you cannot see them with
126	the unaided eye. We call this type of miniaturization *nanotechnology*.
136	Nanotechnology is helping us learn how atoms operate when you move
147	them around and build new structures with them. **(#2)**

Section #2 Key Details - Scaffolding Questions:

a. Does miniaturization have to do with making large things or small things? *Miniaturization has to do with making small things.*

b. What do we call it when someone makes things so small that they can't be seen with an unaided eye? *When someone makes things so small that they can't be seen with an unaided eye, we call it nanotechnology.*

c. What is nanotechnology helping us learn that we didn't know before? *Nanotechnology is helping us learn how atoms operate when you move them around and build new structures with them.*

Section #2 Main Question:

Summarize three things you learned about miniaturization and nanotechnology. Begin your answer by saying (or writing): Three things I learned about miniaturization and nanotechnology are:
1) _____. 2) _____. 3) _____.
Accept an answer such as: *1) Because of miniaturization, people are making things that used to be larger, such as cameras, smaller and smaller. 2) Miniaturization also is creating things so small that you can't see them with an unaided eye. This is called nanotechnology. 3) Nanotechnology is helping us learn how atoms operate when you move them around and build new structures with them.*

Section #3

155	In 1960, Richard Feynman, a famous scientist, speculated that
164	people should be able to make things as small as the cells in our
178	bodies. He also believed that you could maneuver things "atom
188	by atom." In 2005, a group of scientists accomplished both. By
199	manipulating atoms, they created the world's first nanocar—a car
209	about 20,000 times smaller than a human hair—visible through an
220	extremely powerful microscope that allowed the scientists to see the
230	wheels roll.
232	If scientists keep pushing the frontiers of miniaturization, whether
241	the products are visible or invisible, who knows how far these frontiers
253	will go? Perhaps we'll see a day when you would swallow a capsule
266	with a tiny video camera and a robot surgeon so that a doctor could
280	perform surgery that was previously impossible. Are parts of the
290	science fiction movie *Fantastic Voyage* becoming reality? **(#3)**

Section #3 Key Details - Scaffolding Questions:

a. What did Richard Feynman believe people could create? *Richard Feynman believed people could create things as small as the cells in our bodies.*

b. What else did Richard Feynman believe? *Feynman believed that people could maneuver things atom by atom.*

c. So, in 2005, which of those beliefs did scientists prove were true? *Both. The scientists manipulated atoms and they made something as small as the cells in our bodies.*

d. What did the scientists create? *The scientists created a nanocar.*

e. If people keep pushing the frontiers of miniaturization, what is one thing that could come from it? *If people keep pushing the frontiers of miniaturization, maybe someone will be able to swallow a capsule with a tiny video camera and a robot surgeon that allows the doctor to perform surgery that couldn't have been done before.*

Section #3 Main Question:

Miniaturization, including nanotechnology, is pushing the frontiers of many branches of science. Speculate on a device or new material that might be created using miniaturization and what it might do. Begin your answer by saying (or writing): I speculate that scientists will use miniaturization (or nanotechnology) to create _____.

Answers will vary a great deal: (a) I speculate that scientists will use nanotechnology to create a device that will be able to move through the tiniest veins and photograph what is happening in those veins. (b) I speculate that scientists will use nanotechnology to create a device that will move through operating equipment and detect wear.

(c) I speculate that scientists will use miniaturization to create small food tablets (like miniature hamburgers) that will feed everybody at cheaper prices and no one will go hungry any more.

Section #4

297	The frontiers of earth science are equally fascinating. Earth
306	scientists, people who explore the earth, are intrigued by what
316	they might find when they drill into the earth. In the 1960s, humans
329	successfully drilled into the crust, but no one has penetrated the
340	mantle, which makes up 84% of the Earth's volume. To reach the
352	mantle on land would mean drilling through the crust up to 37.3 miles.
365	Even if it were possible with the current equipment, drilling that
376	far would take many, many years.
382	Now, scientists are considering three places in the ocean where
392	the crust is thin enough to attempt drilling 3.7 miles down to the
405	mantle. Even at one-tenth the distance compared to drilling on land,
417	this will still be a considerable challenge. After taking several years
428	to work on improving the equipment, the scientists hope to bring up
440	fresh samples of mantle material to study. Studying these samples
450	will lead to increased understanding of earthquakes, volcanoes, and
459	continents. How far will the frontiers of earth science advance during
470	your lifetime? **(#4)**

NOTE

37.3 miles = 60 km
3.7 miles = 6 km

Section #4 Key Details - Scaffolding Questions:

a. Have earth scientists already drilled through the crust or the mantle? *Earth scientists have drilled through the crust.*

b. If scientists tried to reach the mantle on land, what would happen? *If scientists tried to reach the mantle on land, we're not sure they would make it that far. Even if it were possible, it would take many, many years to drill down to the mantle, which could be as much as 37.3 miles.*

c. Why will earth scientists attempt to drill down to the mantle in the ocean instead? *Earth scientists will attempt to drill down into the mantle in the ocean instead because there are places in the ocean where the crust is thin enough that they might make it. They have to drill 3.7 miles to reach the mantle.*

d. If scientists drill down to the mantle in the ocean instead of on land, will the drilling be easy? *Drilling down in the ocean will still be a challenge, and the current equipment needs to be improved before they can make the attempt.*

e. What do earth scientists hope to get from their drilling? *From the drilling, earth scientists hope to get fresh samples of mantle material.*

Section #4 Main Question:

Where will earth scientists drill down to the mantle, what will they get from the drilling, and what do they hope to learn about the earth's mantle? Begin your answer by saying (or writing): Earth scientists will drill down to the mantle ＿＿＿＿＿＿＿＿, and bring up ＿＿＿＿＿＿＿＿, from which they will learn more about ＿＿＿＿＿＿＿＿. *Accept an answer such as: Earth scientists will drill down to the mantle in the ocean where the crust is thin enough to be successful, and bring up fresh samples from the mantle, from which they hope to learn more about earthquakes, volcanoes, and continents. Specifically, they might learn (a) the age of the materials in the mantle, (b) the elements that make up the mantle, (c) how the elements in the mantle compare to the elements in various lava flows on earth, and (d) much more.*

Section #5

472	The frontiers of space exploration have fueled human imaginations
481	for centuries. People have written stories about space travel since
491	the 2nd century, when Lucian wrote the first known "science fiction."
502	Many centuries later, in the 1960s, humans completed numerous
511	journeys into space. On some of these journeys, astronauts made it
522	as far as the moon. Today, the goal is to send humans even farther.
536	Scientists talk of building space elevators, establishing space colonies,
545	and capturing asteroids. What will be the next frontier—Mars? **(#5)**

Section #5 Key Details - Scaffolding Questions:

a. How long have humans been interested in space travel? *Humans have been interested in space travel at least since the 2nd century when Lucian wrote the first "science fiction."*

b. How many years, decades, or centuries later did humans finally accomplish space travel? *Eighteen centuries later, in the 1960s, humans finally completed journeys into space, including journeys to the moon.*

c. What are some of the new goals for space exploration? *Scientists want to establish space colonies and capture asteroids. Maybe they also want to go to Mars.*

Section #5 Main Question:

Today, scientists want to extend space exploration. What are some reasons that they might wish to extend space exploration? Begin your answer by saying (or writing): Scientists might want to extend space exploration for the following reasons: First, ＿＿＿＿＿＿＿. Second, ＿＿＿＿＿＿＿. Third, ＿＿＿＿＿＿＿. Accept an answer

such as: *Scientists might want to extend space exploration for the following reasons: First, space travel has fueled their imaginations for centuries. Second, now that they finally made it to the moon, they want to see if they could go farther or do something different, such as capture an asteroid. Third, they might want to make it as far as Mars for many possible reasons: (a) to establish a space colony, (b) to determine if there is life on another planet, (c) to find new resources on an unexplored planet.*

Section #6

555	Humans are constantly advancing frontiers. Is it because humans
564	have a never-ending, insatiable quest for knowledge? Is it because of
576	the incentives for going deeper, traveling farther, and creating things
586	smaller than ever before? Or, is it because innovations make life easier
598	for humans? Whatever the reasons, you can participate in the exciting
609	future that lies before you. Perhaps you will contribute to exploring
620	one of these frontiers or even frontiers we can't yet imagine. **(#6)**
631	

Section #6 Main Question:

The author gave several reasons that humans constantly advance frontiers. What's your belief about why humans constantly want to explore new frontiers? What other reason do you propose? Begin your answer by saying (or writing): Humans constantly want to explore new frontiers because _____. In addition, I think humans want to explore because _____. Accept one of these answers: *(a) Humans want to explore new frontiers because they want to understand more and know more. (b) Humans want to explore new frontiers because they want to constantly do something better or bigger than they've done before. (c) Humans want to explore new frontiers because they want to improve life on our planet.* Answers will vary considerably: *In addition, I think humans want to explore because . . .*

ACTIVITY L: Rate Development

Student Objective: to increase reading rate of an informative passage that contains many long words

Activity Summary

- Have students complete a Cold Timing, one or two practice readings, and a Hot Timing of the Activity K passage.
- Have students record the number of words read during each timing.
- Have students complete their Progress Monitoring Graph.

Cold Timing		**Practice 1**	
Practice 2		**Hot Timing**	

Instructional Steps

1. Find Activity L. Now it's time for rate development.

2. Find the beginning of the passage about frontiers. Pause. Whisper-read. See how many words you can read in one minute. Begin. Time students for one minute. Stop. Circle the last word you read. Pause. Record the number of words you read after **Cold Timing** at the end of the passage on page 115. Pause and monitor.

3. Let's practice again. Return to the beginning of the passage. Pause. Begin. Time students for one minute. Stop. Put a box around the last word that you read. Pause. Record the number of words you read after **Practice 1**. Pause and monitor.

4. Optional Let's practice one more time before the Hot Timing. Begin. Time students for one minute. Stop. Put a box around the last word that you read. Pause. Record the number of words you read after **Practice 2.** Pause and monitor.

5. Please exchange books with your partner. Pause. Partner 1, you are going to read first. Partner 2, listen carefully and underline any mistakes or words left out. Ones, begin. Time students for one minute. Stop. Twos, cross out the last word that your partner read. Pause. Twos, record the number of words your partner read after **Hot Timing**. Pause and monitor.

6. Partner 2, you are going to read next. Partner 1, listen carefully and underline any mistakes or words left out. Twos, begin. Time students for one minute. Stop. Ones, cross out the last word that your partner read. Pause. Ones, record the number of words your partner read after **Hot Timing**. Pause and monitor.

7. Return your partner's book. Pause. Turn to your Progress Monitoring Graph. Pause. Indicate on the graph the number of Cold Timing and Hot Timing words you read. Monitor as students mark their books.

✓ A Check-up that tests material learned in Lessons 17-20 is provided online.

Displays
for
Lesson 20

ACTIVITY D: Guided Strategy Practice

1. graphical   indestructibility

2. significance   unimaginatively

3. deliberation   inconspicuous

4. repercussion   surreptitiously

ACTIVITY E: **Unguided Strategy Practice**

1. tremendously   indispensable

2. particularly   impressionistic

3. examination   unattractiveness

4. masterfully   inconsistently

5. capitalism   insurmountable

ACTIVITY E: **Unguided Strategy Practice**

1. tremendously   indispensable

2. particularly   impressionistic

3. examination   unattractiveness

4. masterfully   inconsistently

5. capitalism   insurmountable
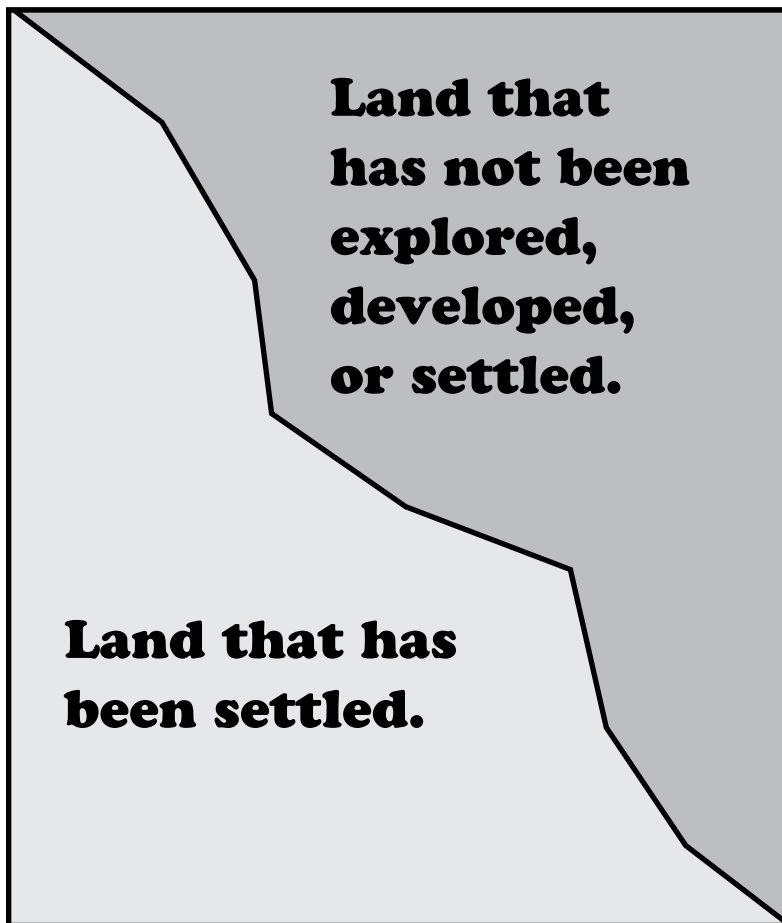
ACTIVITY F: **Spelling Dictation**

1	**tremendously**
2	**insurmountable**
3	**significance**
4	**particularly**

1a. frontier *(noun)*

Land that has not been explored, developed, or settled.
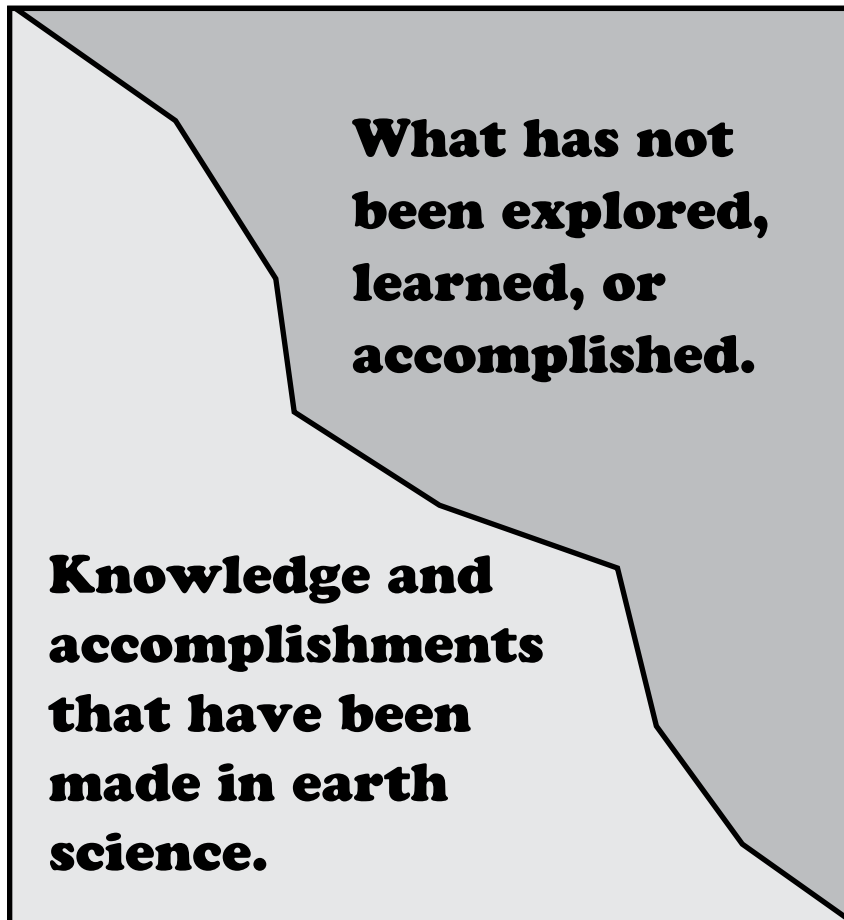
Land that has been settled.

explanation:

A **frontier** is the boundary between land that has been settled and land that has not been explored, developed, or settled.

example:

This imaginary boundary line between land that has been settled and land that has not been settled or explored indicates the **frontier**.

1b. frontier *(noun)*

Frontier of Earth Science

What has not been explored, learned, or accomplished.

Knowledge and accomplishments that have been made in earth science.

explanation:

A **frontier** is the limit of knowledge or accomplishment in a field of knowledge beyond which there is more to explore, learn, and accomplish.

example:

The diagram to the left illustrates the concept of a **frontier**. Examine it carefully.

2. quest *(noun)*

explanation:

A **quest** is a search for something; it's often a long and difficult search.

example:

These scientists are on a **quest** to find a cure for cancer. Humans have an insatiable **quest** for knowledge in all kinds of areas.

3. accomplishment *(noun)*

An **accomplishment** is the successful completion of a task or the achievement of a goal.

accomplishment — examples

When an eighth grader learns to read long words, that is an **accomplishment.**

When a ninth grader writes a long essay, that is an **accomplishment.**

accomplishment — word family

- accomplished *–adjective*

- accomplishing *–verb*

- accomplishment *–noun*

It takes many years to become an **accomplished** musician. **Accomplishing** this goal requires a lot of practice. But, it's worth it. To play beautiful music is a wonderful and rewarding **accomplishment**.

4. miniature *(noun)*

explanation:

A **miniature** is something that is very small; often it's a smaller version of something that is normally much larger.

example:

The racecar in this photo is a **miniature** of a sports car that may have been raced in Europe. The process of making things on a small scale is called **miniaturization**.

miniature — example

In the upper photo, you see the Statue of Liberty, a massive monument. In the lower photo, you see a six-inch **miniature** of the Statue of Liberty.

5. capsule *(noun)*

explanation:

A **capsule** is a small, closed container or compartment.

example:

Medicine was put into each blue and white **capsule**.

capsule — example

One type of miniaturization results in making smaller versions of things. Because of this type of miniaturization, researchers and engineers are putting other things besides medicines into **capsules**. For example, they are putting miniature cameras into **capsules** for a patient to swallow so the doctor can see the patient's insides.

6. nanotechnology *(noun)*

explanation:

Nanotechnology is the science of understanding and controlling things at the atomic level.

example:

Nanotechnology is another type of miniaturization in which things are made so small that you cannot see them with the unaided eye. In this drawing, an artist has created an imaginary example of **nanotechnology**: A futuristic nanobot (tiny robot) has been sent into a human body to attack cancer cells and destroy them.

7. intrigues *(verb)*

explanation:

If something **intrigues** you, especially if it's something strange or unusual, that thing interests you and you want to know more about it.
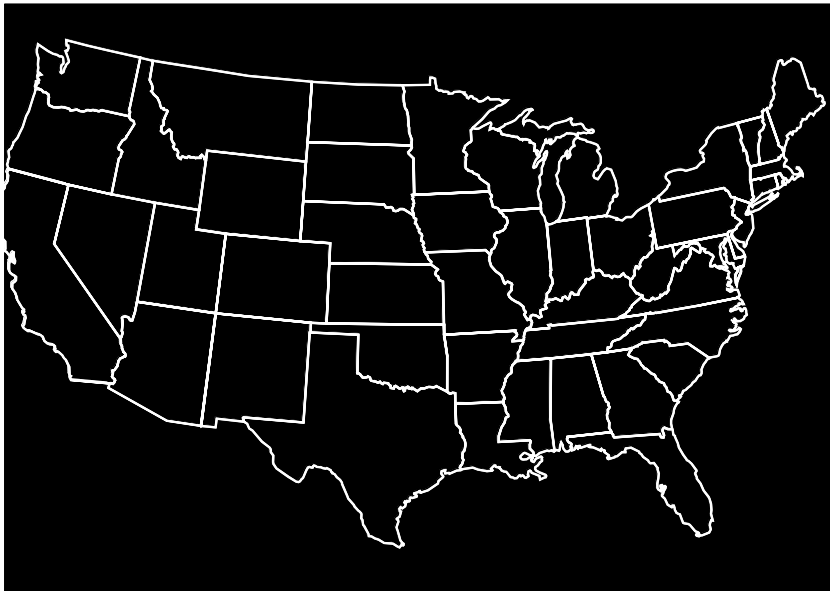
example:

If one of NASA's Mars Exploration Rovers **intrigues** you, you can go online and learn how that rover is exploring the surface of Mars and what that rover is finding.

ACTIVITY J: Content-Area Vocabulary

List 2

1 b<u>ou</u>nd<u>ary</u>   *n.*   A **boundary** is an imaginary line that separates one area from other areas.

2 <u>ex</u>p<u>lore</u>   *v.*   If you **explore** a place or an idea, you find out what it is like.

3 sp<u>ec</u>ul<u>ate</u>   *v.*   If you **speculate** about something, you make guesses about its nature or about what might happen.

4 <u>in</u>n<u>ov</u>a<u>tion</u>   *n.*   An **innovation** is a new thing or a new method of doing something.

5 m<u>an</u>t<u>le</u>   *n.*   In geology, the **mantle** is the part of the earth that lies between the crust and the core.

6 m<u>a</u>nip<u>u</u>l<u>ate</u>   *v.*   If you **manipulate** something that requires skill, such as a certain tool or a complicated piece of equipment, you move, operate, or control it.

7 m<u>a</u>n<u>e</u>uv<u>er</u>   *v.*   If you **maneuver** something into or out of an awkward or unusual position, you skillfully move it there.

1. boundary *(noun)*

explanation:

A **boundary** is an imaginary line that separates one area from other areas.

example:

The lines on this U.S. map represent **boundaries** that separate one state from another state.
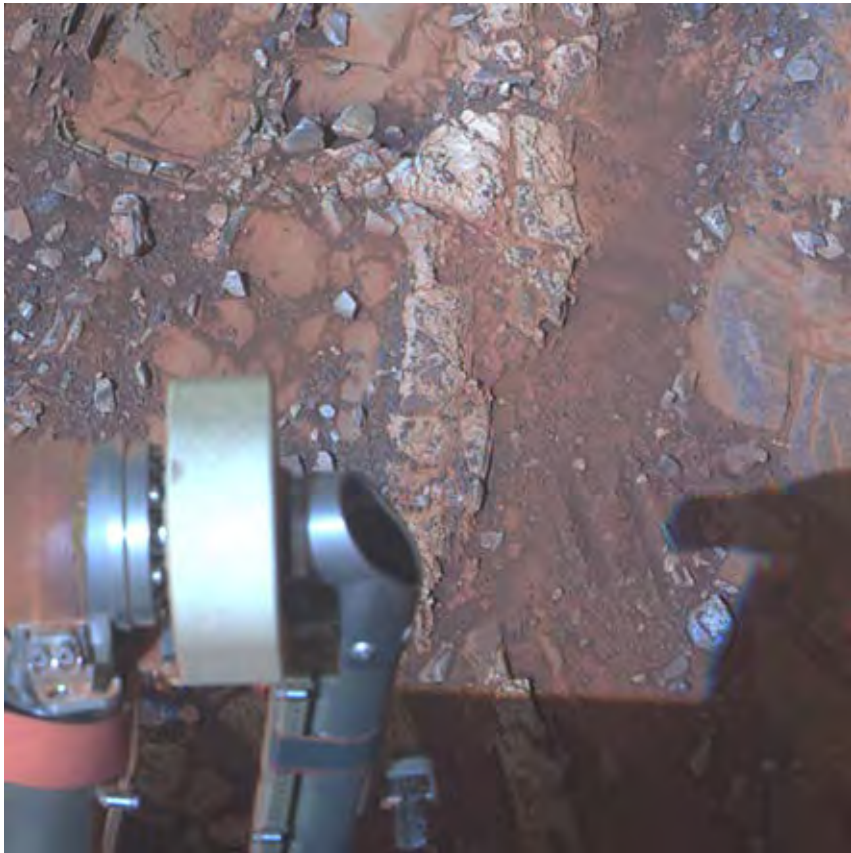
2. explore *(verb)*

explanation:

If you **explore** a place or an idea, you find out what it is like.

example:

At the frontier of space **exploration**, we don't know what astronauts are going to **explore.**

3. speculate *(verb)*

explanation:

If you **speculate** about something, you make guesses about its nature or about what might happen.

example:

Before NASA began its Mars Exploration Rover project, scientists could only **speculate** about the surface of Mars. Now the rovers have provided evidence that water once flowed on Mars.

4. innovation *(noun)*

explanation:

An **innovation** is a new thing or a new method of doing something.

example:

Technology constantly brings us new **innovations**.

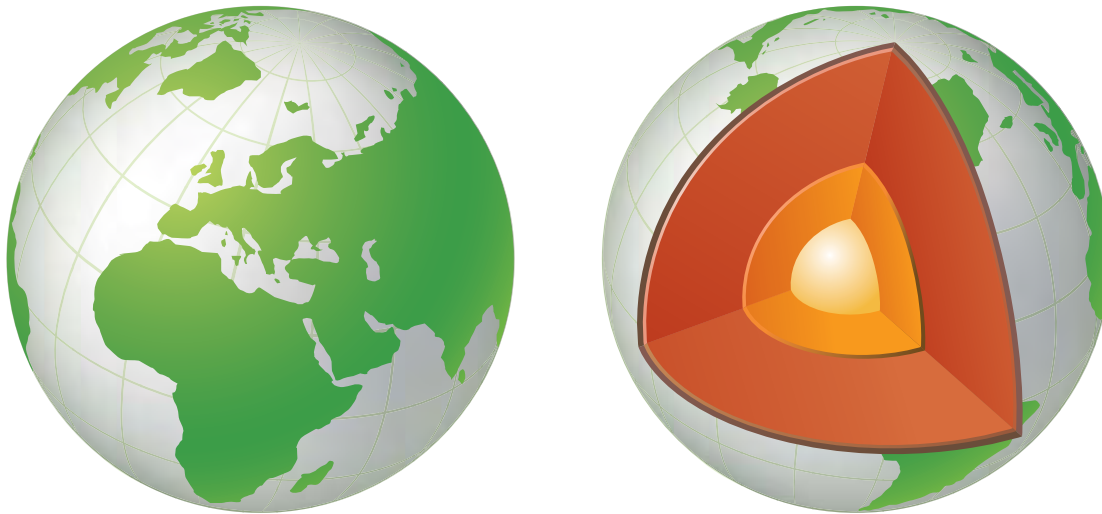# innovation — check for understanding

Humans are constantly dreaming of **innovations** in order to solve problems in their lives, in their homes, or elsewhere in the world. What idea do you have for an **innovation** and what problem does it solve?

Begin by saying:

My idea for an **innovation** is . . . to solve the problem of . . .

5. mantle *(noun)*

	Crust		Mantle		Outer core		Inner core

explanation:

In geology, the **mantle** is the part of the earth that lies between the crust and the core.

example:

This illustration of the Earth's structure shows the layers of the earth's interior, including the crust, the **mantle**, the outer core, and the inner core.

6. manipulate *(verb)*

explanation:

If you **manipulate** something that requires skill, such as a certain tool or a complicated piece of equipment, you move, operate, or control it.

example:

When you play video games, you **manipulate** buttons and joysticks on the game's controller.

manipulate — word family

- manipulate *–verb*

- manipulation *–noun*

- manipulated *–verb*

In the electronics industry, technicians frequently have to **manipulate** tools in order to repair machine parts, such as circuit boards. Because of how small some of the components are on the circuit board, this **manipulation** takes skill and practice. This technician has successfully **manipulated** his soldering iron to repair a circuit.

7. maneuver *(verb)*

explanation:

If you **maneuver** something into or out of an awkward or unusual position, you skillfully move it there.

example:

The driver of the red car had to have excellent driving skills to **maneuver** it into this parking space.

Frontiers of Tomorrow
Section #1

Key Details - Scaffolding Questions:

a. How is the term *frontier* used when talking about land?

b. How is the term *frontier* used when talking about knowledge in a field of study?

c. What are some examples of frontiers of knowledge?

Main Question:

(Note to teacher: You may select to have students write out answers to main questions before sharing with their partners and the class.)

What are some areas of knowledge that have 21st century frontiers?

Begin your answer by saying (or writing):

Some areas of knowledge that have 21st century frontiers include _____.

(Be sure to use information from the article.)

Frontiers of Tomorrow
Section #2

Key Details - Scaffolding Questions:

a. Does miniaturization have to do with making large things or small things?

b. What do we call it when someone makes things so small that they can't be seen with an unaided eye?

c. What is nanotechnology helping us learn that we didn't know before?

Main Question:

Summarize three things you learned about miniaturization and nanotechnology.

Begin your answer by saying (or writing):

Three things I learned about miniaturization and nanotechnology are: 1) _____.
2) _____. 3) _____.

(Be sure to use information from the article.)

Frontiers of Tomorrow
Section #3

Key Details - Scaffolding Questions:

a. What did Richard Feynman believe people could create?

b. What else did Richard Feynman believe?

c. So, in 2005, which of those beliefs did scientists prove were true?

d. What did the scientists create?

e. If people keep pushing the frontiers of miniaturization, what is one thing that could come from it?

Main Question:

Miniaturization, including nanotechnology, is pushing the frontiers of many branches of science. Speculate on a device or new material that might be created using miniaturization and what it might do.

Begin your answer by saying (or writing):

I speculate that scientists will use miniaturization (or nanotechnology) to create _____.

(Be sure to use information from the article.)

Frontiers of Tomorrow
Section #4

Key Details - Scaffolding Questions:

a. Have earth scientists already drilled through the crust or the mantle?

b. If scientists tried to reach the mantle on land, what would happen?

c. Why will earth scientists attempt to drill down to the mantle in the ocean instead?

d. If scientists drill down to the mantle in the ocean instead of on land, will the drilling be easy?

e. What do earth scientists hope to get from their drilling?

Main Question:

Where will earth scientists drill down to the mantle, what will they get from the drilling, and what do they hope to learn about the earth's mantle?

Begin your answer by saying (or writing):

Earth scientists will drill down to the mantle _____, and bring up _____, from which they will learn more about _____.

(Be sure to use information from the article.)

Frontiers of Tomorrow
Section #5

Key Details - Scaffolding Questions:

a. How long have humans been interested in space travel?

b. How many years, decades, or centuries later did humans finally accomplish space travel?

c. What are some of the new goals for space exploration?

Main Question:

Today, scientists want to extend space exploration. What are some reasons that they might wish to extend space exploration?

Begin your answer by saying (or writing):

Scientists might want to extend space exploration for the following reasons:
First, _____. Second, _____.
Third, _____.

(Be sure to use information from the article.)

Frontiers of Tomorrow
Section #6

Main Question:

The author gave several reasons that humans constantly advance frontiers. What's your belief about why humans constantly want to explore new frontiers? What other reason do you propose?

Begin your answer by saying (or writing):

Humans constantly want to explore new frontiers because _____. In addition, I think humans want to explore because _____.

(Be sure to use information from the article.)

Student Pages for Lesson 20

ACTIVITY A: Vowel Combinations Review

1	a - e	oo	oi	ay	ee	au
2	ar	o - e	or	i - e	ow	oy
3	ai	ea	u - e	ou	e - e	oa

ACTIVITY B: Vowel Conversions Review

e	o	i	a	u

ACTIVITY C: Prefixes and Suffixes Review

Prefixes

1	re	ab	con	im	de
2	pro	per	dis	com	ad

Suffixes

3	le	ence	tial	ance	tious
4	al	ism	cial	ary	ly
5	cious	able	ible	ic	ate

ACTIVITY D: Guided Strategy Practice

1 graphical   indestructibility

2 significance   unimaginatively

3 deliberation   inconspicuous

4 repercussion   surreptitiously

ACTIVITY E: Unguided Strategy Practice

1 tremendously   indispensable

2 particularly   impressionistic

3 examination   unattractiveness

4 masterfully   inconsistently

5 capitalism   insurmountable

ACTIVITY F: Spelling Dictation

1		**3**	
2		**4**	

ACTIVITY G: Meanings of Prefixes and Suffixes

a (Activity D) the quality of not being able to be destroyed

_____

b (Activity D) in a manner that is not imaginative

_____

c (Activity E) in a manner that is not consistent or not in agreement

_____

ACTIVITY H: Word Reading Review

1 financial   misinformation

2 impracticality   environmentally

3 evaluation   circumstantial

4 incorruptible   incomprehensible

5 preventable   impressionable

ACTIVITY I: Sentence Reading

1 It is a wonderful victory to masterfully read long words.

2 Unfortunately, the family's debt rose to an insurmountable level during the recession.

3 Art that is impressionistic expresses an idea of something rather than showing the thing as we really see it.

4 For most professions, consistency and perseverance are good qualities to have.

5 Rather than rushing the patient examination, the emergency room doctor completed her task with deliberation.

6 Most corporations strive for effective organization and environmentally safe conditions.

7 Misinformation and attempts to foil communication were used to boost the movie's sinister plot.

8 The spectators did not realize the repercussions of their presence in the area; they were the ones who were delaying the rescue operations.

9 In my estimation, if a dog is your best friend, its name deserves your thought and imagination, but some dogs are unimaginatively named "Fido."

10 You can find all the baseball statistics you want (batting, pitching, fielding, attendance) on the graphical history of baseball website.

11 The children watched the performance from behind the curtains, trying to be <u>inconspicuous</u>.

12 Even though the instructor's methods were <u>unconventional</u>, they were tremendously effective; the results were fantastic.

List 1

1 frontier *n.* a. A **frontier** is the boundary between land that has been settled and land that has not been explored, developed, or settled.

b. A **frontier** is the limit of knowledge or accomplishment in a field of knowledge beyond which there is more to explore, learn, and accomplish.

2 quest *n.* A **quest** is a search for something; it's often a long and difficult search.

* **3** accomplishment *n.* An **accomplishment** is the successful completion of a task or the achievement of a goal.

4 miniature *n.* A **miniature** is something that is very small; often it's a smaller version of something that is normally much larger.

5 capsule *n.* A **capsule** is a small, closed container or compartment.

6 nanotechnology *n.* **Nanotechnology** is the science of understanding and controlling things at the atomic level.

* **7** intrigues *v.* If something **intrigues** you, especially if it's something strange or unusual, that thing interests you and you want to know more about it.

List 2

1   boundary   *n.*   A **boundary** is an imaginary line that separates one area from other areas.

2   explore   *v.*   If you **explore** a place or an idea, you find out what it is like.

* **3**   speculate   *v.*   If you **speculate** about something, you make guesses about its nature or about what might happen.

* **4**   innovation   *n.*   An **innovation** is a new thing or a new method of doing something.

5   mantle   *n.*   In geology, the **mantle** is the part of the earth that lies between the crust and the core.

6   manipulate   *v.*   If you **manipulate** something that requires skill, such as a certain tool or a complicated piece of equipment, you move, operate, or control it.

7   maneuver   *v.*   If you **maneuver** something into or out of an awkward or unusual position, you skillfully move it there.

Frontiers of Tomorrow

	The word *frontier* has traditionally meant the boundary between
9	land that has been settled and land that has not yet been explored,
22	developed, and settled. Today, people are more likely to use *frontier*
33	to mean the limit of knowledge or accomplishment in a field of study
46	beyond which there is more to explore, learn, and accomplish; for
57	example, *frontiers of medicine* or *frontiers of engineering*. Let's
66	examine a few of many 21st century frontiers. **(#1)**
74	Miniaturization is pushing the frontiers in manufacturing as
82	people take larger things (such as cameras) and make them smaller
93	and smaller. Miniaturization is also pushing the frontiers of physics,
103	chemistry, and biology. Humans are making things that have never
113	existed before. These things are so tiny that you cannot see them with
126	the unaided eye. We call this type of miniaturization *nanotechnology*.
136	Nanotechnology is helping us learn how atoms operate when you move
147	them around and build new structures with them. **(#2)**
155	In 1960, Richard Feynman, a famous scientist, speculated that
164	people should be able to make things as small as the cells in our
178	bodies. He also believed that you could maneuver things "atom
188	by atom." In 2005, a group of scientists accomplished both. By
199	manipulating atoms, they created the world's first nanocar—a car
209	about 20,000 times smaller than a human hair—visible through an
220	extremely powerful microscope that allowed the scientists to see the
230	wheels roll.
232	If scientists keep pushing the frontiers of miniaturization, whether
241	the products are visible or invisible, who knows how far these frontiers
253	will go? Perhaps we'll see a day when you would swallow a capsule
266	with a tiny video camera and a robot surgeon so that a doctor could
280	perform surgery that was previously impossible. Are parts of the
290	science fiction movie *Fantastic Voyage* becoming reality? **(#3)**
297	The frontiers of earth science are equally fascinating. Earth
306	scientists, people who explore the earth, are intrigued by what
316	they might find when they drill into the earth. In the 1960s, humans
329	successfully drilled into the crust, but no one has penetrated the
340	mantle, which makes up 84% of the Earth's volume. To reach the
352	mantle on land would mean drilling through the crust up to 37.3 miles.
365	Even if it were possible with the current equipment, drilling that
376	far would take many, many years.

382	Now, scientists are considering three places in the ocean where
392	the crust is thin enough to attempt drilling 3.7 miles down to the
405	mantle. Even at one-tenth the distance compared to drilling on land,
417	this will still be a considerable challenge. After taking several years
428	to work on improving the equipment, the scientists hope to bring up
440	fresh samples of mantle material to study. Studying these samples
450	will lead to increased understanding of earthquakes, volcanoes, and
459	continents. How far will the frontiers of earth science advance during
470	your lifetime? **(#4)**
472	The frontiers of space exploration have fueled human imaginations
481	for centuries. People have written stories about space travel since
491	the 2nd century, when Lucian wrote the first known "science fiction."
502	Many centuries later, in the 1960s, humans completed numerous
511	journeys into space. On some of these journeys, astronauts made it
522	as far as the moon. Today, the goal is to send humans even farther.
536	Scientists talk of building space elevators, establishing space colonies,
545	and capturing asteroids. What will be the next frontier—Mars? **(#5)**
555	Humans are constantly advancing frontiers. Is it because humans
564	have a never-ending, insatiable quest for knowledge? Is it because of
576	the incentives for going deeper, traveling farther, and creating things
586	smaller than ever before? Or, is it because innovations make life easier
598	for humans? Whatever the reasons, you can participate in the exciting
609	future that lies before you. Perhaps you will contribute to exploring
620	one of these frontiers or even frontiers we can't yet imagine. **(#6)**
631	

ACTIVITY L: Rate Development

Cold Timing [　　　]   **Practice 1** [　　　]

Practice 2 [　　　]   **Hot Timing** [　　　]

✓ **Time for a Check-up!**

Assessment

Progress Monitoring Assessments
End-of-Unit Check-up

At the end of each unit, you will be giving students a Progress Monitoring Check-up that covers the content of the lessons just completed. Before students do the Check-up, you may have them do as much practice and studying as you think they need. However, the Check-up is a closed-book assessment. Students should not have access to Spelling Words, Vocabulary Logs, or other resources while taking the Check-up. If you have posted a classroom poster of the prefixes, suffixes, and vowel sounds, you may wish to cover the poster as well. None of the sections on the Check-up are timed.

Directions:

1. Reproduce one blank copy of the Check-up for each student. Have the Answer Key ready.

2. You may elect to begin with Part 4 first. If so, see direction #4 below. Otherwise, read the directions for Part 1 with students. Tell them to practice reading all the words in all four lines, and then start over and practice all the words again. Tell students that you will go around the room and listen to each student read one line of words, randomly chosen. Confine your feedback to praising the student's effort. Do not correct errors. When a student has finished reading to you, give that student a score to record for Part 1.

3. When students in the class have practiced all the words twice, stop listening to individual students read. Read the directions for Parts 2 and 3 with all the students. Explain to students how to do the Bonus section. Tell students to go ahead and work while you continue to listen to individuals read words in Part 1.

4. For Part 4, dictate the spelling words to the whole class: say each word and have students repeat the word. Tell students they may put their fingers up and say the parts to themselves just as they learned to do in the lessons in the Spelling Dictation activity.

5. Using your Answer Key, assist students in checking their test and recording their scores, or collect the papers and check the tests yourself.

6. Have students record their Check-up score on the Progress Monitoring Graph found at the back of their *Student Book*, or use the VPORT data management system* for recording student scores. Bonus points are not included in the progress monitoring score but may be used for other purposes, such as raising a letter grade being given for the unit.

*For more information on VPORT, please contact our support team at **support@soprislearning.com**.

Name _____ Date _____ Total Points of 100 _____

Part 1. Decoding Multisyllabic Words   Points _____/25

Practice reading all the words in each line. The teacher will ask you to read one line.
Each word is worth 5 points for a total of 25 points.

A.   indestructibility   disappointment   circumstantial   confidence   impressionable

B.   inconspicuous   estimation   tenacious   traditionally   organization

C.   productivity   dramatically   inspirational   evidence   deliberation

D.   significance   culminate   environmentally   considerable   unconventional

Part 2. Academic Vocabulary   Points _____/30

Circle the letter next to the words that best express the vocabulary word's meaning.
Be sure to pick the **best** answer. Each correct answer is worth 3 points for a total of 30 points.

1. foreign 　(a.) from a country not your own 　b. helping you believe in something 　c. from your father's house 　d. present in large quantities	**6. produce** 　(a.) make or create something 　b. move from place to place 　c. bring parts together to form one 　d. live in a certain place
2. curious 　a. eager to get rid of things 　b. full of caution 　(c.) eager to learn something 　d. able to be controlled	**7. settle** 　a. try to find out what happened 　b. figure out the size 　(c.) start living there permanently 　d. think only of yourself
3. speculate 　a. do something to bring about results 　(b.) make a guess about what will happen 　c. move from place to place 　d. make a detailed record	**8. romanticize** 　a. make a guess about something 　b. watch someone closely 　c. make or create something 　(d.) make something better than it is
4. observe 　a. change something completely 　(b.) watch someone closely 　c. move something skillfully 　d. disagree with someone	**9. intrigues** 　a. decides ahead of time to do it 　(b.) interests you so you try to learn 　c. grows and becomes more advanced 　d. discovers facts
5. evidence 　a. one who tells about beliefs 　b. way of life, including customs 　c. belief in oneself 　(d.) facts to help you believe something	**10. culture** 　a. final result of something 　b. exciting experience 　(c.) way of life, including customs 　d. something made very small

Part 3. Meanings of Prefixes and Suffixes Points _____/30

Fill in the blanks. Each answer is worth 3 points for a total of 30 points.

1. What part of the adjective "suspicious" means *full of*? **cious**

   So, "suspicious" means **full of suspicion**

2. What part of the noun "productivity" means *state of*? **ity**

   So, "productivity" means **the state of being productive or getting a lot done**

3. What part of the adverb "unimaginatively" means *in a manner that is*? **ly**

   So, "unimaginatively" means **in a manner that is not imaginative**

4. What part of the adjective "cautious" means *full of*? **tious**

   So, "cautious" means **full of caution**

5. What part of the adverb "traditionally" means *in a manner that is*? **ly**

   So, "traditionally" means **in a manner that is traditional**

Part 4. Spelling Points _____/15

Write each word the teacher dictates. Each word is worth 5 points for a total of 15 points.

1. **inconsiderate**

2. **inventiveness**

3. **preventable**

Bonus Points. Forming Word Families Points _____/8

This section is worth extra points. Each word is worth 1 point for a total of 8 points.

Use the parts below to make eight words that you've heard before. You may use some parts more than once.

re	instruct	tion	or	er
compare	able	tive	produce	ity

reinstruct   **instruction**   **reinstruction**

instructor   **instructable**   **instructive**

comparer   **comparable**

Also accept: **comparability, comparative, reproduce, production, reproduction, producer, productivity, productive**

Points to be recorded on Progress Monitoring Graph: _____/100

90–100 **A** or **Excellent**   80–89 **B** or **Very Good**   70–79 **C** or **Good**   69 or below **Needs Improvement**

Bonus points: _____/8