

Book Four

- 1 A Final Point About Twinning in Longer Words
- 2 Review of Long and Short Vowel Patterns
- 3 The Suffix *-ist*
- 4 The Suffixes *-ist* and *-est*
- 5 The Suffix *-ize*
- 6 The Diphthong [ou]
- 7 The Diphthong [oi]
- 8 Test One
- 9 Review of [ə] and [u]
- 10 Review of Vowel Sounds
- 11 The Prefix *Ad-*
- 12 Sometimes *Ad-* Assimilates
- 13 More Words with *Ad-*
- 14 Review of Assimilation and the Prefix *Ad-*
- 15 Test Two
- 16 Another Function of Silent Final <e>: Marking Voiced <th>
- 17 Silent Final <e> as an Insulator
- 18 Sometimes Silent Final <e> Does Two Jobs at Once
- 19 More Practice with the Final <e> Deletion Rule
- 20 More About Changing <y> to <i>, and Some Review of Rules and Sounds
- 21 How Do You Spell [t]?
- 22 The Sound [t] and Twinning
- 23 The Sound [t] and Assimilation
- 24 The Sound [t] and the VCC Pattern
- 25 Test Three
- 26 More Practice with [t] Spelled <tt>
- 27 Words with <tle> and <ttle>
- 28 Sometimes [t] is Spelled <ed>
- 29 Some Verbs that End with <t>
- 30 The Reasons for Some Unusual Spellings of [t]
- 31 Suffixes Spelled <en>
- 32 More Suffixes Spelled <en>
- 33 Test Four
- 34 The Prefix *Sub-*
- 35 The Prefixes Spelled <in>
- 36 Sometimes the Two Prefixes *In-* Assimilate
- 37 The Prefix *Ob-*
- 38 Review of Prefixes, Stems, and Suffixes
- 39 How Do You Spell [p]?
- 40 When is [p] Spelled <pp>?
- 41 Test Five
- 42 Spelling [p] After Short and Long Vowels
- 43 Words with <ple> and <pple>
- 44 Four More Suffixes: *-ful*, *-less*, *-ly* and *-y*
- 45 The Letter <v> After Short and Long Vowels
- 46 Review
- 47 More Review
- 48 Test Six

Lesson One

A Final Point About Twinning in Longer Words

1 You twin the final consonant of a free stem that has two vowel sounds only when four conditions are met:

- i. The stem ends with a single consonant letter that is not the letter <x>.
- ii. The stem ends with the pattern CVC
- iii. The suffix starts with a vowel
- iv. The stem has strong stress on the second (or final) vowel sound.

The strong stress must be on the final vowel of the stem before you add the suffix, and it must stay on that vowel when the suffix is added. If the stress is not on the final vowel of the stem both before and after the suffix is added, we do not twin the final consonant.

Sometimes the stress is where it should be after the suffix has been added, but it was not there before the suffix was added. For instance, *symbolic* has stress on the <o>. But in the stem *symbol* the stress is on the <y>. So the final <l> is not twinned in *symbolic*.

Sometimes the stress is where it should be at first, but when the suffix is added, the stress moves. For instance, *prefer* has stress on the final vowel, but if we add the suffix *-ence*, we make the word *preference*, which has stress on the first vowel. So the final <r> is not twinned in *preference*.

Notice, though, that if we add a suffix like *-ed* to the stem *prefer*, we make *preferred*, in which the stress stays on the final vowel of the stem, so the final <r> is twinned.

2 In the table below when you are given a word, analyze it into its free stem plus suffix. Show any twinning that takes place. When you are given the analysis, write the word in the Word column.

Word	Analysis: Free Stem + Suffix
preference	<i>prefer + ence</i>
attaching	<i>attach + ing</i>
permitted	<i>permit + t + ed</i>
<i>laborious</i>	labor + ious

Word	Analysis: Free Stem + Suffix
murmuring	<i>murmur + ing</i>
forbidden	<i>forbid + d + en</i>
<i>referee</i>	refer + ee
avoided	<i>avoid + ed</i>
<i>equipment</i>	equip + ment
preferring	<i>prefer + r + ing</i>
poisonous	<i>poison + ous</i>
whispering	<i>whisper + ing</i>
regretted	<i>regret + t + ed</i>
<i>angelic</i>	angel + ic
enjoyed	<i>enjoy + ed</i>
relaxing	<i>relax + ing</i>
<i>outtalked</i>	outtalk + ed
forgotten	<i>forgot + t + en</i>
dreaded	<i>dread + ed</i>
<i>allowance</i>	allow + ance

3 In fifteen of the words above twinning did not take place when the suffix was added to the stem. In each case it was because one of the four conditions was not met. Write the fifteen words into the Word column in the table below. Then put a check in the column that gives the reason twinning did not take place in that word:

Word	The stem ends with the wrong letter	The stem doesn't end CVC	The stress is in the wrong place	The suffix starts with the wrong letter
<i>preference</i>			✓	
<i>attaching</i>		✓		
<i>laborious</i>			✓	

Word	The stem ends with the wrong letter	The stem doesn't end CVC	The stress is in the wrong place	The suffix starts with the wrong letter
<i>murmuring</i>			✓	
<i>referee</i>			✓	
<i>avoided</i>		✓		
<i>equipment</i>				✓
<i>poisonous</i>			✓	
<i>whispering</i>			✓	
<i>angelic</i>			✓	
<i>enjoyed</i>		✓		
<i>relaxing</i>	✓			
<i>outtalked</i>		✓		
<i>dreaded</i>		✓		
<i>allowance</i>		✓		

Teaching Notes.

The main point of this lesson is that all four of the conditions must be met for twinning to take place. If just one of the four is not met, twinning does not occur.

Items 2-3. Though it has nothing to do with twinning, be sure that the students get the two <t>s in *outtalked* due to simple addition: one for the *out*, one for the *talk*.

Lesson Two

Review of Long and Short Vowel Patterns

1 In each of the following words one of the vowels is marked 'v'. You are to mark the two letters after that vowel either 'v' or 'c'. If you get to the end of the word before you have marked two more letters, use the tic-tac-toe sign to mark the end of the word. Any cases of VV# should be marked Ve#, as we have done with *agree*. In words that end VC#, mark the letter in front of the 'v' either 'v' or 'c':

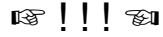
agree ve#	subdue v	extreme v	forgot v	stubborn v
chapter v	broken v	hug v	equip v	canoe v
dispute v	race v	combat v	whisper v	aspirin v
student v	vacation v	tiptoe v	permit v	symptom v

2 Now sort the words into this matrix. This matrix has eight squares rather than the regular four, but don't let that bother you. It works just like the smaller ones:

Words with . . .

	VCC:	CVC#:	VCV:	Ve#:
Words with short first vowels in the pattern:	<i>chapter</i>	<i>hug</i>		
Words with long first vowels in the pattern:			<i>dispute</i>	<i>agree</i>

3 In the patterns _____ and _____ the vowel will usually be short, and in the patterns _____ and _____ the first vowel will usually be long.



Word Squares. Fit these ten words into the Squares. To help you, we have marked the VCV, VCC, VC#, and Ve# strings in each of the ten words:

agree dispute correct success submit
assistant evening striking continue die

			v	c	c					
								v	c	c
						v				
	v	e		v	c	e				
	c			c						
				c			v	c	v	
								v	c	v
								e		

Lesson Three The Suffix *-ist*

1 Earlier you saw that one suffix *-er* changes verbs into nouns with the meaning "one that does" or "one who does":

teach + er = teacher ("one who teaches")
verb noun
 burn + er = burner ("one that burns")
verb noun

The suffix *-ist* changes nouns, verbs, and adjectives into nouns, with the meaning "one who works with, is connected with, or believes in" the thing referred to in the stem:

harp + ist = harpist ("one who plays a harp")
noun noun
 reform + ist = reformist ("one who believes that things should be reformed")
verb noun
 pure + ist = purist ("one who believes that things should be pure")
adjective noun

2 Analyze each of the following nouns into its free stem and suffix:

Noun	=	Free Stem	+	Suffix
harpist	=	<i>harp</i>	+	<i>ist</i>
artist	=	<i>art</i>	+	<i>ist</i>
orchardist	=	<i>orchard</i>	+	<i>ist</i>
tourist	=	<i>tour</i>	+	<i>ist</i>
humorist	=	<i>humor</i>	+	<i>ist</i>
projectionist	=	<i>projection</i>	+	<i>ist</i>
arsonist	=	<i>arson</i>	+	<i>ist</i>
cartoonist	=	<i>cartoon</i>	+	<i>ist</i>
conformist	=	<i>conform</i>	+	<i>ist</i>
environmentalist	=	<i>environmental</i>	+	<i>ist</i>

3 Add each of the stems and suffixes below to make nouns:

Stem	+ Suffix	= Noun
harp	+ ist	= <i>harpist</i>
real	+ ist	= <i>realist</i>
vacation	+ ist	= <i>vacationist</i>
final	+ ist	= <i>finalist</i>
illusion	+ ist	= <i>illusionist</i>
journal	+ ist	= <i>journalist</i>
motor	+ ist	= <i>motorist</i>
racé	+ ist	= <i>racist</i>
special	+ ist	= <i>specialist</i>
vocal	+ ist	= <i>vocalist</i>

4 The suffix *-ist* adds the meaning "one who works with, is connected with, or believes in" the thing referred to in the stem.

5 Analyze each of the following nouns into its free stem and suffix. Show any changes:

Noun	=	Free Stem	+ Suffix
druggist	=	<i>drug + g</i>	+ <i>ist</i>
bicyclist	=	<i>bicyclé</i>	+ <i>ist</i>
extremist	=	<i>extremé</i>	+ <i>ist</i>
typist	=	<i>typé</i>	+ <i>ist</i>
environmentalist	=	<i>environmental</i>	+ <i>ist</i>
projectionist	=	<i>projection</i>	+ <i>ist</i>
specialist	=	<i>special</i>	+ <i>ist</i>
receptionist	=	<i>reception</i>	+ <i>ist</i>

Teaching Notes. A word like *jurist* tells us something new about the <y>-to-<i> change: If we just added *-ist* to *jury* and changed the <y> to <i>, we would get two <i>'s in a row: *jury* + *ist* = *jury* + *i* + *ist* = **juriist*. In English we avoid double <i>'s. We can double many letters — like <ee>, or <oo>, or <tt>, or <ss>, for instance — but we don't use <ii>. So instead of **juriist* with <ii>, we just delete the <y>: *jury* + *ist* = *jury* + *ist* = *jurist*. The <ii> at the end of the state name *Hawaii* is due to the spelling system for the Hawaiian language, not English, and the <ii> in the formal variant *radii* is straight from Latin, usually replaced in English with the regular *-es*: *radiuses*.

Lesson Four The Suffixes *-ist* and *-est*

1 The suffix *-ist* is often used to make nouns by adding it to stems ending with the suffixes *-al* or *-ic*. Analyze each of the following words into its stem and two suffixes. Suffix #1 will always be either *-al* or *-ic*. All of the words go together by simple addition:

Word	=	Stem	+ Suffix #1	+ Suffix #2
capitalist	=	<i>capit</i>	+ <i>al</i>	+ <i>ist</i>
classicist	=	<i>class</i>	+ <i>ic</i>	+ <i>ist</i>
vocalist	=	<i>voc</i>	+ <i>al</i>	+ <i>ist</i>
socialist	=	<i>soci</i>	+ <i>al</i>	+ <i>ist</i>
physicist	=	<i>phys</i>	+ <i>ic</i>	+ <i>ist</i>
journalist	=	<i>journ</i>	+ <i>al</i>	+ <i>ist</i>
publicist	=	<i>publ</i>	+ <i>ic</i>	+ <i>ist</i>
environmentalist	=	<i>environment</i>	+ <i>al</i>	+ <i>ist</i>
nationalist	=	<i>nation</i>	+ <i>al</i>	+ <i>ist</i>
realist	=	<i>re</i>	+ <i>al</i>	+ <i>ist</i>

2 The suffixes *-ist*, *-ic*, and *-al* combine in many different ways. Combine the stems and suffixes you are given below to make new words:

Stem	+ Suffixes	= Word
capit	+ al + ist + ic + al + ly	= <i>capitalistically</i>
journ	+ al + ist + ic + al + ly	= <i>journalistically</i>
character	+ ist + ic + al + ly	= <i>characteristically</i>
agricultur \emptyset	+ al + ist	= <i>agriculturalist</i>
colon \acute{y} + l	+ al + ist	= <i>colonialist</i>
fat \emptyset	+ al + ist + ic + al + ly	= <i>fatalistically</i>
natur \emptyset	+ al + ist	= <i>naturalist</i>

Stem	+ Suffixes	= Word
re	+ al + ist + ic	= <i>realistic</i>
nation	+ al + ist + ic + al + ly	= <i>nationalistically</i>
mechan	+ ic + al	= <i>mechanical</i>
muse	+ ic + al + ly	= <i>musically</i>

3 The suffix *-ist* can make nouns with the meaning "one who works with or is connected with." The suffix *-est* adds the meaning "most" to short adjectives and adverbs – as in *calmest*, which means "most calm."

Since both suffixes sound like [ist] or [əst], they can be easily confused when you are trying to spell them. You have to remember not just how they sound, but also what they mean.

REMEMBER
Words that end with the suffix <i>-ist</i> always contain the meaning "one who works with or is connected with."
Words that end with the suffix <i>-est</i> always contain the meaning "most."

5 Below you are given some definitions. Your job is to spell the words that are being defined. Watch especially for *-ist* and *-est*:

Definition	Word
A person who writes novels	<i>novelist</i>
Most stubborn	<i>stubbornest</i>
One who is on a tour	<i>tourist</i>
Most real	<i>realest</i>
One who is on vacation	<i>vacationist</i>
One who sells drugs	<i>druggist</i>

Definition	Word
Most cloudy	<i>cloudiest</i>
Most nice	<i>niciest</i>
One who believes in realism	<i>realist</i>
One who raises an orchard	<i>orchardist</i>
Most pure	<i>purest</i>
One who believes that things should be pure	<i>purist</i>
One who rides a bicycle	<i>bicyclist</i>
Most mean	<i>meanest</i>
One who plays the violin	<i>violinist</i>

Teaching Notes.

Item 1. Six of the stems in this table are bound bases, and one is a perhaps surprising free base. The six bound bases are *capit* "head, wealth"; *voc* "speak, voice, call"; *soci* "ally, companion, comrade"; *phys* "exist, grow"; *journ* "day, daily"; and *publ* "people." The perhaps surprising free base is *re*. It derives from a Latin word meaning "thing, property." Used as a preposition it means "in reference to," but in words like *real* it carries its earlier sense of "thing": If something is real, it is thing-y.

Item 2. Be sure the students catch the final <e> deletions and the <y>-to-<i> change.

Lesson Five The Suffix *-ize*

1 The suffix *-ize* turns stems into verbs. The suffix *-ize* is related to *-ist* in a special way:

Noun or Adjective	Noun	Verb
capital	capitalist	capitalize
vocal	vocalist	vocalize
ideal	idealist	idealize

Many stems that add *-ist* to make a noun also add *-ize* to make a verb.

2 Analyze each of the following words into its shortest free stem plus suffix or suffixes. Show any changes.

Word	= Free Stem	+ Suffix or Suffixes
rationalized	= <i>ration</i>	+ <i>al + ize + ed</i>
rationalists	= <i>ration</i>	+ <i>al + ist + s</i>
vaporizer	= <i>vapor</i>	+ <i>ize + er</i>
criticizing	= <i>critic</i>	+ <i>ize + ing</i>
capitalists	= <i>capital</i>	+ <i>ist + s</i>
capitalize	= <i>capital</i>	+ <i>ize</i>
naturalized	= <i>nature</i>	+ <i>al + ize + ed</i>
naturalists	= <i>nature</i>	+ <i>al + ist + s</i>
itemizing	= <i>item</i>	+ <i>ize + ing</i>
realizing	= <i>real</i>	+ <i>ize + ing</i>
realist	= <i>real</i>	+ <i>ist</i>
characterizes	= <i>character</i>	+ <i>ize + es</i>
civilized	= <i>civil</i>	+ <i>ize + ed</i>
victimize	= <i>victim</i>	+ <i>ize</i>
formalized	= <i>form</i>	+ <i>al + ize + ed</i>
specialize	= <i>special</i>	+ <i>ize</i>

3 **Proofreading Quiz.** The nine words in bold type in the following two paragraphs are misspelled. Find the mistakes and write in the correct spelling of each one:

a. The words *gyp*, *gypsy*, and *Egypt* are all related to one another ^{historically} **historicaly**. The word *Egypt* came first. It is a very old word that goes back to ancient Egyptian times. Then, five hundred years ago when a lot of dark-^{skinned} **skined** people moved into Europe from Asia, many thought them to be from ^{Egypt} **Egyp**, so they were called *gypsies*. Then because many thought that gypsies often cheated people, their name was shortened to stand for a certain kind of cheat: a gyp. Many people thought that gypsies ^{gypped} **gyped** people.

b. The Greeks believed that there were nine goddesses who were in charge of the arts. These nine ^{artistic goddesses} **artistick godesses** were called muses. If you add the suffix *-ic* to the word *muse*, you get *music*: *muse* + *ic* = *music*. Music is the art of the muses. The same base *muse* is also in the word *museum*: *muse* + *eum* = *museum*. A museum was a place for the muses. So when you attend a ^{musical} **musicall** concert or look at an exhibit in an art museum, you can thank the nine ^{Greek} **Greke** muses.

Teaching Notes. The suffix *-ize* is very common and still productive in English. British English often has *-ise* where American English has *-ize*, as in *civilise* vs. *civilize*..

Lesson Six The Diphthong [ou]

1 A **diphthong** runs together two vowel sounds. In the diphthong [ou] the two sounds are [o] and [u]. When we run the two together, we say something that sounds like "ow," as in *cow* and *cloud* and *crown*. The word *diphthong* is pronounced [dif-thon]. It combines two Greek elements: *di-*, which means "two," and *phthong*, which means "sound."

2 In the words below underline the letters that spell the diphthong [ou]:

account ground round thousand
powerful amount cloudy vowel
mouth downtown crowded mountain
flower however doubt allowance

3 Now sort these sixteen words into these two groups:

Words in which [ou] is spelled . . .

<ou>		<ow>	
<i>account</i>	<i>cloudy</i>	<i>powerful</i>	<i>crowded</i>
<i>mouth</i>	<i>doubt</i>	<i>flower</i>	<i>vowel</i>
<i>ground</i>	<i>thousand</i>	<i>downtown</i>	<i>allowance</i>
<i>amount</i>	<i>mountain</i>	<i>however</i>	
<i>round</i>			



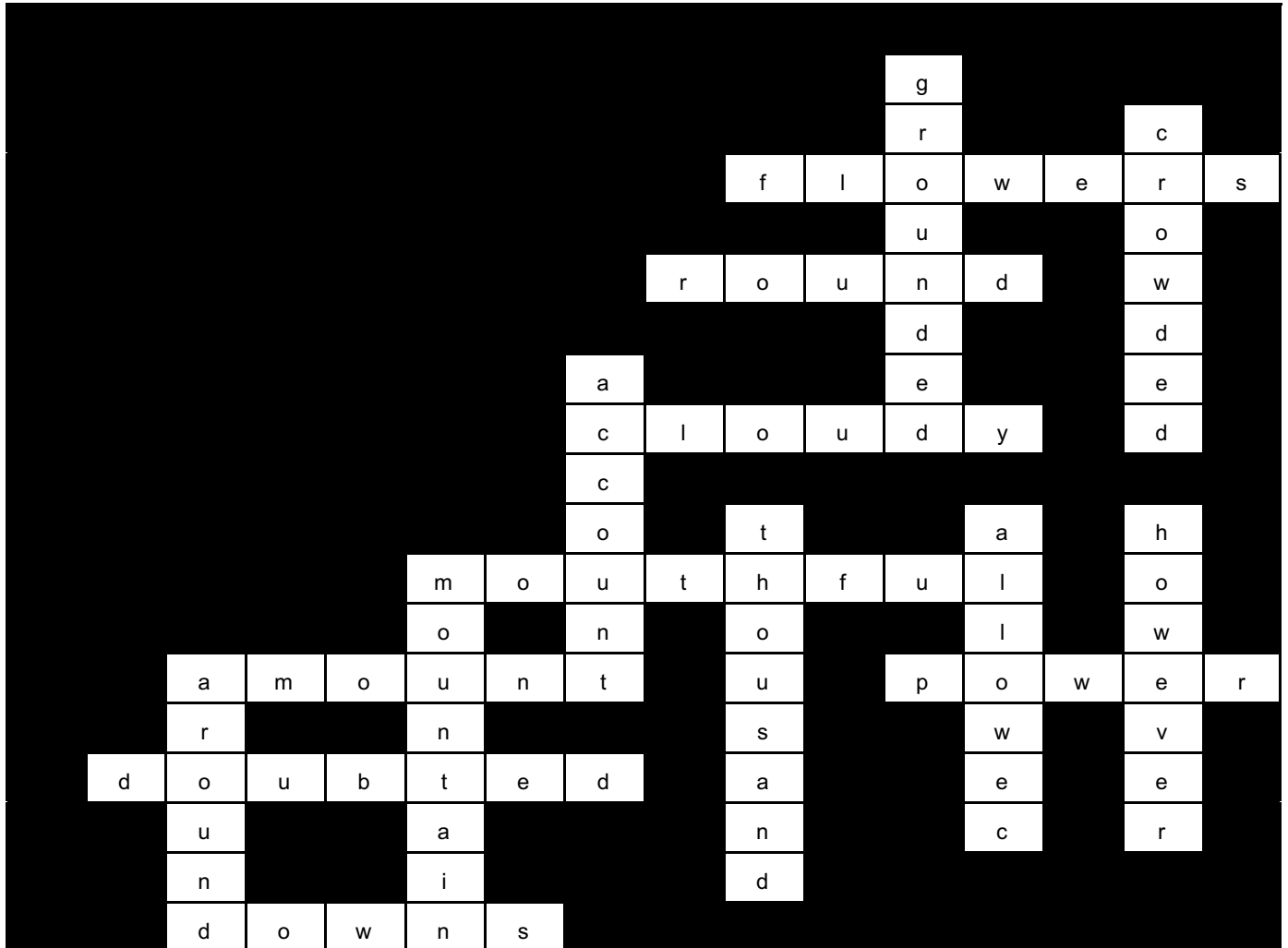
Word Squamble. A Squamble combines a Word Squares with a Word Scramble. Unscramble the sixteen scrambled words below. Then fit them into the rows and columns of the Squares. The number of the scrambled word is the same as the number of the row or column it fits into in the Squares. As you unscramble each word, fit it into the Squares, and that will give you clues about how to unscramble other words. Two other clues: All of the words contain the diphthong [ou], and in the Squares we have written in the letters that spell the [ou] sound.

Columns: ▾

- 1. redugond = grounded
- 2. dworced = crowded
- 5. cutcoan = account
- 7. shadnuto = thousand
- 8. walldoe = allowed
- 9. herevow = however
- 10. outinman = mountain
- 11. dranou = around

Rows: ▶

- 3. rewolfs = flowers
- 4. rudon = round
- 6. coylud = cloudy
- 10. humotluf = mouthful
- 11. manout = amount
- 12. prewo = power
- 13. dobudet = doubted
- 14. swond = downs



Teaching Notes. In the *Basic Speller* we recognize only two diphthongs, [ou] and [oi]. Technically the sound we symbolize [ī], long <i>, is a diphthong: If you say “ah” and “ee”, running the two together, you get a sound like [ī]. And people who speak various dialects with various

personal accents often diphthongize other vowels. But we will work with just the two, [ou̥] and [oi̥].

The diphthong [ou̥] is spelled <ou> about twice as often as it is spelled <ow>. There is some overlap between the two, but <ow> usually occurs at the end of words and before vowels. For more on the spelling of [ou̥], see *AES*, pp. 303-06, where it is symbolized [aù].

Item 1. For the record, we also have the words *monophthong* and *triphthong*, which refer, respectively, to one and three vowel sounds.

Lesson Seven The Diphthong [oi]

1 You can hear the diphthong [oi] in *spoil* and *joy*. It sounds like a short <o> run together with a short <i>. The sound [oi] is spelled either <oi> or <oy>. Underline the letters that spell [oi] in each of the following words:

enjoy moisten toilet soiled
 joys pointed royal loyalty
 oil boil voyage poison
 toying coin voice destroy

2 Sort the sixteen words into these two groups:

Words in which [oi] is spelled . . .

<oi>		<oy>	
<i>oil</i>	<i>toilet</i>	<i>enjoy</i>	<i>voyage</i>
<i>moisten</i>	<i>voice</i>	<i>joys</i>	<i>loyalty</i>
<i>pointed</i>	<i>soiled</i>	<i>toying</i>	<i>destroy</i>
<i>boil</i>	<i>poison</i>	<i>royal</i>	
<i>coin</i>			

3 Here are some words that contain the diphthong [oi]. They have been analyzed into their elements. Look at each carefully and notice whether the [oi] sound is at the front, in the middle, or at the end of its element:

en+joy+ment join+ing toil+et ap+point+ment
 joy+ful+ly points+s roy+al de+stroy+er
 boil oil+y voy+age spoil+ed
 boy+'s coin point+less a+void
 un+soil+ed voice+less+ly loy+al+ty poison

4 Now sort the twenty words into the matrix, as we have done with *enjoyment*:

Words with [oi] . . .

	at the end of the element	not at the end of the element
Words with [oi] spelled <oy>	<i>enjoyment</i> <i>joyfully</i> <i>boy's</i> <i>royal</i> <i>voyage</i> <i>loyalty</i> <i>destroyer</i>	
Words with [oi] spelled <oi>		<i>boil</i> <i>pointless</i> <i>unsoiled</i> <i>appointment</i> <i>joining</i> <i>spoiled</i> <i>points</i> <i>avoid</i> <i>oily</i> <i>poison</i> <i>coin</i> <i>voicelessly</i> <i>toilet</i>

5 **How Do You Spell [oi]?** When the sound [oi] comes at the very end of an element, it is spelled <oy> ; everywhere else it is spelled <oi> .

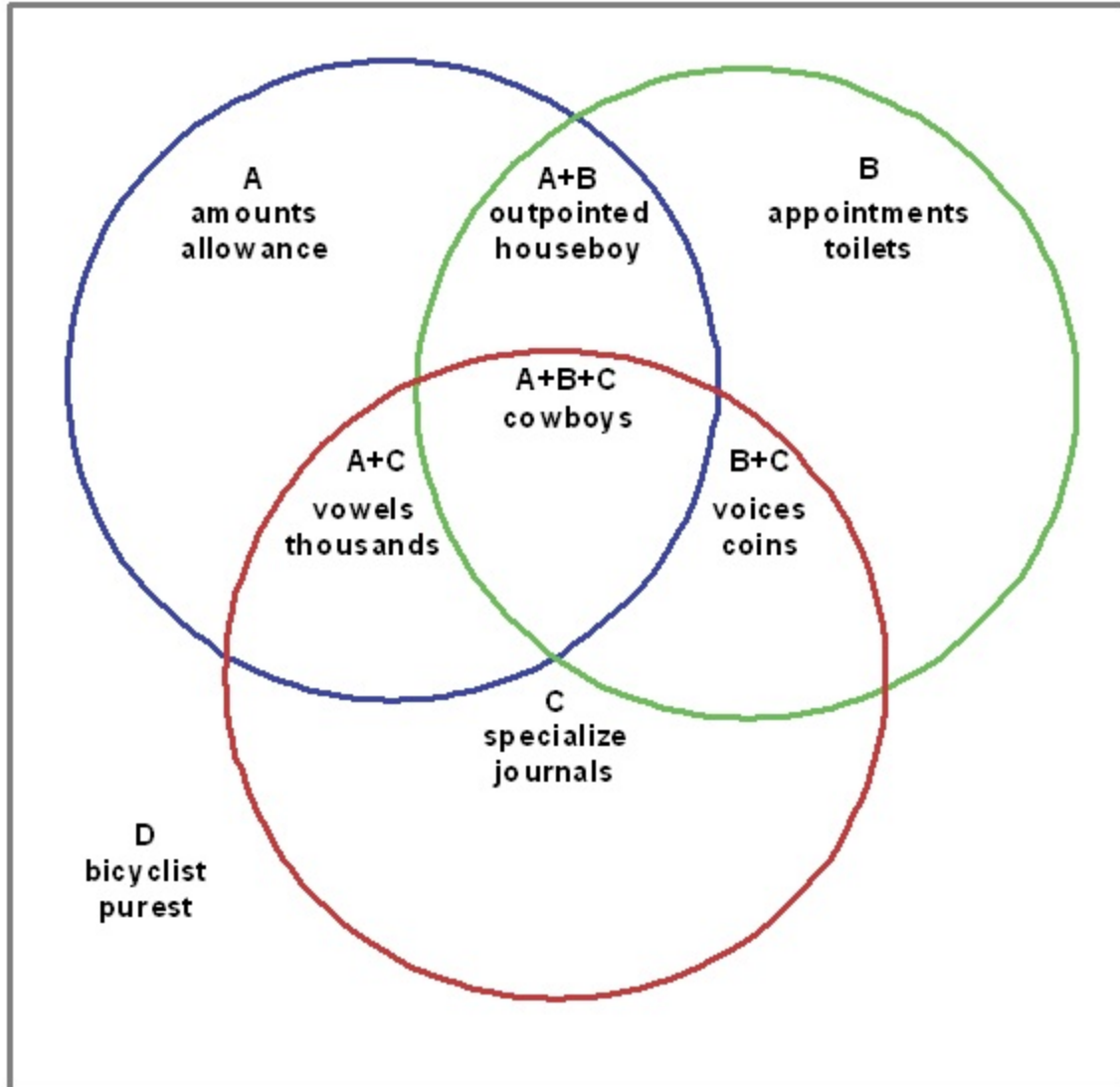


Word Venn. In circle A put only words that contain the sound [ou]. In circle B put only words that contain the sound [oi]. In circle C put only words that contain the sound [z]:

amounts✓
outpointed✓
appointments✓
cowboys✓
vowels✓

voices✓
allowance✓
specialize✓
bicyclist✓
purest✓

toilets✓
houseboy✓
coins✓
journals✓
thousands✓



Teaching Notes.

Item 3. The free base *toil* originally meant “web, weaving.” It is our free base *toil* “net, trap,” as in “They were caught in the wicked villain’s toils.” The evolution of our current sense of *toilet* is complex: Originally *toilet* meant “little cloth”; it was used to refer to the cloth used to keep toilet articles clean. Then it transferred to the table on which the articles were kept, then to the act of adorning oneself, then to the room in which the toilet took place, then to our current senses. The base *roy* “king” occurs also in *royalty*, *viceroys*. Folk etymology has taken *corduroy* to mean “cord, or cloth, of the king,” though *corduroy* has nothing to do with France or French, and is of obscure origin.

Item 5. That is a good rule for spelling [oi]. The only common words that don't fit it are *oyster* and *gargoyle*. *Oyster*, with the <oy> spelling at the front rather than the end of

the element, was earlier spelled <oister>, which did fit the rule. We don't really know why the spelling was changed. *Gargoyle*, with the <oy> spelling in the middle of the element, was once spelled <oi> (and several other ways!). Again, we don't know why the <oy> spelling became standard.

For more on the history and spelling of [oi], see *AES*, pp. 301-03.

**Lesson Eight
Test One**

Words	Analysis
1. <i>vowels</i>	[ou] = <u><ow></u> , [z] = <u><s></u>
2. <i>voiced</i>	[oi] = <u><oi></u> , [s] = <u><c></u>
3. <i>druggist</i>	[u] = <u><u></u> , [g] = <u><gg></u> Free stem + suffix = <u>drug + g + ist</u>
4. <i>toilet</i>	[oi] = <u><oi></u> , [l] = <u><l></u>
5. <i>purest</i>	[s] = <u><s></u> Free stem + suffix = <u>puré + est</u>
6. <i>thousands</i>	[ou] = <u><ou></u> , [ə] = <u><a></u> [z] = <u><s></u>
7. <i>bicyclist</i>	[i] = <u><i></u> , Free stem + suffix = <u>bicyclé + ist</u>
8. <i>journalist</i>	[ur] = <u><our></u> Free stem + suffix = <u>journal + ist</u>
9. <i>purist</i>	Free stem + suffix = <u>puré + ist</u>
10. <i>specialized</i>	Free stem + suffix #1 + suffix #2 = <u>special + izé + ed</u>

Lesson Nine Review of [ə] and [u]

1 In the following words, underline the letters that spell schwa, [ə]. Double underline the letters that spell short <u>, [u]. Then sort the sixteen words into the matrix:

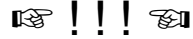
adjust summon produce toughen
 loyalty joyfully account royal
 poison thousand spoiled allowed
 downtown toungue mountain clubhouse

2 Sort the words into this matrix:

Words with . . .		
	[ə]:	no [ə]:
Words with [u]:	<i>adjust</i> <i>summon</i> <i>toughen</i>	<i>tongue</i> <i>clubhouse</i>
Words with no [u]:	<i>loyalty</i> <i>account</i> <i>poison</i> <i>mountain</i> <i>joyfully</i> <i>royal</i> <i>thousand</i> <i>allowed</i> <i>produce</i>	<i>downtown</i> <i>spoiled</i>

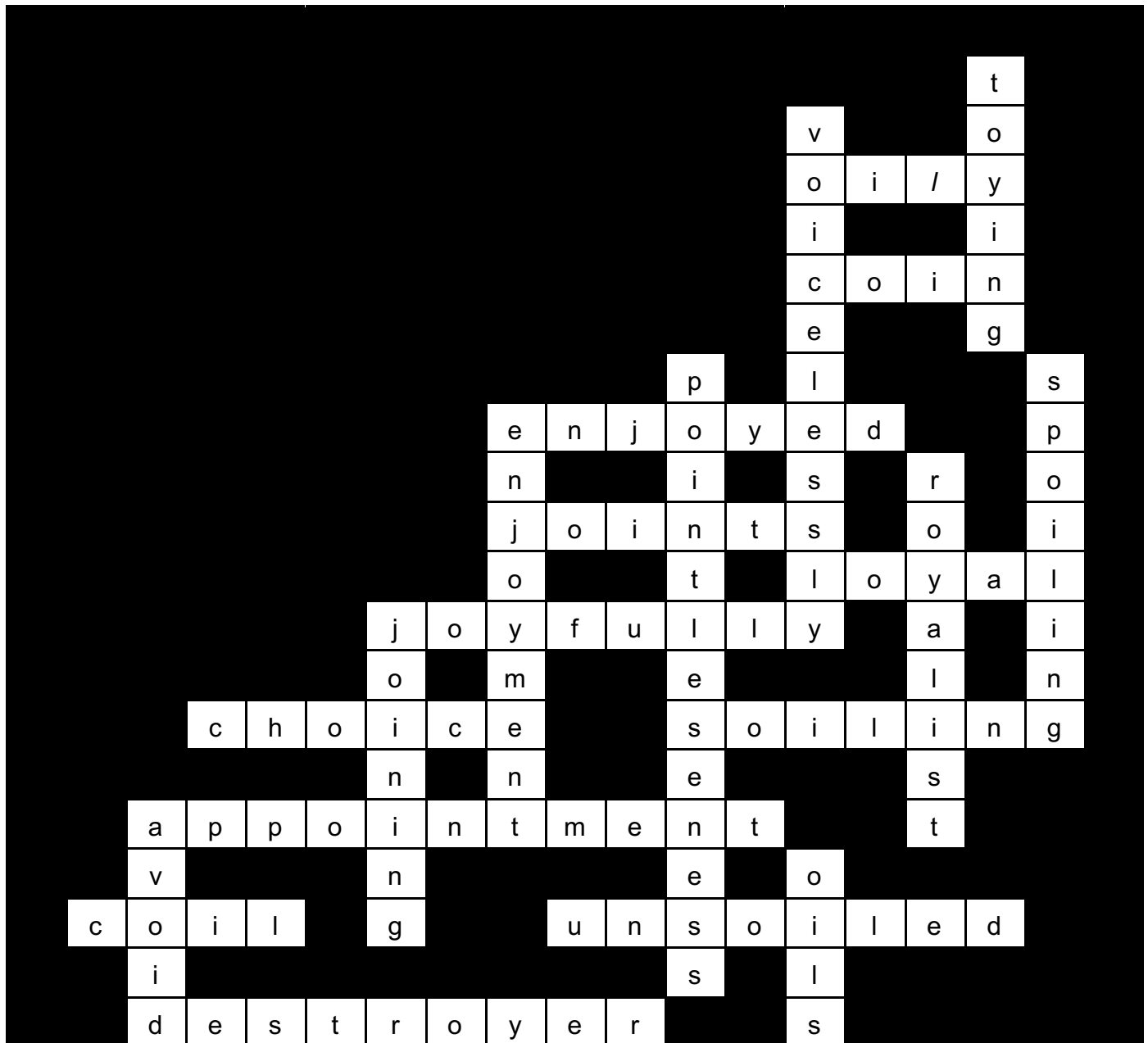
2 Three ways to spell [u] are <u>, <ou>, and <o>.

3 List all the different ways you found in the sixteen words to spell schwa: <a>, <o>, <e>, <u>, <ai>



Word Squambles. This Squambles is made up of words that contain the sound [oi]. We've given you a bit of a start. Unscramble the easy words first and enter them into the squares. That will give you some clues to help you with the harder ones. As you enter each word into the squares, check it off the list:

Rows		Columns	
3. yilo✓	<i>oily</i>	1. yoingt✓	<i>toying</i>
4. nico✓	<i>coin</i>	2. slycoilvese✓	<i>voicelessly</i>
7. noyjeed✓	<i>enjoyed</i>	5. eeiolnppsst✓	<i>pointlessness</i>
9. stinjo✓	<i>joints</i>	6. plingios✓	<i>spoiling</i>
10. aloly✓	<i>loyal</i>	7. entoymenj✓	<i>enjoyment</i>
11. fuylyjol✓	<i>joyfully</i>	8. toysalir✓	<i>royalist</i>
12. hecoic✓	<i>choice</i>	11. noijnig✓	<i>joining</i>
13. noislig✓	<i>soiling</i>	14. ovoid✓	<i>avoid</i>
14. paintmopent✓	<i>appointment</i>	15. silo✓	<i>oils</i>
15. loci✓	<i>coil</i>		
17. noisdule✓	<i>unsoiled</i>		
18. reredtoys✓	<i>destroyer</i>		



Teaching Notes.

Item 1. We are taking *produce* here as the verb, with stress on the second vowel. If it is taken as the noun, with stress on the first vowel, then there is no schwa and no [u] in it, and it would go into the lower right square in the matrix.

Tongue can be a very difficult word for spellers. You might remind the students that <o> is a fairly common spelling of [u]: *front, among, brother, comfort, confront, monkey, month, mother, nothing,*

smother, sponge, wonder, etc. This <o> spelling of [u] is due to a feature of handwriting in the Middle Ages: Several different letters were composed of combinations of single vertical pen strokes called minims. A minim looked something like this: ꝛ. The letter <u> consisted of two minims, ꝛꝛ. So did the letter <n>, ꝛꝛ. The letter <i> was ꝛ. The letter <m> was ꝛꝛꝛ. Since scribes tended back then to crowd the letters and words together (parchment being scarce and expensive), there could be interpretation problems with words that contained sequences of two or more letters that consisted of minims. For instance, the word *minim* would be something like ꝛꝛꝛꝛꝛꝛꝛꝛꝛ! Since <u> consisted of two minims but <o> did not, the convention arose of changing <u> to <o> when it was close to other minim letters. *Tongue*, for instance, was spelled *tunge* in Old English, and the <u> was apparently changed to <o> to avoid the string of four minims in <un>: ꝛꝛꝛꝛ.

If you were to leave out the <u> in *tongue*, you would get **tonge*, which looks as if it should be pronounced with a soft <g>, [j], like *sponge*. The <u> can be said to insulate the <g> from the <e>. That, alas, leaves unexplained the continuing presence of the <e>. (For more on *tongue*, see *AES*, p. 437.)

Squambles. You may want to warn the students that the word in row 10 is not *alloy* and that the word in column 15 is not *soil*. The letters are there to spell *alloy* and *soil*, but they will not work in the squares.

Lesson Ten Review of Vowel Sounds

1 Sort these thirty-two words into the eight groups below. Remember that [ur] has strong stress, and [ər] does not. Remember, too, that if a word has just one vowel sound, that vowel has a strong stress.

love	produce	voice	druggist
wood	woolen	musically	include
early	canoe	journalist	argue
humorist	lose	poison	worse
statue	thousand	choose	mountain
voyager	former	labor	should
allowed	continue	serve	worship
occurred	reserve	prove	tourist

Words that contain . . .

[ur]:		[ər]:	
<i>early</i>	<i>serve</i>	<i>humorist</i>	<i>former</i>
<i>occurred</i>	<i>worse</i>	<i>voyager</i>	<i>labor</i>
<i>reserve</i>	<i>worship</i>		
<i>journalist</i>	<i>tourist</i>		

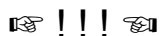
Words that contain . . .

[ū]	[yū]	[ù]	
<i>statue</i>	<i>choose</i>	<i>humorist</i>	<i>wood</i>
<i>produce</i>	<i>prove</i>	<i>continue</i>	<i>woolen</i>
<i>canoe</i>	<i>include</i>	<i>musically</i>	<i>should</i>
<i>lose</i>		<i>argue</i>	

Words that contain . . .		
[u]:	[oi]:	[ou]:
<i>love</i>	<i>voyager</i>	<i>allowed</i>
<i>druggist</i>	<i>voice</i>	<i>thousand</i>
	<i>poison</i>	<i>mountain</i>

2 Fill in the blanks:

Name of the sound:	Written symbol of the sound:	Word that contains the sound:
<i>Short uh</i>	<i>[u]</i>	<i>just</i>
<i>Short oo</i>	<i>[ü]</i>	<i>Answers will vary.</i>
<i>Long oo</i>	<i>[ū]</i>	<i>Answers will vary</i>
<i>Long yoo</i>	<i>[yū]</i>	<i>cute</i>
<i>Schwa</i>	<i>[ə]</i>	<i>Answers will vary</i>



Watch the Middles!

journalist		
<i>journ</i>	<i>al</i>	<i>ist</i>
<i>journ</i>	<i>al</i>	<i>ist</i>
<i>journ</i>	<i>al</i>	<i>ist</i>
<i>journ</i>	<i>al</i>	<i>ist</i>
<i>journalist</i>		

allowed		
<i>al</i>	<i>low</i>	<i>ed</i>
<i>al</i>	<i>low</i>	<i>ed</i>
<i>al</i>	<i>low</i>	<i>ed</i>
<i>al</i>	<i>low</i>	<i>ed</i>
<i>allowed</i>		

Lesson Eleven The Prefix *Ad-*

1 Many of our words come from Latin, the language spoken by the ancient Romans. Many of these old Latin words contain a prefix that was at first spelled <ad> and meant “to, toward.”

In some words the [d] in the prefix *ad-* has changed to a different sound, and the <d> has been replaced by a different letter.

We can divide *adventure* into its prefix and stem like this: *ad* + *venture*.

And we could divide *appoint* into its prefix and stem like this: *ap* + *point*. But the <ap> in *appoint* is really a changed form of the prefix *ad-*. The <d> has been replaced with a <p>: *aɔ* + *p* + *point*.

The <d> in *ad-* is deleted, and a <p> is put in its place.

In *adventure*, we add the prefix and the stem together by simple addition. But in the word *appoint* we replace the <d> in the prefix with a <p>.

2 Each of the following words begins with some form of the prefix *ad-*. Sometimes the <d> has stayed <d>. Sometimes it has been replaced by another letter. Analyze each word into its prefix and its stem the way we did with *adventure* and *appoint*. If the <d> has been replaced with a different letter, show that change in your analysis.

Words	=	Prefix	+	Stem
adventure	=	<i>ad</i>	+	<i>venture</i>
appoint	=	<i>aɔ</i> + <i>p</i>	+	<i>point</i>
approve	=	<i>aɔ</i> + <i>p</i>	+	<i>prove</i>
adverb	=	<i>ad</i>	+	<i>verb</i>
apply	=	<i>aɔ</i> + <i>p</i>	+	<i>ply</i>
acclaim	=	<i>aɔ</i> + <i>c</i>	+	<i>claim</i>
adjust	=	<i>ad</i>	+	<i>just</i>
account	=	<i>aɔ</i> + <i>c</i>	+	<i>count</i>

attack	=	<i>ad</i> + <i>t</i>	+	<i>tack</i>
advantage	=	<i>ad</i>	+	<i>vantage</i>
allow	=	<i>ad</i> + <i>l</i>	+	<i>low</i>
advertise	=	<i>ad</i>	+	<i>vertise</i>
assist	=	<i>ad</i> + <i>s</i>	+	<i>sist</i>
attend	=	<i>ad</i> + <i>t</i>	+	<i>tend</i>

3 Now sort the words in the Words column into these two groups:

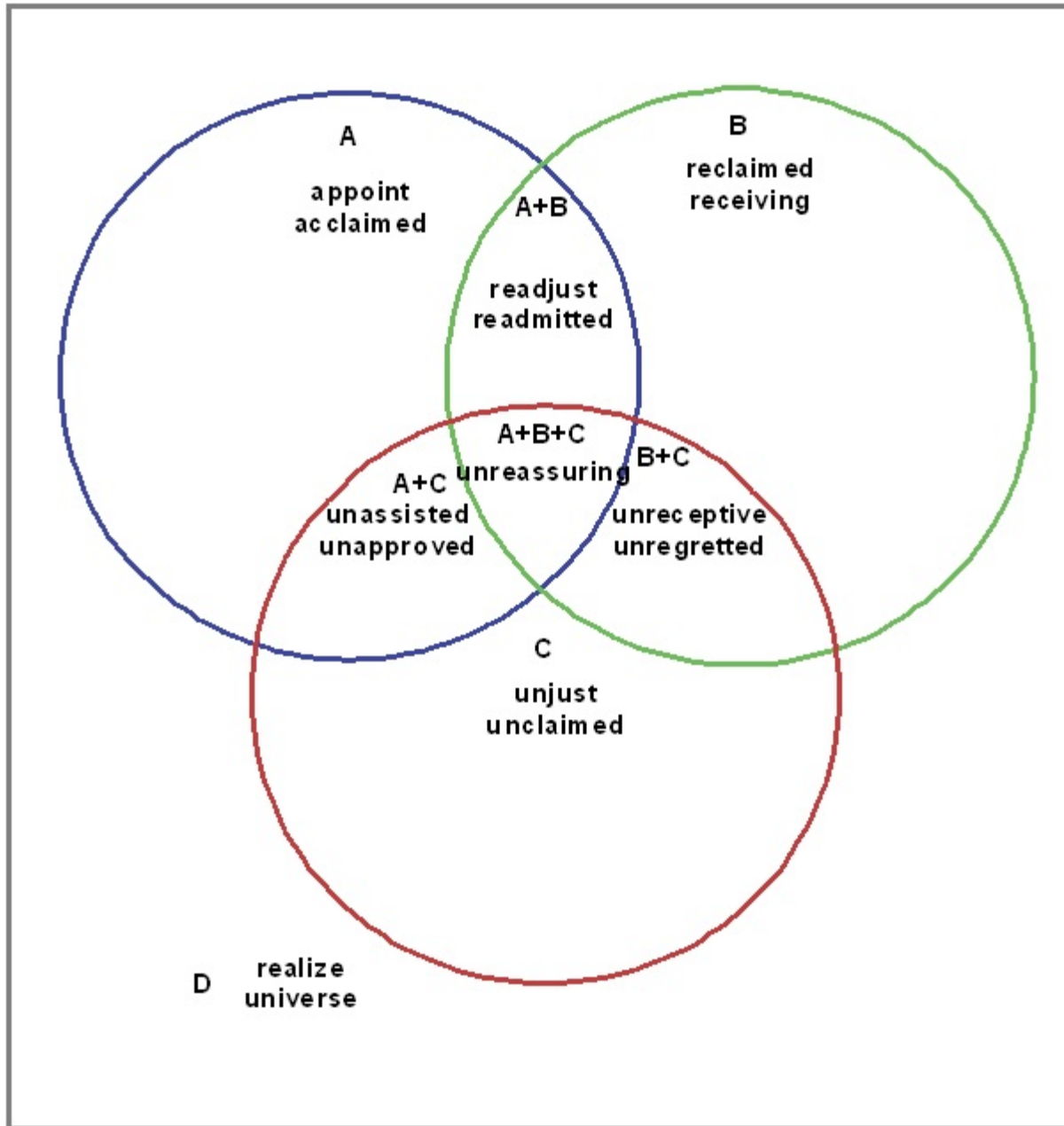
Words in which the <d> in *ad-*

stayed <d>:	was replaced with a different letter:	
<i>adventure</i>	<i>appoint</i>	<i>attack</i>
<i>adverb</i>	<i>approve</i>	<i>allow</i>
<i>adjust</i>	<i>apply</i>	<i>assist</i>
<i>advantage</i>	<i>acclaim</i>	<i>attend</i>
<i>advertise</i>	<i>account</i>	



Word Venn. In circle A put only words that contain some form of the prefix *ad-*. In circle B put only words that contain the prefix *re-*. In circle C put only words that contain the prefix *un-*.

appoint✓	readjust✓	unapproved✓
unreceptive✓	unreassuring✓	unclaimed✓
unjust ✓	unassisted✓	unregretted✓
realize✓	reclaimed✓	universe✓
acclaimed✓	readmitted✓	receiving✓



Teaching Notes.

Item 1. This lesson is the second example of the third of the three kinds of change that can preempt the Rule of Simple Addition: replacement. The first example was the <y>-to-<i> replacement. The students studied the first two kinds of changes, addition and deletion, in their work with twinning and final <e> deletion. The replacement of the <d> in *ad-* with some other consonant is due to a process called **assimilation**, as the students will learn in the next lesson.

The main objective of the work with assimilated prefixes is to help students recognize the various forms a prefix like *ad-* takes and to understand when and why the changes in form occur. This recognition can help the students see a unity – and thus a simplification – in the language where to the uninformed eye there would be just meaningless complexity with no unity or pattern at all. At a more particular and practical level, work with assimilated prefixes like *ad-* can help with two spelling problems:

First, it can help students anticipate and remember the double consonants in words like *apply* and *attack*. We often use double consonants to mark stressed short vowels in VCC strings, but we seldom have double consonants that are preceded by unstressed schwa. The vowels in assimilated prefixes are the major case where schwa occurs right before a double consonant. Just as the twinning rule explains the presence of double consonants at the end of many stems, the assimilation of prefixes explains their presence at the front.

The second way work with assimilated prefixes can help is with the schwa itself: If students can identify the prefixes in words, they are in a better position to know which vowel letter spells the schwa that is normal in those prefixes. For instance, the schwa heard in the many forms of *ad-* is always going to be spelled <a>.

Item 2. Students may ask about the stems and bases in this table. Since much of our concern in this program is to help students see connections and patterns among words, questions such as “Is the *point* in *appoint* the same as the *point* when you point your finger at someone?” are valuable questions indeed. The prefix *ad-* means, literally, “to, towards.” In most of the old Latin words in which it appears, *ad-*'s meaning can be hard to make out. In some cases, though, a meaning can be retrieved: Since adverbs modify verbs, they are, in a sense, directed towards verbs *ad+verb*. In *advertise* the base *vert* means “turn,” and when you advertise, you do in a way try to turn someone towards the thing you are advertising. And you can feel a sense of “to, towards” in words like *acclaim* and *appoint*, the latter of which does contain the free base *point*.

Lesson Twelve Sometimes Ad- Assimilates

1 Here are twelve words in which the <d> in *ad-* changes to a different letter:

attend	apply	account	arrange
approve	acclaim	attach	assist
arrest	allegiance	allowance	assembly

Sort these twelve words into these six groups:

Words in which the <d> is replaced with a

<c >	<l>	<p>	<r>	<s>	<t>
<i>acclaim</i>	<i>allegiance</i>	<i>approve</i>	<i>arrest</i>	<i>assist</i>	<i>attend</i>
<i>account</i>	<i>allowance</i>	<i>apply</i>	<i>arrange</i>	<i>assembly</i>	<i>attach</i>

2 The <d> in these twelve words is replaced with another letter because of **assimilation**. When things assimilate, they get more similar. *Assimilation* is a good word for this for two reasons. For one thing, it contains the prefix *ad-* with the <d> assimilated to an <s>: *assimilation* = *ad* + *s* + *similation*. So the word *assimilation* contains an example of itself!

For another thing, the base *simil* in *assimilation* is the same base that is in the word *similar*. The base *simil* means "like." And that is what assimilation is all about: Sounds or letters assimilate when they change to be more like other sounds or letters.

Sounds change to be more like one another in order to make the word easier to say. It would be a little hard to say things like **adsist* or **adcount*. We could say them, but it is easier to say them if the sounds spelled by the <d> change to be like the sound right after them.

When the sound changes, we often change the spelling, too. So instead of **adsist*, we have *assist*. Instead of **adcount* we have *account*. And we say that the sounds and the spellings have assimilated.

Teaching Notes.

Assimilation is one result of the much more general tendency of speakers to make words easier to pronounce. The assimilations of prefixes like *ad-* all took place

centuries ago, in Latin. However, the process of assimilation and other simplifications go on around us all the time. If you listen carefully, you will hear that most of the time people pronounce a word like *input* with an [m] rather than the [n] suggested by the spelling. The reason is that [m] and [p] are both pronounced out at the lips while [n] is pronounced with the tongue up in back of the upper teeth. It's a shorter move in the mouth from [m] to [p] than it is from [n] to [p], so [np] becomes [mp]. If the assimilation were to persist as it did with some older words like *important* and *impulse*, the spelling of *input* would change to <imput>. (*Webster's Third International* actually shows an alternate pronunciation with [m], and even an alternate spelling with <m>! The older and more conservative *Webster's Second* allows no alternates with [m] or <m>.)

A number of other simplifications occur quite regularly: For instance, practically no one really pronounces the <d> in *grandfather* or *handkerchief*; the clusters [ndf] and [ndk] are such mouthfuls that we simplify them to [nf] and [nk] or [ŋk]. In a somewhat similar way, most people pronounce *cents* and *sense* so that they are a perfect rhyme; the <t> gets very little, if any, force in the pronunciation. A similar example is the pronunciation of *pumpkin* as if it were spelled <punkin>. Unfortunately, though such changes make pronunciation easier, they can make spelling more complicated.

The point of these examples is that assimilation is not some strange and technical thing that happened centuries ago but happens no more. It is going on all the time, as well as other changes to pronunciation that are also simplifications. It is all part of humans' insistence on simplifying things, and our language's inevitable and irresistible tendency to change and simplify. It is our somewhat melancholy job as teachers to try to slow down that change and simplification as we correct our students' use of the language. In a certain sense we are being paid to delay the often inevitable!

Item 1. The base of *arrest* is the free base *rest* "stand still." It occurs in *restive* and in the free base *rest* that means "remainder." Oddly it is not related to the free base *rest* that means "repose, cessation of work." It actually combines the prefix *re-* plus the <st> from the stem that underlies such words as *stand*, *distance*, *obstacle* and many, many others, but we treat it now as a single element.

The story of the bound base *leg* in *allegiance* is complicated. Basically, it derives from the word *liege*, which means both master and servant. It occurs only in *allegiance* and can be said to mean something like "service."

The free base *count* occurs also in *discount* and *recount*. It derives from the Latin word *computāre*, which also produced our word *compute* (com+pute). The bound base *pute* "prune, cut, count, consider" is the same as that in *dispute*, *repute*, and *amputate*.

Lesson Thirteen More Words With Ad-

1 Each of the following words starts with some form of the prefix *ad-*. Analyze each one into its prefix and stem. If the <d> has assimilated to a different letter, show the assimilation in your analysis, the way you did before.

Word	=	Prefix	+	Stem
assign	=	<i>ad</i> + <i>s</i>	+	<i>sign</i>
allow	=	<i>ad</i> + <i>l</i>	+	<i>low</i>
address	=	<i>ad</i>	+	<i>dress</i>
affect	=	<i>ad</i> + <i>f</i>	+	<i>fect</i>
assort	=	<i>ad</i> + <i>s</i>	+	<i>sort</i>
adjective	=	<i>ad</i>	+	<i>jective</i>
allegiance	=	<i>ad</i> + <i>l</i>	+	<i>legiance</i>
admire	=	<i>ad</i>	+	<i>mire</i>
accompany	=	<i>ad</i> + <i>c</i>	+	<i>company</i>
appearance	=	<i>ad</i> + <i>p</i>	+	<i>pearance</i>
adopt	=	<i>ad</i>	+	<i>opt</i>
arrive	=	<i>ad</i> + <i>r</i>	+	<i>rive</i>
attempt	=	<i>ad</i> + <i>t</i>	+	<i>tempt</i>
advice	=	<i>ad</i>	+	<i>vice</i>
attention	=	<i>ad</i> + <i>t</i>	+	<i>tention</i>
accident	=	<i>ad</i> + <i>c</i>	+	<i>cident</i>
announce	=	<i>ad</i> + <i>n</i>	+	<i>nounce</i>
appliance	=	<i>ad</i> + <i>p</i>	+	<i>pliance</i>
adventure	=	<i>ad</i>	+	<i>venture</i>
appoint	=	<i>ad</i> + <i>p</i>	+	<i>point</i>

Word	=	Prefix	+	Stem
assure	=	<i>ad</i> + <i>s</i>	+	<i>sure</i>
advise	=	<i>ad</i>	+	<i>vise</i>

2 Sort the words in the Word column into these two groups:

Words in which the <d> . . .

stayed <d>:	assimilated to a different letter:	
<i>address</i>	<i>assign</i>	<i>attempt</i>
<i>adjective</i>	<i>allow</i>	<i>attention</i>
<i>admire</i>	<i>affect</i>	<i>accident</i>
<i>adopt</i>	<i>assort</i>	<i>announce</i>
<i>advice</i>	<i>allegiance</i>	<i>appliance</i>
<i>adventure</i>	<i>accompany</i>	<i>appoint</i>
<i>advise</i>	<i>appearance</i>	<i>assure</i>
	<i>arrive</i>	

3 Now sort the words in which the <d> assimilated into these groups:

Words in which the <d> assimilated to . . .

<c>	<f>	<l>
<i>accompany</i>	<i>affect</i>	<i>allow</i>
<i>accident</i>		<i>allegiance</i>

Words in which the <d> assimilated to . . .

<n>	<p>	<r>
<i>announce</i>	<i>appearance</i>	<i>arrive</i>
	<i>appliance</i>	
	<i>appoint</i>	

Words in which the <d> assimilated to . . .

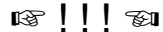
<s>	<t>
<i>assign</i>	<i>attempt</i>
<i>assort</i>	<i>attention</i>
<i>assure</i>	

Lesson Fourteen
Review of Assimilation and the Prefix Ad-

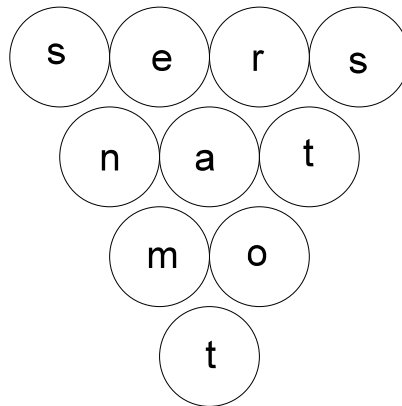
1 Combine the prefixes, stems, and suffixes below. Show any assimilation or other changes that take place:

Prefix	+	Stem	+	Suffix	=	Word				
<i>ad</i>	+	<i>f</i>	+	fect	+	ion	=	<i>affection</i>		
<i>ad</i>	+	<i>c</i>	+	company	<i>y</i>	+ <i>i</i>	+	es	=	<i>accompanies</i>
<i>ad</i>	+	<i>n</i>	+	nounce	<i>ce</i>	+	er	=	<i>announcer</i>	
<i>ad</i>	+		+	mire	<i>ce</i>	+	ing	=	<i>admiring</i>	
<i>ad</i>	+	<i>f</i>	+	ford	+	able	=	<i>affordable</i>		
<i>ad</i>	+	<i>s</i>	+	sort	+	ment	=	<i>assortment</i>		
<i>ad</i>	+		+	venture	<i>ce</i>	+	er	=	<i>adventurer</i>	
<i>ad</i>	+	<i>p</i>	+	point	+	ment	=	<i>appointment</i>		
<i>ad</i>	+	<i>s</i>	+	sure	<i>ce</i>	+	ed	=	<i>assured</i>	
<i>ad</i>	+	<i>l</i>	+	low	+	ance	=	<i>allowance</i>		
<i>ad</i>	+		+	dress	+	es	=	<i>addresses</i>		
<i>ad</i>	+	<i>s</i>	+	sign	+	ed	=	<i>assigned</i>		
<i>ad</i>	+	<i>r</i>	+	rive	<i>ce</i>	+	al	=	<i>arrival</i>	
<i>ad</i>	+	<i>c</i>	+	cident	+	al	=	<i>accidental</i>		
<i>ad</i>	+	<i>p</i>	+	pliance	<i>ce</i>	+	es	=	<i>appliances</i>	
<i>ad</i>	+	<i>p</i>	+	ply	<i>y</i>	+ <i>i</i>	+	ance	=	<i>appliance</i>
<i>ad</i>	+	<i>t</i>	+	tempt	+	ing	=	<i>attempting</i>		
<i>ad</i>	+		+	opt	+	ion	=	<i>adoption</i>		
<i>ad</i>	+		+	ject	+	ive	=	<i>adjective</i>		
<i>ad</i>	+	<i>p</i>	+	pear	+	ance	=	<i>appearance</i>		
<i>ad</i>	+	<i>t</i>	+	tent	+	ion	=	<i>attention</i>		
<i>ad</i>	+		+	vise	+	er	=	<i>adviser</i>		

Prefix	+	Stem	+	Suffix	=	Word
<i>ad+f</i>		+ fect		+ ion	=	<i>affection</i>



Word Bowl. In a Word Bowl the ten circles represent ten bowling pins. Your job is to spell words from the letters on the pins. You can spell more than two words but you can use each of the ten letters only one time. If you can spell one ten-letter word using all the letters on the pins, you have scored a strike, which gives you a total of twenty points, the highest possible score. If you can spell two words that use up all ten letters, you have scored a spare, which gives you a total of fifteen. If you don't get a strike or spare, you get one point for each letter of the word or words you spell, for up to nine points.



SCORECARD		
Words		Points
Strike: <i>assortment</i>	(20 points)	
Spare: See below.	(15 points)	
Other word or words:	(Up to 9 points)	

Teaching Notes.

Word Bowl. The ten letters in *assortment* offer an amazing array of shorter words. Here is a list of some of the spare combinations:

sternmost + a
 torments + as
 smartest, mattress + on, no

smartens + to
monsters + at
transom + set
streams, masters + not, ton
stamens + ort, rot, tor
smarten, martens + sot
sermons + tat
monster, mentors + sat
matters + son, nos
matrons + set
toners, tenors + mast, mats
tastes, states + morn
stream, master + tons
storms + neat
stones, stenos + mart, tram
sterns + moat, atom
steams + torn
starts + omen
stamen + sort, orts, rots, tors
snorts + tame, team, mate, meat
smarts + tone, note
sermon + tats
sanest, assent + mort
rotten + mass
ransom, manors + test, stet
otters + mans
natter + moss
morass + tent
matter + sons
matron + sets
marten + toss
manses + tort
astern + most, toms
trots, torts + manes, manse, means, amens, names
trams, marts, smart + notes, onset, stone, steno, tones
toner, tenor + masts
tomes, smote + tarns, rants
tests, stets + manor, roman
terns, stern, rents + atoms, moats, stoma,
tents + roams, moras
tames, teams, mates, meats, steam + snort
state, taste + morns, norms
tarts, start + omens, meson
tamer + snots
morts, storm + antes

sorts + meant

There are also dozens of other shorter words that do not fit into spare combinations:
sea, arose, senator, rotate, etc. etc.

You may or may not choose to tell the students that *assortment*, the strike word, appears in the current lesson.

**Lesson Fifteen
Test Two**

Words	Fill in the blanks
1. <i>allowance</i>	Prefix + stem = <u>ad + l + lowance</u>
2. <i>adjective</i>	Prefix + bound stem + suffix = <u>ad + ject + ive</u>
3. <i>accident</i>	Prefix + bound stem = <u>ad + c + cident</u>
4. <i>adoption</i>	Prefix + free stem = <u>ad + option</u>
5. <i>addressed</i>	Prefix + free stem + suffix = <u>ad + dress + ed</u>
6. <i>announcer</i>	Prefix + bound stem + suffix = <u>ad + n + nounce + er</u>
7. <i>attempted</i>	Prefix + free stem + suffix = <u>ad + t + tempt + ed</u>
8. <i>reappointment</i>	Prefix + prefix + free stem + suffix = <u>re + ad + p + point + ment</u>
9. <i>misadventure</i>	Prefix + prefix + free stem = <u>mis + ad + venture</u>
10. <i>disapproval</i>	Prefix + prefix + free stem + suffix = <u>dis + ad + p + prove + al</u>

Lesson Sixteen

Another Function of Silent Final <e>: Voiced <th>

1 So far you have worked with three functions of silent final <e>:

a. A final <e> can mark a preceding vowel as being long in the patterns Ve # and VCe.

b. A final <e> can mark a <c> in front of it as being soft so that the <c> is pronounced [s].

c. A final <e> can mark a <g> in front of it as being soft so that the <g> is pronounced [j].

2 There is one other consonant whose sound final <e> can mark. Say these two sentences carefully, paying special attention to the last sound you hear in each underlined word:

I could not get my breath.

I could not breathe.

3 You should hear a difference between the final consonant sounds in the two words. The difference is called **voicing**. The <th> sound at the end of *breathe* is voiced. But the <th> sound at the end of *breath* is unvoiced.

In the front of people's throats you can see a lump that we sometimes call the "Adam's apple." That lump is actually the voice box, and it contains the vocal cords. When we pronounce voiced sounds, we make those vocal cords buzz. When we pronounce unvoiced sounds, we don't buzz them. That buzzing sound is what we call voicing.

4 The voiced <th> sound at the end of *breathe* is written [th]. The voiceless <th> sound at the end of *breath* is written [θ].

So the pronunciation of *breath* would be written [breθ], and *breathe* would be written [brēth].

5 Pronounce these words carefully. If you are unsure of any, ask for help or look them up in the dictionary. Underline the words that end with voiced [th]. Then sort them into the matrix below:

cloth	bath	breath	teeth
<u>clothe</u>	<u>bathe</u>	<u>breathe</u>	<u>teethe</u>
with	wreath	booth	loath
<u>tithe</u>	<u>wreathe</u>	<u>soothe</u>	<u>loathe</u>

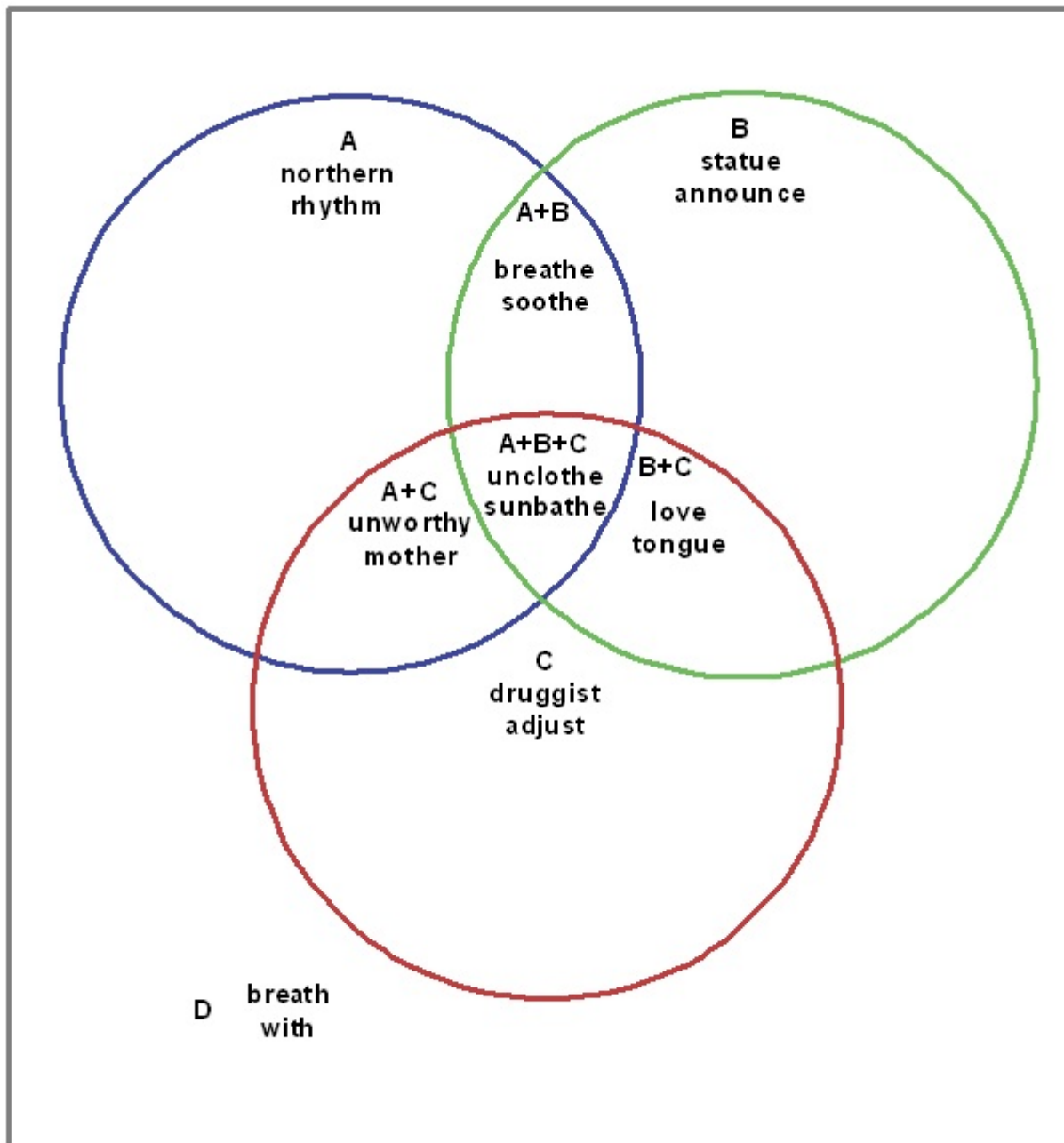
	Words whose final sound is . . .	
	voiced [th]:	voiceless [th]:
Words with a silent final <e>	<i>clothe</i> <i>tithe</i> <i>bathe</i> <i>wreathe</i>	<i>breathe</i> <i>soothe</i> <i>teethe</i> <i>loathe</i>
Words with no silent final <e>		<i>cloth</i> <i>with</i> <i>bath</i> <i>wreath</i>

6 A silent final <e> marks a preceding vowel as long, a preceding <c> or <g> as soft, and a preceding <th> as voiced.



Word Venn. In circle A put only words that contain the sound [th]. In circle B put only words that end with a silent <e>. In circle C put only words that contain the sound [u]. In area D put all other words:

northern✓	unworthy✓	rhythm✓	mother✓
love✓	sunbathe✓	soothe✓	announce✓
breath✓	breathe✓	with✓	tongue✓
druggist✓	statue✓	adjust✓	unclothe✓



Teaching Notes. The difference between unvoiced [θ] and voiced [ð] can be a subtle one to hear. You might ask puzzled students to pronounce *bath* and *bathe* a few times, pressing their fingers lightly against the front of their throats. They should be able to feel the vocal cords vibrating at the end of *bathe*, indicating the presence of voicing. The sound [ð] is quite restricted in its occurrence: It occurs rarely in consonant

clusters, usually with [r], as in *farther*, *northern*, and *worthy*. It also occurs in the word *rhythm*. Usually it occurs with a vowel after it, as in *that*, *then*, *their*, and other function words or with a silent final <e> after it. The only known noteworthy holdouts are the verb *mouth* and the adjective and verb *smooth*, both with [th] in final position with no silent <e>. For more on [th] see *AES*, pp. 384-86.

Lesson Seventeen Silent Final <e> as an Insulator

1 A final <e> marks a preceding vowel as being long in the patterns VCe and Ve#; it marks a <c> or <g> right in front of it as being soft; it marks a <th> right in front of it as being voiced.

Besides these functions, silent final <e> is used to keep certain letters from coming at the end of a word. When a final <e> does this, it is **insulating** the letter.

2 **<u> and <v>**. In English we avoid ending words with the letters <u> or <v>. Many words have a silent final <e> to keep them from ending with a <u> or <v>. Here are some words in which silent final <e> is simply insulating a <u> or a <v>:

achieve	reserve	league	tongue
morgue	nerve	expensive	mosque
technique	starve	dissolve	love

Sort the words into these two groups:

Words that end . . .

<ve>		<ue>	
<i>achieve</i>	<i>expensive</i>	<i>morgue</i>	<i>tongue</i>
<i>reserve</i>	<i>dissolve</i>	<i>technique</i>	<i>mosque</i>
<i>nerve</i>	<i>love</i>	<i>league</i>	
<i>starve</i>			

3 **<s> and <z>**. Just as we avoid ending words with <u> or <v>, we also avoid ending free bases with a single <s>. The letter <s> is so common as a suffix that if we were to end free bases with it, the free base would look like a plural noun or like a verb with the -s suffix. For instance, without a silent final <e> *dense* would look like *dens*, the plural of *den*. And without its silent final <e>, *moose* would look like the verb *moos*, as in “That cow moos all day long.” So we avoid ending free bases with a single <s>, and we sometimes do so by insulating the <s> with a silent final <e>, as in *dense* and *moose*.

The letters <s> and <z> are very closely related to one another. In fact, the sound [z] is spelled <s> more often than it is spelled <z>. So just as we avoid ending free bases

with <s>, we avoid ending them with a single <z>. We sometimes use a final <e> to insulate a single <z>. For example, all the final <e> is doing in the word *bronze* is insulating the <z> so that it does not come at the end.

4 Divide the following words into the four groups:

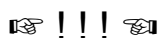
worse	glimpse	tongue	dissolve	gauze
squeeze	starve	mosque	purchase	expensive
nerve	clause	mouse	adjective	technique
league	reserve	bronze	sneeze	clubhouse

Words that end . . .

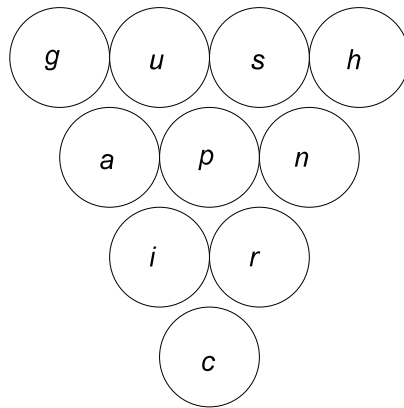
<se>	<ze>	<ve>	<ue>
<i>worse</i>	<i>squeeze</i>	<i>nerve</i>	<i>league</i>
<i>glimpse</i>	<i>bronze</i>	<i>starve</i>	<i>tongue</i>
<i>clause</i>	<i>sneeze</i>	<i>reserve</i>	<i>mosque</i>
<i>mouse</i>	<i>gauze</i>	<i>dissolve</i>	<i>technique</i>
<i>purchase</i>		<i>adjective</i>	
<i>clubhouse</i>		<i>expensive</i>	

5 So final <e> can insulate four different letters to keep them from the end of a free base or word. The four letters are <u>, <v>, <s>, and <z>.

6 **The Functions of Silent Final <e>**. In the patterns VCV and Ve# silent final <e> marks a preceding vowel as being long; it marks a preceding <c> or <g> as being soft, and it marks a preceding <th> as being voiced; final <e> is also used to insulate <u>, <v>, <s>, and <z>.



Word Bowl. Again, your job is to spell words from the letters on the pins. Remember that you can spell more than two words but you can use each of the ten letters only one time. If you can spell one ten-letter word using all the letters on the pins, you have scored a strike, which gives you a total of twenty points, the highest possible score. If you can spell two words that use up all ten letters, you have scored a spare, which gives you a total of fifteen. If you don't get a strike or spare, you get one point for each letter of the word or words you spell, up to nine points.



SCORECARD		
Words		Points
Strike: <i>purchasing</i>	(20 points)	
Spare: <i>See below</i>	(15 points)	
Other word or words:	(Up to 9 points)	

Teaching Notes.

Item 2. The historical reason for the constraint against ending words with <u> or <v> is not clear. But it is logical for the reason, whatever it may be, to apply to both <u> and <v> because until the 17th century the two letters were used as different forms of one letter that was used to spell both the consonant sound [v] and the various <u> vowel sounds. In general, <v> was used at the beginning of words, <u> in the middle and at the end, whether the sound being spelled was vowel or consonant. In older dictionaries words starting with <u> and <v> were alphabetized as a single group. So it is logical that what we now see as two separate letters would have certain similarities of behavior.

Word Bowl. Some spare combinations:

sprucing + ah, ha
scraping + uh
parching + us
crushing + pa
chagrins, crashing + up
urchins + gap
spinach + rug
garnish, sharing + cup
phasing, shaping + cur
rushing + cap, pac
gunship, pushing + arc, car
graphic + sun
cursing + hap
arching, chagrin + pus, sup, ups,
carping + uhs
urping + cash
urchins + gaps
punish, unship + crag

unrigs + chap
sprain + chug
raunch + gips, pigs
arcing, caring, racing + push
paunch + rigs
paring + such
pacing + rush
curing + haps
aching + spur, urps
ruing, unrig + chaps
unhip + crags
suing + parch
sugar + pinch
shrug + panic
harps, sharp + cuing
crush + aping

Lesson Eighteen

Sometimes Silent Final <e> Does Two Jobs at Once

1 A silent final <e> marks a preceding vowel as long, a preceding <c> or <g> as soft, a preceding <th> as voiced, and sometimes insulates an otherwise final <s>, <z>, <u>, or <v>.

2 You may have noticed that a silent final <e> can sometimes mark a long vowel and a soft or voiced consonant sound at the same time. Pronounce each of the following words and sort them into the matrix:

twig	rage	twice	picnic
unlace	zinc	hug	engage
artistic	advice	attic	oblige
zenith	scythe	cloth	clothe
bath	bathe	stag	stage

	Words that end with . . .					
	unvoiced <th>	voiced <th>	soft <c>	hard <c>	soft <g>	hard <g>
Words in which the final <e> marks a long vowel		<i>scythe</i> <i>bathe</i> <i>clothe</i>	<i>unlace</i> <i>advice</i> <i>twice</i>		<i>rage</i> <i>engage</i> <i>oblige</i> <i>stage</i>	
Words in which there is no final <e> to mark a long vowel	<i>zenith</i> <i>bath</i> <i>cloth</i>			<i>artistic</i> <i>zinc</i> <i>attic</i> <i>picnic</i>		<i>twig</i> <i>hug</i> <i>stag</i>

3 List the words in which silent final <e> marks a long vowel and also marks a voiced <th> or a soft <c> or a soft <g>:

<i>scythe</i>	<i>clothe</i>	<i>advice</i>	<i>rage</i>	<i>oblige</i>
<i>bathe</i>	<i>unlace</i>	<i>twice</i>	<i>engage</i>	<i>stage</i>

4 In some of the following words the final <e> marks a long vowel and in some it does not. Sort the words into the matrixes:

expensive	tongue	reserve	argue
produce	necklace	advantage	engage
voyage	enrage	suppose	clause
glimpse	oppose	baptize	bronze
analyze	worse	lettuce	gauze
unlace	tithe	scythe	specialize
arrive	statue	mosque	remove

Words that end with . . .

	soft <c>	soft <g>	voiced <th>
Words in which the final <e> marks a long vowel	<i>produce</i> <i>unlace</i>	<i>enrage</i> <i>engage</i>	<i>scythe</i> <i>tithe</i>
Words in which the final <e> does not mark a long vowel	<i>necklace</i> <i>lettuce</i>	<i>voyage</i> <i>advantage</i>	

Words that end with an insulated . . .

	<s>	<z>	<u>	<v>
Words in which the final <e> marks a long vowel	<i>oppose</i> <i>suppose</i>	<i>analyze</i> <i>baptize</i> <i>specialize</i>	<i>statue</i> <i>argue</i>	<i>arrive</i> <i>remove</i>
Words in which the final <e> does not mark a long vowel	<i>glimpse</i> <i>worse</i> <i>clause</i>	<i>bronze</i> <i>gauze</i>	<i>tongue</i> <i>mosque</i>	<i>expensive</i> <i>reserve</i>

5 In five of the words in Item 4 the final <e> does not mark a long vowel because the vowel is not stressed. Those five words are:

<i>necklace</i>	<i>lettuce</i>	<i>voyage</i>	<i>advantage</i>	<i>expensive</i>
-----------------	----------------	---------------	------------------	------------------

Teaching Notes.

Item 2. You might ask the students why the six empty cells in the matrix are empty. Looked-for answer: Because if a word has a silent final <e>, it cannot end with an unvoiced <th>, hard <c>, or hard <g> sound, and in order to end with a voiced <th>, soft <c>, or soft <g> sound, a word must have silent final <e>.

Item 4. We are using *produce* here as a verb, with stress on the <u>.

Item 5. In eight other words the final <e> does not mark a long vowel for different reasons: (i) in *glimpse*, *worse*, *bronze*, *mosque*, and *reserve* there are two consonant letters between the <e> and the preceding vowel so the words do not end in the pattern VCV; (ii) in *clause* and *gauze* the vowel sound is spelled with a digraph, <au>, and in general digraphs are exempt from the normal pattern rules; (iii) in *tongue* the situation is a little different: I believe we should treat the <u> as a consonant, similar to the <u> after <q> in *mosque*, so the word ends VCCe like the others in (i). This makes the <u> after <g> a perfect parallel with the <u> after <q>: Sometimes spelling [w], sometimes silent, but in either case a consonant. Thus in words in which it spells [w] after <g>, <u> is a consonant, as in *distinguish*, *anguish*, *language*; in words in which

it is silent after <g> it is also a consonant, as in *disguise*, *fatigue*, *guilty*; in words in which it spells a vowel sound after [g] it is a vowel: *disgust*, *argue*, etc.

Concerning (i) above: Students may wonder about words like *scythe* and *tithe* in which the final <e> marks a long vowel that has two letters (a <t> and an <h>) between it and the vowel. Point out to them that when <th> spells a single sound, either [th] or [t̥h], it is treated as a single letter; in words in which the <th> spells two distinct sound, [t] plus [h], as in *fathead* and *hothouse*, the <th> is two letters.

Lesson Nineteen
More Practice With the Final <e> Deletion Rule

1 **Final <e> Deletion Rule.** You delete a final <e> that marks a soft <c> or soft <g> only when you add a suffix that begins with the letters <e>, <i>, or <y>; you delete all other silent final <e>s whenever you add a suffix that starts with any vowel.

That rule is also true for the final <e>'s that mark a voiced <th> or insulate <s>, <z>, <u>, or <v>. For these final <e>'s are also deleted whenever you add a suffix that starts with any vowel.

2 Here are some free stems and suffixes for you to add together to practice your final <e> deletion rule. Show any changes:

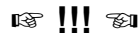
Free Stem	+ Suffix	=	Word
glimps e	+ ed	=	<i>glimpsed</i>
advantag e	+ ed	=	<i>advantaged</i>
advantag e	+ es	=	<i>advantages</i>
advantage	+ ous	=	<i>advantageous</i>
breath e	+ ing	=	<i>breathing</i>
bronz e	+ ed	=	<i>bronzed</i>
expensive	+ ly	=	<i>expensively</i>
nerv e	+ ous	=	<i>nervous</i>
argu e	+ ing	=	<i>arguing</i>
cloth e	+ ed	=	<i>clothed</i>
clothe	+ s	=	<i>clothes</i>
bath e	+ ing	=	<i>bathing</i>
squeez e	+ ing	=	<i>squeezing</i>
sneez e	+ ed	=	<i>sneezed</i>
choos e	+ y	=	<i>choosy</i>
wors e	+ en	=	<i>worsen</i>
claus e	+ es	=	<i>clauses</i>

Free Stem	+ Suffix	=	Word
gauz é	+ y	=	gauzy
nerve	+ s	=	nerves

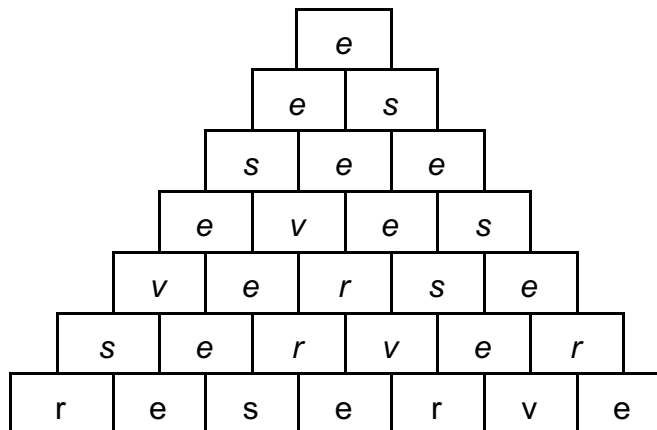
3 Analyze each of the following into its free stem and suffix. Be sure your analysis shows any final <e> deletions that occurred when the suffix was added:

Word	=	Stem	+ Suffix
removed	=	remov é	+ ed
according	=	accord	+ ing
reserved	=	reserv é	+ ed
analyzing	=	analyz é	+ ing
achieved	=	achiev é	+ ed
glimpses	=	glimps é	+ es
accompanied	=	accompan y +i	+ ed
producer	=	produc é	+ er
appearances	=	appearanc é	+ es
mouser	=	mous é	+ er
expensive	=	expens é	+ ive
expensively	=	expensive	+ ly
starving	=	starv é	+ ing
dissolved	=	dissolv é	+ ed
voyaging	=	voyag é	+ ing
adventurous	=	adventur é	+ ous
affected	=	affect	+ ed
admiring	=	admir é	+ ing
addresses	=	address	+ es

4 **Silent Final <e> Deletion Rule.** You delete a silent final <e> that marks a soft <c> or soft <g> only when you add a suffix that begins with the letters <e>, <i>, or <y>; you delete all other silent final <e>'s whenever you add a suffix that starts with any vowel.



Word Pyramid. The two-letter word in this Pyramid is a bit tricky.



If you scramble the letters in *reserve* various ways, you can spell three other seven-letter words. How many can you get?

<i>revers</i>	<i>reverse</i>	<i>severer</i>
---------------	----------------	----------------

Teaching Notes.

Items 2 and 3. Be sure the students get the <e> deletion in *clauses*, *glimpses*, *appearances*.

Word Pyramid. *Reserve* contains letters for the following words: 6 letters: *reeves*, *revere*, *server*, *severe* ; 5 letters: *reeve*, *sever*, *veers*, *verse* ; 4 letters: *errs*, *ever*, *eves*, *revs*, *seer*, *sere*, *veer*, *vees* ; 3 letters: *ere*, *err*, *eve*, *rev*, *see*, *vee* ; 2 letters: *es* (plural of *e*, also spelled *e's*), *re*.

Lesson Twenty
More About Changing <y> to <i>
and
Some Review of Rules and Sounds

1 Earlier you saw that sometimes when we add a suffix to a stem that ends in a <y> that has a consonant right in front of it, we change the <y> to <i>. For example:

cry + ed = cry + i + ed = cried
 easy + est = easy + i + est = easiest

But notice what would happen if we changed the <y> to <i> when the suffix starts with an <i>:

accompany + ing = accompany + i + ing = *accompaniing

We would get <ii>. In English we avoid <ii>. So when we add a suffix that starts with an <i> to a stem that ends in <y>, we use simple addition:

accompany + ing = accompanying
 toy + ing = toying

2 When you add a suffix that starts with an <i> to a stem that ends in a <y>, you use simple addition; when the suffix starts with any other vowel, and the <y> has a consonant right in front of it, you change the <y> to <i>.

3 Combine the following prefixes, stems, and suffixes. Show any cases of twinning, silent final <e> deletion, changes of <y> to <i>, and assimilation. Watch for cases where the <y> does not change to <i>:

Elements	=	Word
a∅ + p + ply + ing	=	<i>applying</i>
bath∅ + er + s	=	<i>bathers</i>
un + a∅ + f + fect + ion + ate	=	<i>unaffectionate</i>
choos∅ + y + i + est	=	<i>choosiest</i>
up + set + t + ing	=	<i>upsetting</i>
glimps∅ + ed	=	<i>glimpsed</i>

Elements	=	Word
un + re + serv e + ed + ly	=	<i>unreservedly</i>
ad + ventur e + ous	=	<i>adventurous</i>
re + ad + s + sur e + ed	=	<i>reassured</i>
re + gret + t + ing	=	<i>regretting</i>
dis + solv e + ing	=	<i>dissolving</i>
gauz e + y	=	<i>gauzy</i>
earl y +i + est	=	<i>earliest</i>
achiev e + er + s	=	<i>achievers</i>
sooth e + ing + ly	=	<i>soothingly</i>
ad + c + company + ing	=	<i>accompanying</i>
re + ad + p + pl y +i + ed	=	<i>reapplied</i>

4 You can hear the sound [t] at the beginning and end of the word *toot*.
You can hear the sound [d] at the beginning and end of the word *dude*.

5 Underline the letters that spell [t] and [d] in the following words:

candidate adventure building hospital struggle
 address stubborn electric succeeded vegetable
 include biting benefit motor ghetto

6 Sort the fifteen words into these two groups. Some words will go into both groups:

Words with the sound [t]:		Words with the sound [d]:	
<i>candidate</i>	<i>hospital</i>	<i>candidate</i>	<i>adventure</i>
<i>stubborn</i>	<i>motor</i>	<i>address</i>	<i>building</i>
<i>biting</i>	<i>struggle</i>	<i>include</i>	<i>succeed</i>
<i>electric</i>	<i>vegetable</i>		
<i>benefit</i>	<i>ghetto</i>		

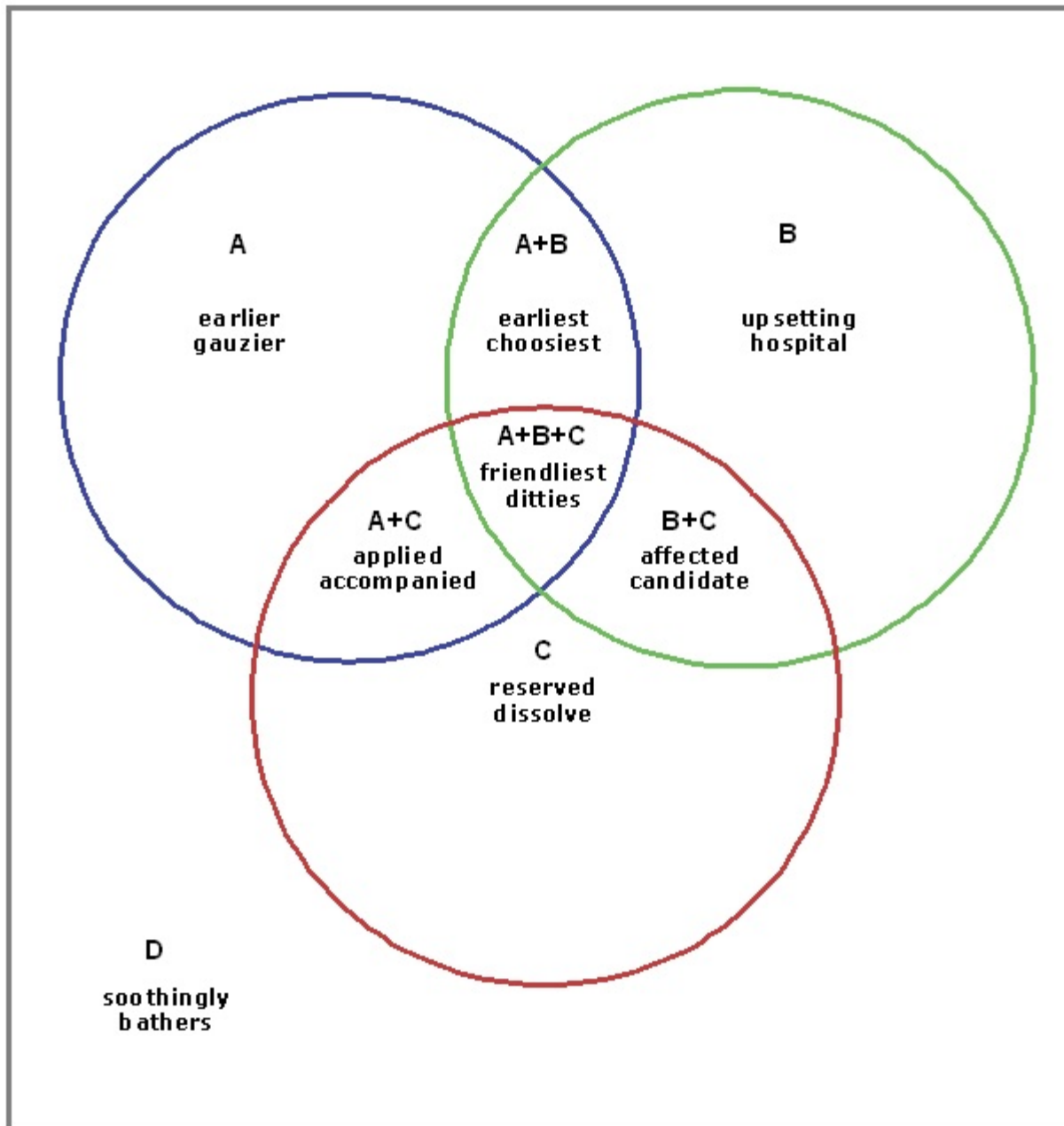
7 Two ways to spell [t] are <t> and <tt>.

Two ways to spell [d] are <d> and <dd>.



Word Venn. Into circle A put only words in which a <y> has been changed to an <i>. Into circle B put only words that contain the sound [t]. Into circle C put only words that contain the sound [d]:

earlier✓ applied✓ bathers✓ accompanied✓
 reserved✓ earliest✓ gauzier✓ choosiest✓
 upsetting✓ candidate✓ hospital✓ ditties✓
 soothingly✓ friendliest✓ dissolve✓ affected✓



Teaching Notes.

Item 5. In words like *motor* and *biting* the [t] may sound much like a [d]. This sound is called the flap-[d]. The following is from the teaching notes for Book 1, Lesson 14, where this flap is first mentioned: “The pattern here is that if the <t> or <tt> has a stressed vowel right in front of it and an unstressed vowel right after it, it tends to become something in between [d] and [t] that linguists call a flap-[d]. The word *flap* is meant to indicate that it is a sound somewhat quicker than a full [d]. Technically, what is happening is that the [t], which is normally an unvoiced sound (that is, pronounced with no vibration of the vocal cords), picks up some voicing (or vibration of the vocal cords) from the surrounding vowels, which are voiced. (In less technical terms, we tend to start the cords buzzing with the preceding vowel and just keep them buzzing through the following vowel, rather than turning them on, then off for the [t], then on again.) Since

[d] is the voiced counterpart of the voiceless [t], the result is a pronunciation of [t] that sounds like [d]. Most desk dictionaries show the sound spelled <t> and <tt> in such words as [t], ignoring the flap-[d] pronunciation. But *Webster's Third International Unabridged* gives both [d] and [t] as pronunciations for them.”

This technical point is obviously not something to inflict on youngsters. It is mentioned here simply to encourage you to resist any temptation you may have to correct the pronunciation of students who seem to have more of a [d] than a [t] in their pronunciation of such words. They have *Webster's Third* and professional linguists on their side! Also, it is remotely possible that a student may notice the variation and ask about it. In case of such an astonishing event, I recommend that you praise the student for having a good ear, indeed, and explain that it is true that in such words as *hotter* and the others the [t] can begin to sound more like a [d], but that since the spelling is <t> or <tt>, we (and most dictionaries) choose to treat the pronunciation as a [t]. For more on the flap-[d], see *AES*, pp. 338-39, and for the related flap-[t], see *AES*, pp. 342-43. (The flap-[t] is the thing that can sneak in between the [n] and the [s] of, say, *sense*, causing it to rhyme with *cents*.)

If students argue that *adventure* has a [t] in it, point out that though it does indeed have the letter <t>, it does not have the sound [t]. In *adventure* the <t> spells the sound [ch]. This spelling is due to a process called *palatalization*, which the students will study in Book 8, Lesson 40.

Lesson Twenty-one How Do You Spell [t]?

1 Underline the letters that spell the [t] sounds in the following words:

tele <u>ph</u> one	benef <u>i</u> t	cand <u>i</u> date	t <u>o</u> urist
wri <u>t</u> er	art <u>i</u> st	hosp <u>i</u> tal	t <u>o</u> ngue
colle <u>c</u> t	veget <u>a</u> ble	elect <u>r</u> ic	str <u>u</u> ggle
t <u>e</u> chnique	t <u>a</u> ught	sympt <u>o</u> m	mot <u>o</u> rs

2 Now sort the words into these three groups:

Words in which [t] is . . .

the first sound:	the last sound:	in the middle:
<i>telephone</i>	<i>collect</i>	<i>writer</i>
<i>technique</i>	<i>benefit</i>	<i>artist</i>
<i>taught</i>	<i>artist</i>	<i>vegetable</i>
<i>tourist</i>	<i>taught</i>	<i>hospital</i>
<i>tongue</i>	<i>candidate</i>	<i>electric</i>
	<i>tourist</i>	<i>symptom</i>
		<i>motors</i>

3 How is [t] spelled in all of these words? <t>. More than nine times out of ten the sound [t] is spelled this way.

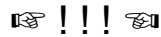
4 Usually the sound [t] is spelled <t>.

5 Underline the letters that spell [t] in the following words:

cattail regretting botttom
 committed outttalk attttention
 submitted upttetting attttend

6 How is [t] spelled in all of these words? <tt> . About ninety-nine times out of a hundred the sound [t] is spelled either <t> or<tt>.

Practically always the sound [t] is spelled either <t> or <tt> .



Watch the Middles!

benefit	
bene	<i>fit</i>
<i>bene</i>	fit
<i>bene</i>	<i>fit</i>
<i>benefit</i>	

electric	
electr	<i>ic</i>
<i>electr</i>	ic
<i>electr</i>	<i>ic</i>
<i>electric</i>	

telephones		
tele	<i>phone</i>	s
<i>tele</i>	phone	s
<i>tele</i>	<i>phone</i>	s
<i>tele</i>	<i>phone</i>	s
<i>telephones</i>		

vegetables		
veget	<i>able</i>	s
<i>veget</i>	able	s
<i>veget</i>	<i>able</i>	s
<i>veget</i>	<i>able</i>	s
<i>vegetables</i>		

Teaching Notes.

Item 5. Dictionaries show the <tt> in the compounds *outtalk* and *cattail* spelling not [t] but [t-t]. In everyday speech it is likely that the two words are most often pronounced with a single [t], which is why the two words are included here. On the other hand, any

students who argue that <tt> spells [t-t] rather than [t] also have a good point: The dictionaries are on their side.

Item 6. In lessons 28 and 30 the students will study the minor spellings of [t] that account for the remaining less than 1%.

For more on the spellings of [t] see *AES*, pp. 342-49.

Lesson Twenty-two The Sound [t] and Twinning

1 In those words in which [t] is spelled <tt> it is usually easy to see why there are two <t>'s. Here are the words from the last lesson in which [t] is spelled <tt>.

cattail	regretting	bottom
committed	outtalk	attention
submitted	upsetting	attend

2 A compound word is a word that contains at least two free stems, or shorter words – for example, *blackbird* (*black+bird*) and *dogcatcher* (*dog+catcher*). Sometimes the first stem in a compound word ends with a <t> and the second starts with a <t>. Where the two parts come together through simple addition, you get <tt>: *cat* + *tail* = *cattail*.

There is one other compound word in the nine words above that has [t] spelled <tt> because the first stem ends with <t> and the second stem starts with <t>. Find the word and analyze it into its two free stems:

Compound	=	Free Stem #1	+	Free Stem #2
<i>outtalk</i>	=	<i>out</i>	+	<i>talk</i>

3 Sometimes [t] is spelled <tt> because of twinning: *upsetting* = *upset* + *t* + *ing*.

You twin the final consonant of a word that has one vowel sound and ends CVC

when you add a suffix that starts with a vowel . And you twin the final consonant

of a word that has two vowel sounds whenever you add a suffix that starts with a

 vowel if the word ends CVC and has strong stress on the last vowel.

4 What is the suffix in the word *upsetting*? -ing

5 Does this suffix start with a vowel? yes

6 What is the stem to which the *-ing* in *upsetting* was added? upset

7 How many vowel sounds are there is in this stem? two

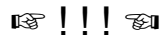
8 Does the stem end cvc? yes

9 Is there strong stress on the <e> in *upset* before and after you add the suffix? yes

10 Do you twin the final consonant of *upset* when you add a suffix like *-ing*? yes

11 Other than *upsetting* there are three more words among the nine above in which the <tt> spelling is due to twinning. Find the three words and analyze them to show where the <tt> comes from, as we did with *upsetting*:

Word	= Free Stem	+ Suffix
<i>upsetting</i>	= <i>upset + t</i>	+ <i>ing</i>
<i>committed</i>	= <i>commit + t</i>	+ <i>ed</i>
<i>submitted</i>	= <i>submit + t</i>	+ <i>ed</i>
<i>regretting</i>	= <i>regret + t</i>	+ <i>ing</i>



Watch the Middles!

permitted		
<i>per</i>	<i>mit + t</i>	<i>ed</i>
<i>per</i>	mit + t	ed
<i>per</i>	<i>mit + t</i>	ed
<i>per</i>	<i>mit + t</i>	ed
<i>permitted</i>		

submitted		
<i>sub</i>	<i>mit + t</i>	<i>ed</i>
<i>sub</i>	mit + t	ed
<i>sub</i>	<i>mit + t</i>	ed
<i>sub</i>	<i>mit + t</i>	ed
<i>submitted</i>		

Lesson Twenty-three The Sound [t] and Assimilation

1 Earlier you saw that when the prefix *ad-* is added to a stem that starts with a <t>, the <d> **assimilates**: It changes to a <t>, making two <t>'s: *ad + t + tain = attain*.

When the prefix *ad-* is added to a stem that starts with a <t>, the <d> assimilates and changes to a <t>.

2 Here again are the nine words from the last lesson in which [t] is spelled <tt>.

cattail	regretting	bottom
committed	outtalk	attention
submitted	upsetting	attend

There are two words in the nine that contain the prefix *ad-* and a stem that starts with a <t>. Find them and analyze them to show the assimilation that gives us the <tt> spelling, as we have done with *attain*:

Word	= Assimilated Prefix <i>ad-</i> +	Stem
<i>attain</i>	= <i>ad + t</i>	+ <i>tain</i>
<i>attention</i>	= <i>ad + t</i>	+ <i>tention</i>
<i>attend</i>	= <i>ad + t</i>	+ <i>tend</i>

3 Now sort the nine words into the following three groups:

Words in which the <tt> is due to . . .

simple addition	assimilation	twinning
<i>cattail</i>	<i>attention</i>	<i>committed</i>
<i>outtalk</i>	<i>attend</i>	<i>submitted</i>
		<i>regretting</i>
		<i>upsetting</i>

Among the nine words in Item 2, the word in which the <tt> is not due to either simple addition, assimilation, or twinning is bottom. We will talk about words like this

one in the next lesson.

4 Analyze each of the following words to show where the <tt> spelling comes from:

Word	=	Analysis
outtrick	=	<i>out + trick</i>
attracts	=	<i>ad+t+tract+s</i>
knotty	=	<i>knot+t+y</i>
quitter	=	<i>quit+t+er</i>
attempt	=	<i>ad+t+tempt</i>
outtake	=	<i>out+take</i>
rattrap	=	<i>rat+trap</i>
regretted	=	<i>regret+t+ed</i>
permitting	=	<i>permit+t+ing</i>
attendance	=	<i>ad+t+tend+ance</i>
fattest	=	<i>fat+t+est</i>
fattiest	=	<i>fat+t+y+i+est</i>

5 Three reasons for [t] being spelled <tt> are simple addition,
assimilation, and twinning.

Teaching Notes.

Item 4. Technically, there is more explication done in the suggested solutions than is necessary to show where the <tt> spelling comes from, but it seems worthwhile to have the students analyze out the suffixes. If nothing else, it underlines the difference in structure between *fattest* and *fattiest*.

Lesson Twenty-four The Sound [t] and the VCC Pattern

1 These are the short and long vowel sounds:

Short Vowel Sounds	Long Vowel Sounds
[a] as in <i>mat</i>	[ā] as in <i>mate</i>
[e] as in <i>met</i>	[ē] as in <i>meet</i>
[i] as in <i>mitt</i>	[ī] as in <i>might</i>
[o] as in <i>cot</i>	[ō] as in <i>coat</i>
[u] as in <i>cut</i>	[ū] as in <i>coot</i>
[ù] as in <i>cook</i>	[yū] as in <i>cute</i>

2 Earlier you saw that in the VCC pattern, the vowel will usually be short, and in the VCV pattern the first vowel will usually be long. Which word, *later* or *latter*, has a short first vowel? *latter* Which has a long first vowel? *later*
Which has the VCC pattern for the first vowel? *latter* Which has the VCV pattern for the first vowel? *later*

3 In a word like *latter* with the VCC pattern the vowel will usually be *short* , and in a word like *later* with the VCV pattern the first vowel will usually be *long* .

4 Many words that are not compounds and do not contain twinning or assimilation still spell [t] <tt> because of the VCC pattern, just like *latter* – and *bottom*. Mark the VCC pattern and identify the vowel sound you hear in front of the <tt> in each of the following words, as we have with *bottom*:

Word	Vowel sound in front of the <tt>	Word	Vowel sound in front of the <tt>
<i>bottom</i> VCC	[o]	<i>latter</i> VCC	[e]

Word	Vowel sound in front of the <tt>	Word	Vowel sound in front of the <tt>
scatter vcc	[a]	pattern vcc	[a]
ghetto vcc	[e]	butter vcc	[u]
lettuce vcc	[e]	matter vcc	[a]
chatter vcc	[a]	bitter vcc	[i]
kitten vcc	[i]	motto vcc	[o]
button vcc	[u]	tattoo vcc	[a]
cotton vcc	[o]	symptom vcc	[i]

5 Are the vowel sounds in front of the <tt> long or are they short? short

Teaching Notes.

Although the VCC pattern has a few holdouts – in words like *haste*, *range*, *soldier*, for instance – it is extremely reliable when the CC in question is <tt>, or any other double consonant other than <ll>. For more on the VCC pattern see *AES*, pp. 96-107.

**Lesson Twenty-five
Test Three**

Words	Fill in the blanks
1. <i>ghetto</i>	[g] = <u><gh></u> ; [t] = <u><tt></u>
2. <i>permitted</i>	Stem + Suffix = <u>permit+tt+ed</u>
3. <i>attending</i>	Prefix + Stem = <u>ad+tt+tending</u>
4. <i>soothed</i>	<th> = <u>[th]</u> Stem + Suffix = <u>soothe+ed</u>
5. <i>breathing</i>	<th> = <u>[th]</u> Stem + Suffix = <u>breathe+ing</u>
6. <i>accompanied</i>	Prefix + Stem + Suffix = <u>ad+c+company+i+ed</u>
7. <i>applied</i>	Prefix + Stem + Suffix = <u>ad+p+ply+i+ed</u>
8. <i>attention</i>	Prefix + Stem = <u>ad+tt+tention</u>
9. <i>regretting</i>	Stem + Suffix = <u>regret+tt+ing</u>
10. <i>symptom</i>	[i] = <u><y></u> ; [t] = <u><t></u>

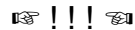
Lesson Twenty-six
More Practice with [t] Spelled <tt>

1 The following words all contain the sound [t] spelled <tt> because of either simple addition, twinning, or assimilation. Analyze each word to show where the two <t>'s come from:

Word	=	Analysis	Reason
regretting	=	<i>re+gret+t+ing</i>	<i>Twinning</i>
attractive	=	<i>ad+t+tract+ive</i>	<i>Assimilation</i>
quitter	=	<i>quit+t+er</i>	<i>Twinning</i>
attendance	=	<i>ad+t+tend+ance</i>	<i>Assimilation</i>
outtake	=	<i>out+take</i>	<i>Simple Addition</i>
attempted	=	<i>ad+t+tempt+ed</i>	<i>Assimilation</i>
committee	=	<i>com+mit+t+ee</i>	<i>Twinning</i>
attends	=	<i>ad+t+tend+s</i>	<i>Assimilation</i>
cattails	=	<i>cat+tail+s</i>	<i>Simple Addition</i>
submitting	=	<i>sub+mit+t+ing</i>	<i>Twinning</i>
regretted	=	<i>re+gret+t+ed</i>	<i>Twinning</i>
fatter	=	<i>fat+t+er</i>	<i>Twinning</i>
attention	=	<i>ad+t+tent+ion</i>	<i>Assimilation</i>
rattrap	=	<i>rat+trap</i>	<i>Simple Addition</i>
fattiest	=	<i>fat+t+y+i+est</i>	<i>Twinning</i>

2 Mark the VCV or VCC patterns for the first vowel in each of the following words and fill in the blanks, as we have done for *later* and *latter* :

Word #1	Is the vowel in front of the <t> long or short?	Word #2	Is the vowel in front of the <tt> long or short?
later vcv	<i>Long</i>	latter vcc	<i>Short</i>
writer vcv	<i>Long</i>	written vcc	<i>Short</i>
cuter vcv	<i>Long</i>	cutter vcc	<i>Short</i>
biter vcv	<i>Long</i>	bitter vcc	<i>Short</i>
fated vcv	<i>Long</i>	fattest vcc	<i>Short</i>
hating vcv	<i>Long</i>	hatter vcc	<i>Short</i>
Peter vcv	<i>Long</i>	petting vcc	<i>Short</i>
motor vcv	<i>Long</i>	otter vcc	<i>Short</i>



Word Find. This find contains the following twenty words that all have [t] spelled <tt> because of the VCC pattern:

attack	critter	flutter	motto	putty
attic	ditto	ghetto	otter	regatta
bottom	ditty	lettuce	pattern	tattoo
cotton	flattery	matter	petty	utter

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

In nineteen of the words the <tt> is due to the VCC pattern. In one word it is due to assimilation. Which word is that? attack

Lesson Twenty-seven Words With <tle> and <ttle>

1 Words like *battle* that end with the letters <le> right after a [t] sound are a special group. In the words below underline the letters that spell [t]:

<u>b</u> at <u>t</u> le	ket <u>t</u> le	bot <u>t</u> le	shu <u>t</u> tle
bee <u>t</u> le	gen <u>t</u> le	st <u>a</u> rt <u>l</u> e	<u>t</u> ur <u>t</u> le
man <u>t</u> le	rat <u>t</u> le	set <u>t</u> le	<u>t</u> it <u>l</u> e
lit <u>t</u> le	brit <u>t</u> le	cat <u>t</u> le	too <u>t</u> le

2 Now sort the words into this matrix:

Words in which the [t] comes right after . . .

	a consonant:	a long vowel:	a short vowel:
Words with [t] spelled <t>	<i>mantle gentle startle turtle</i>	<i>beetle title tootle</i>	
Words with [t] spelled <tt>			<i>battle bottle little settle kettle cattle rattle shuttle brittle</i>

3 In words that end with a [t] sound with <le> right after it, if the [t] comes right after a consonant or long vowel sound, the [t] is spelled <t>. But if the [t] comes right after a short vowel sound, the [t] is spelled <tt>.

5 The long vowels in words like *title* may seem to be exceptions to the VCC pattern. But the pattern for words that end <tle> is true for words that end with any consonant followed by <le>. Since there is always a long vowel in every word that ends with a single consonant followed by <le>, we can treat these long vowels not as exceptions,

but rather as the result of a smaller pattern within a bigger pattern. We can call it the **VCl#** pattern. VCl# is another pattern that marks long vowels, like VCV and Ve #.

If there is a short vowel sound right in front of the [t], we use a double <tt> to spell [t] in front of the <le>. We can think of this as another smaller pattern within the bigger VCC pattern. We can call it the **VCCle # pattern**, which is another pattern that marks short vowels, like VCC and VC#.

In the VCCle pattern the vowel is short, but in the VCl# pattern the vowel is long.

6 Sort the words with short vowels into these two groups:

Words with short vowels in which [t] is spelled . . .

<t>	<tt>	
<i>mantle</i>	<i>battle</i>	<i>bottle</i>
<i>gentle</i>	<i>little</i>	<i>settle</i>
<i>startle</i>	<i>kettle</i>	<i>cattle</i>
<i>turtle</i>	<i>rattle</i>	<i>shuttle</i>
	<i>brittle</i>	

If there is a consonant between the short vowel and the [t], we only need a single <t> because the other consonant will fill out the VCCle pattern, as in words like *gentle* and *mantle*. But if there is no other consonant, we need both <t>'s, as in words like *bottle* and *little*.



Word Changes. Remember to follow the directions carefully and write the words you make in the column on the right. The shaded boxes will contain words with which you worked in Item 1 of this lesson. All of the words will end in either <tle> or <ttle>. As you form each word, decide whether it should be spelled with a single or a double <t>:

1. Write the word <i>battle</i>	battle
2. Change the first consonant in the word to the twentieth letter in the alphabet.	tattle
3. Change the first consonant back to and change the <a> to <ee>.	beetle
4. Change the first consonant in the word to the fifth consonant in the alphabet and change the second <e> to the fourteenth letter in the alphabet.	gentle
5. Change the first letter in the word to <m> and change the first vowel in the word to the first vowel in the alphabet.	mantle
6. Move the second consonant in the word to the front, delete the <m>, and change the <a> to an <e>.	nettle
7. Change the first consonant in the word to the fourteenth consonant in the alphabet, and change the <e> back to an <a>.	rattle
8. Change the first letter in the word to the letter that comes right after it in the alphabet, make the second letter in the word a <c>, and change the <a> to the twenty-first letter of the alphabet.	scuttle
9. Change the first two letters of the word to and change the <u> to <i>.	brittle

Teaching Notes.

The *VCle#* and *VCCle#* patterns, though quite modest in their extension, are important and very reliable. Notice that though the ending is spelled <le>, it is pronounced [əl]: the letters and sounds are reversed. In terms of sound, then, the *VCle#* and *VCCle#* patterns fit the *VCV* and *VCC* patterns. For more on the <le> ending see *AES*, pp. 149-51. *Butler*, with its short vowel, may appear to be an exception to the *VCle#* pattern, but it was adopted from French and is thus covered by the French Lemon Rule, which shortens otherwise long vowels and is discussed in Book Eight, Lesson 13.

Item 6. The short vowel in *startle* is [ɒ]. The short vowel in *turtle* is the [ʊ] in [ʊr], though there is admittedly very little [ʊ] coloring left in most pronunciations of [ʊr].

Word Changes. Be sure the students understand that they must decide whether the words are spelled <tle> or <ttle>. The directions don't mention that aspect of the spelling. If students get fuddled trying to count letters and consonants and vowels in the alphabet, the table "Letters of the Alphabet" may be helpful. Notice that <u>, <w>, and <y> are counted as both vowels and consonants.

LETTERS OF THE ALPHABETS

	Letter	Vowel	Consonant
a	1st	1st	
b	2nd		1st
c	3rd		2nd
d	4th		3rd
e	5th	2nd	
f	6th		4th
g	7th		5th
h	8th		6th
i	9th	3rd	
j	10th		7th
k	11th		8th
l	12th		9th
m	13th		10th
n	14th		11th
o	15th	4th	
p	16th		12th
q	17th		13th
r	18th		14th
s	19th		15th
t	20th		16th
u	21st	5th	17th
v	22nd		18th
w	23rd	6th	19th
x	24th		20th
y	25th	7th	21st
z	26th		22nd

Lesson Twenty-eight Sometimes [t] is Spelled <ed>

1 Look at these sentences and fill in the blank:

He coughs a lot.
Last night he coughed all night long.

When you want to add the meaning "in the past" to a verb, usually you add the suffix

 -ed .

2 The suffix *-ed* sometimes sounds like [d], sometimes like [ɪd], and sometimes like [t]. Say each of the following words carefully and sort them into the three groups:

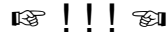
addressed	approached	struggled	shoveled
adopted	collected	enjoyed	attached
accomplished	allowed	taxed	announced
murmured	assigned	attended	avoided
attacked	approved	coughed	telephoned

Words in which *-ed* sounds like . . .

[ɪd]	[d]	[t]
<i>adopted</i>	<i>murmured</i>	<i>addressed</i>
<i>collected</i>	<i>allowed</i>	<i>accomplished</i>
<i>attended</i>	<i>assigned</i>	<i>attacked</i>
<i>avoided</i>	<i>approved</i>	<i>approached</i>
	<i>struggled</i>	<i>taxed</i>
	<i>enjoyed</i>	<i>coughed</i>
	<i>shoveled</i>	<i>attached</i>
	<i>telephoned</i>	<i>announced</i>

3 Sometimes the [t] at the end of a verb that has the meaning "in the past" is the suffix -ed.

4 So far you have worked with three different spellings of [t]. They are <t>, <tt>, and <ed>.



Word Scrambles. This Scrambles contains words that all contain the sound [t]. We have given you a start by filling in the three spellings of [t].

No.	Scrambled Word	Unscrambled Word
1	neebtif	b e n e f i t
2	xedat	t a x e d
3	sledgimp	g l i m p s e d
4	tricecel	e l e c t r i c
5	tedtan	a t t e n d
6	totoat	t a t t o o
7	toekaut	o u t t a k e
8	slattaic	c a t t a i l s
9	stingbumit	s u b m i t t i n g
10	wetrir	w r i t e r
11	mobtot	b o t t o m
12	truelt	t u r t l e
13	cattrat	a t t r a c t
14	tolthret	t h r o t t l e
15	greettred	r e g r e t t e d
16	rotte	o t t e r
17	tleeng	g e n t l e

No.	Scrambled Word	Unscrambled Word						
18	hugelad	l	a	u	g	h	e	d
19	beltee	b	e	e	t	l	e	
20	cutetle	l	e	t	t	u	c	e
21	latett	t	a	t	t	l	e	

Teaching Notes.

The following on the [t] pronunciation of *-ed* is from the Teaching Notes to Lesson 12 in Book 2: What is involved in the three pronunciations of *-ed* is that same distinction between voiced and unvoiced sounds that was discussed back in Lesson 6 and earlier in Lesson 14 of Book 1. In general, in English we avoid putting certain voiced and an unvoiced consonants together. In Lesson 6 it was pointed out that [s] and [z] are identical sounds except that [s] is unvoiced and [z] is voiced. It was also pointed out that in the plural *dogs* the <s> is pronounced [z], [dogz], while in the plural *cats* it is pronounced [s], [kats]. That difference is due to the fact that [g] and [z] are both voiced, so they go together, while [t] and [s] are unvoiced, so they too go together. But we avoid mixed combinations such as *[gs] and *[tz]. For more on this tendency to avoid mixed voicing, see *AES*, pp. 73-76.

In the case of the suffix *-ed* the reasoning goes as follows: (1) After the unvoiced sounds [s, f, p, ch, sh, k, th] *-ed* has the unvoiced pronunciation [t]. (2) After all voiced sounds except [d] it has the voiced pronunciation [d]. And (3) after [t] and [d] the vowel sound [i] is inserted to avoid the endings [tt] and [dd], which would be difficult to pronounce and inevitably would be simplified to [t] and [d]. Such a simplification would cause the loss of the spoken distinction between present and past tense. So the three pronunciations of *-ed*, which might at first seem like a perverse and unnecessary complication, are in fact part of a larger logical and ruly pattern.

Lesson Twenty-nine Some Verbs That End With <t>

1 You have seen that sometimes the suffix *-ed* sounds like [t]. Nowadays when we want to add the meaning "in the past" to a verb, we nearly always just add the suffix *-ed*. But long ago with some verbs the suffix that meant "in the past" not only sounded like [t], it was also spelled <t>! A few of those old verbs are still with us. For example: *feel* and *felt*, as in "I feel good now, but yesterday I felt pretty bad."

2 In *feel* is the vowel sound long or is it short? long In *felt* is the vowel long or is it short? short In *feel* how is the vowel spelled? <ee> In *felt* how is the vowel spelled? <e> In *felt* how is the [t] spelled? <t>

3 In the left column below there are more old past tense verbs with *-t*. Write out the present tense form for each one and fill in the two columns on the right, as we have done for *felt*:

		How is the vowel pronounced and spelled in . . .	
Past Tense Verb	Present Tense Verb	the present tense verb?	the past tense verb?
felt	<i>feel</i>	[ē] = <ee>	[e] = <e>
kept	<i>keep</i>	[ē] = <ee>	[e] = <e>
slept	<i>sleep</i>	[ē] = <ee>	[e] = <e>
crept	<i>creep</i>	[ē] = <ee>	[e] = <e>

4 Here are more verbs that have old past tense forms that end with <t>. This time we've given you the present tense form, and you are to fill in the past tense form:

		How is the vowel pronounced and spelled in . . .	
Present Tense Verb	Past Tense Verb	the present tense verb?	the past tense verb?
deal	<i>dealt</i>	[ē]=<ea>	[e]=>ea>
sweep	<i>swept</i>	[ē]=<e>	[e]=<e>
send	<i>sent</i>	[e]=<e>	[e]=<e>
mean	<i>meant</i>	[ē]=<ea>	[e]=<ea>
weep	<i>wept</i>	[ē]=<ee>	[e]=<e>
spend	<i>spent</i>	[e]=<e>	[e]=<e>
build	<i>built</i>	[i]=<ui>	[i]=<ui>
bend	<i>bent</i>	[e]=<e>	[e]=<e>
lend	<i>lent</i>	[e]=<e>	[e]=<e>
lose	<i>lost</i>	[ū]=<o>	[o]=<o>
leave	<i>left</i>	[ē]=<ea>	[e]=<e>

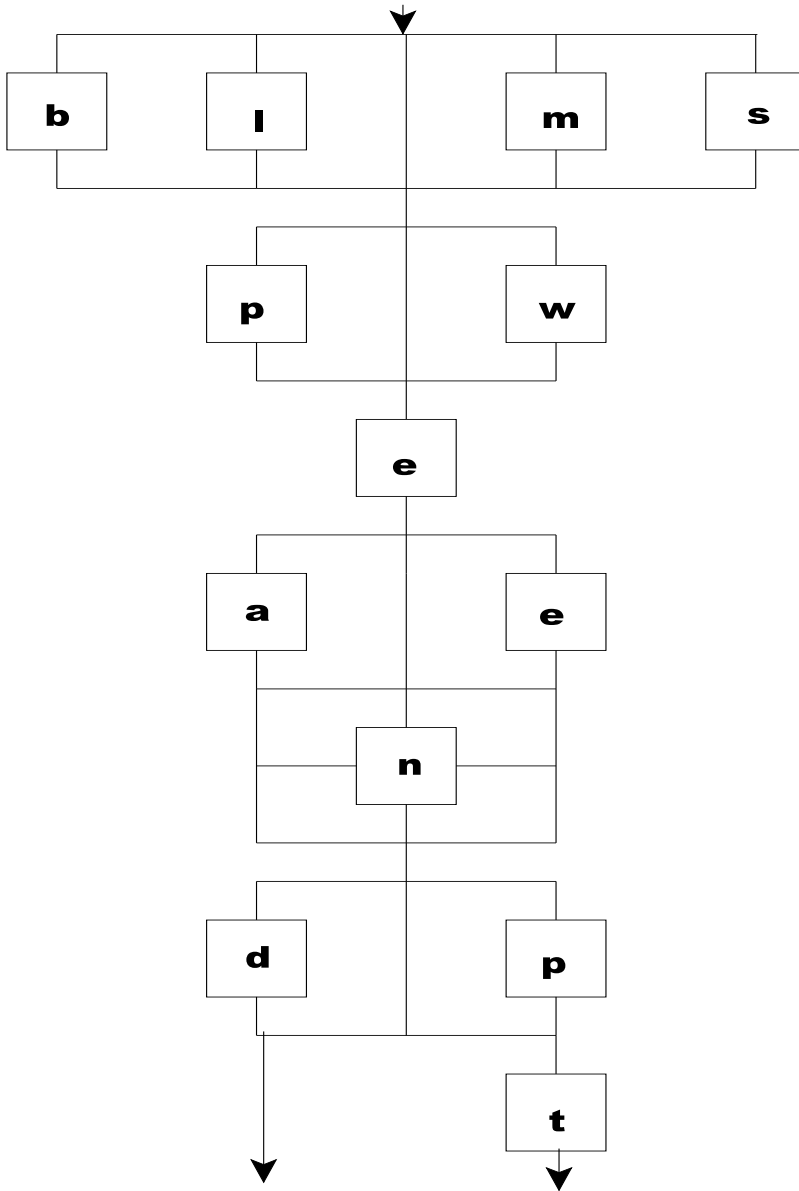
5. Here are some more that have more elaborate changes:

		How is the vowel pronounced and spelled in . . .	
Present Tense Verb	Past Tense Verb	the present tense verb?	the past tense verb?
buy	<i>bought</i>	[i] = <uy>	[o] = <ou>
catch	<i>caught</i>	[a]=<a>	[o]=<au>
bring	<i>brought</i>	[i]=<i>	[o]=<ou>
seek	<i>sought</i>	[ē]=<ee>	[o]=<ou>
teach	<i>taught</i>	[ē]=<ea>	[o]=<au>

		How is the vowel pronounced and spelled in . . .	
Present Tense Verb	Past Tense Verb	the present tense verb?	the past tense verb?
think	<i>thought</i>	[i]=<i>	[o]=<ou>



Word Flow. In this flow you can trace out fourteen words: seven present tense verbs and their past tense forms that end in [t].



Present Tense	Past Tense
<i>bend</i>	<i>bent</i>
<i>lend</i>	<i>lent</i>
<i>mean</i>	<i>meant</i>
<i>send</i>	<i>sent</i>
<i>spend</i>	<i>spent</i>

Present Tense	Past Tense
<i>sweep</i>	<i>swept</i>
<i>weep</i>	<i>wept</i>

Teaching Notes.

The old *-t* forms were more common in the past than they are now. Several have completely disappeared: Milton had *banisht* for *banished*, and at times in the past *kissed* was *kist*, *placed* was *plac't*, *earned* was *earnt*. *Tost*, for *tossed*, is now marked "Literary," as in *storm-tost*.

There are several pairs in which the *-t* form is still in the process of being replaced by *-ed*. In general, American English favors the more regular *-ed* form, and in the following pairs the *-t* form is often marked "Chiefly British": *burnt, burned*; *dreamt, dreamed*; *knelt, kneeled*; *leant, leaned*; *leapt, leaped*; *learnt, learned*; *smelt, smelled*; *spelt, spelled*; *spilt, spilled*; *spoilt, spoiled*. In a few cases the two forms have taken on separate meanings, as in *past* vs. *passed*; *pent* vs. *penned*; *bereft* vs. *bereaved*.

Notice that with the *-t* forms sometimes there is no change in the vowel sound or spelling (*send, sent*), sometimes there is change in the vowel sound but not in its spelling (*mean, meant*), and sometimes there is change in both the sound and the spelling (*buy, bought*).

Word Flow. This flow also allows the pair *lean* and the usually British *leant*.

Lesson Thirty

The Reasons For Some Unusual Spellings of [t]

1 So far you have worked with three spellings of [t]: <t>, <tt>, and <ed>.

The sound [t] is spelled one of these three ways more than ninety-nine times out of a hundred. And if you remember the places where <tt> occurs and remember that *-ed* is always a verb suffix, you should have little trouble knowing which spelling to use.

There are some other spellings of [t], though, that are very rare but still worth looking at:

2 [t] = <ght> in several words. Underline the letters that are spelling [t] in the following words:

<u>al</u> ight	f <u>igh</u> t	l <u>igh</u> tning	s <u>igh</u> t
a <u>ugh</u> t	fl <u>igh</u> t	mid <u>igh</u> t	sl <u>igh</u> t
bo <u>ugh</u> t	fo <u>ugh</u> t	m <u>igh</u> t	sl <u>igh</u> t
br <u>igh</u> t	fr <u>igh</u> t	na <u>ugh</u> t	slau <u>gh</u> ter
br <u>ough</u> t	fr <u>igh</u> t	na <u>ugh</u> ty	sou <u>gh</u> t
ca <u>ugh</u> t	ha <u>ugh</u> ty	n <u>igh</u> t	str <u>igh</u> t
da <u>ugh</u> ter	he <u>igh</u> t	ou <u>gh</u> t	ta <u>ugh</u> t
del <u>igh</u> t	kn <u>igh</u> t	pl <u>igh</u> t	thou <u>gh</u> t
e <u>igh</u> t	l <u>igh</u> t	r <u>igh</u> t	we <u>igh</u> t

Sort the words into the following four groups:

Words with . . .

[i] spelled <i> or <ei>			[ā] spelled <ai> or <ei>
<i>alight</i>	<i>height</i>	<i>night</i>	<i>eight</i>
<i>bright</i>	<i>knight</i>	<i>plight</i>	<i>freight</i>
<i>delight</i>	<i>light</i>	<i>right</i>	<i>straight</i>

[ɪ] spelled <i> or <ei>			[ā] spelled <ai> or <ei>
<i>fight</i>	<i>lightning</i>	<i>sight</i>	<i>weight</i>
<i>flight</i>	<i>midnight</i>	<i>sleight</i>	
<i>fright</i>	<i>might</i>	<i>slight</i>	

Words with [o] spelled. . .

<au>		<ou>	
<i>aught</i>	<i>naught</i>	<i>bought</i>	<i>ought</i>
<i>caught</i>	<i>naughty</i>	<i>brought</i>	<i>sought</i>
<i>daughter</i>	<i>slaughter</i>	<i>fought</i>	<i>thought</i>
<i>haughty</i>	<i>taught</i>		

3 The sound [t] is spelled <ght> only after [ɪ] spelled <i> or <ei>, or after [ā] spelled

<ai> or <ei>, or after [o] spelled <au> or <ou>.

4 [t] = <tw>. The sound [t] is spelled <tw> in only one word: *two*. Long ago *two* was pronounced [twō]. Several words related to *two* contain <tw>, and all contain the meaning "two." Answer Yes or No:

Word	Do you hear the <w>?
twice	Yes
twin	Yes
twelve	Yes
between	Yes
twilight	Yes
twist	Yes
twine	Yes

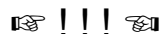
Word	Do you hear the <w>?
twig	Yes
twenty	Yes

5 [t] = <bt>. The sound [t] is spelled <bt> in only three common words: *debt*, *doubt*, and *subtle*. All three came from Latin words, used a long time ago by the Romans. Our word *debt* comes from the Latin word *debitum*. Our word *doubt* comes from the Latin word *dubitare*. Our word *subtle* comes from the Latin word *subtilis*. In Latin both the and the <t> were pronounced in these words. But we would find [bt] difficult to pronounce, so we've simplified it to [t].

6 [t] = <cht>. Long ago the Dutch called a fast sailing ship a *jaghte*. The English borrowed the word and spelled it several different ways, including <yaught>. Back then the <gh> was pronounced with a sound a little like our [ch], so in time the <gh> spelling changed to <ch>. But then over the centuries people stopped pronouncing the <ch>, so we now have a word pronounced [yot] and spelled *yacht*. This is the only word we have in which [t] is spelled <cht>!

In words like *two*, *doubt*, and *yacht* we can see that when we spell, we do more than spell sounds. Our spelling also shows something about words' sources and their life stories. This can make spelling harder than it might be, but there is always some reason for the spellings we use — even if sometimes the reasons seem a little strange.

7 The sound [t] is spelled <ght> only after [i] spelled <i> or <ei>, or after [ā] spelled <ai> or <ei>, or after [o] spelled <au> or <ou>. The word in which [t] is spelled <tw> is two. The three words in which [t] is spelled <bt> are debt, doubt, and subtle. The one word in which [t] is spelled <cht> is yacht.



Word Changes. Follow the instructions very carefully and then fill in the blanks to complete the sentence at the end:

1. Write the word *debt*:
2. Change the vowel from <e> to <ou>:
3. Change the first consonant to the letter that comes

debt
doubt

two letters before it in the alphabet, and change the letter before the <t> to <gh>:

bought

4. Change the first consonant to the letter that comes right after <s> in the alphabet, and change the first vowel to the first letter of the alphabet:

taught

5. Change the first consonant to the second consonant in the alphabet:

caught

6. Change the first consonant to the next-to-last letter in the alphabet; delete the second vowel letter; and change the second consonant to the letter that comes four places before it in the alphabet:

yacht

The sailor went into debt when he bought a yacht
Word #1 Word #3 Word #6

Teaching Notes.

Item 2. In the words with [t] spelled <ght>, the <gh> at one time spelled the [ch]-like sound mentioned in Item 6, the sound heard at the end of the Scottish pronunciation of *loch* and the German pronunciation of *Bach*.. That specific sound disappeared from English, becoming [f] in words like *laugh* and *rough* and falling silent in words like *high* and *sigh* . It also fell silent before the sound [t], with the <gh> becoming part of the spelling of [t]. Some of the <ght> words in Item 2 are worth a special note:

ought. There are really two words spelled <aught>: One means “anything whatever,” as in “For aught I know” The other, which has the variant form *ought*, means “zero, nothing.” *Ought* meaning “should,” as in “I ought to go now,” is always spelled with an <o>.

naught, *nought*: These are two variants of a word also meaning “nothing, zero.”

Slight means “small, slender,” and as a verb it means “to treat someone or something as unimportant.” *Sleight* means “skill, craft,” as in “sleight of hand.” It is related to *sly*.

Lightning does not have an <e> in it. It was actually formed from *lightening* (lighten+ing), but the <e> was dropped, distinguishing it from the verb form *lightening* . The reason for dropping the <e> is not clear.

The following is a fairly complete list of the remaining words in which [t] is spelled <ght>: *Bedight*, *dight*, *hight* are all archaic, *wight* very nearly so:

bedight “array”	sprightly	distraught
bight	tight	fraught
blight	wight “human”	onslaught
dight “adorn”	wright	
flighty		doughty
hight “named”		wrought

Item 4. A good discussion question could be, ‘Why does the text say that all the words in the table contain the meaning “two”?’ Some are very straightforward: *twice*, *twin*. Others are slightly more subtle: *between*, *twilight*, *twist*, *twine*, *twig*. *Twenty* (twen+ty) means “two tens.” *Twelve* (twe+lve) means “two left over (past ten)”; the fragment *lve* is related to *leave* and *left*. (*Eleven* (e+leven) means “one left over”; the fragment *e* echoes Old English *ān* “one.”) All of these <tw> words contain the descendant of an ancient Indo-European root, **dwo-*, which meant “two.”

Item 5. All three of these words were in Middle English usually spelled without the . The ’s were added in the 15th or 16th centuries, because of the ’s in the Latin source words.

Item 6. The “sound a little like our [ch]” is the sound you hear at the end of the Scottish pronunciation of *loch* and the German pronunciation of *Bach*.

After the very predictable major spellings <t>, <tt>, and <ed>, the spelling of [t] is complicated by a number of different minor spellings like the four discussed in the lesson. Here are some others that you may or may not want to discuss with the students:

1. [t] = [dt] in *veldt*, which comes from South African Afrikaans, and finally from the Dutch word *veldt* “field.” *Veldt* has a variant spelling *veld*, in which we would have to say that [t] = <d>.

2. [t] = <ct>. The only stem word in which [t] is spelled <ct> is *indict*, as in *indictment*. *Indict* has always been pronounced much as it is today: [indīt]. It used to be spelled <indite>, which fit the pronunciation better. But people came to feel that its base should be *dict*, the same as that in *predict* and *dictate*, to reflect its Latin source, *indictare*. They changed the spelling to <indict>, but they didn’t change the pronunciation. The earlier spelling <indite> still lives in the related word *indite*, “to compose or write, especially poetry.” Dictionaries show a [kt] in *adjective*, though in rapid speech it probably sounds more like [ædjətiv], with [t] spelled <ct>. Notice that <ct> is usually [kt]: *affect*, *collect*, *electric*, etc.

3. [t] = <th> in *Thomas*, *Thames*, and *thyme*. For more on the [t]–[th] confusion in earlier English, see *AES*, p. 343.

4. [t] = <pt> in *receipt* and in words that contain or were taken to contain the Greek base *pter* “wing”: *pterodactyl*, *pterosaur*, *ptarmigan*. (In *helicopter* the syllable division leads to [pt] rather than [t].) The <pt> spelling also occurs in *ptomaine*, the base of which *ptom*, descends from the Greek word *ptoma* “corpse.”. In Middle English *receipt* was usually spelled without the <p>, but after the 16th century the <p> became standard because of its presence in the Latin source word, *recepta*. It is related to *conceit* and *deceit*, which did not reintroduce the <p>.

For more on the minor spellings of [t] see *AES*, pp. 343-46.

Lesson Thirty-one Suffixes Spelled <en>

1 You have seen that we have two suffixes spelled <er>: One adds the meaning “more” to adjectives: The adjective *calm* plus *-er* becomes *calmer*, “more calm.” The other changes verbs to nouns with the meaning “one that does” or “one who does”, so a teacher is one who teaches and a computer is something that computes.

When two different words or elements are spelled the same but have different meanings, they are called **homographs**. The base *homo*+ means “same”, and the base *graph* means “letter or writing.” So homographs are words or elements that have the same letters or spellings but different meanings.

Because homographs look the same, it can be easy to overlook important differences in what they mean. Homographs remind us that we always have to worry not just about sounds and spellings but also about meanings.

A good example of homographs are the different suffixes that are all spelled <en>. There are five of them. We’ll discuss three in this lesson, the other two in the next.

2 **-en¹ “more than one.”** Long ago the English sometimes used *-en* to form plurals just as we use *-s* today. Only three words still have the old *-en* plural: *oxen*, *children*, and *brethren*.

3 **-en² “consisting of.”** This suffix turns nouns into adjectives: The noun *gold* plus the suffix *-en* gives us the adjective *golden*.

One way to describe a noun is to say that it is the name of a person, place, or thing. Another way is to say that it makes sense when we put it into the blank of this sentence: “The _____ seemed okay.” Any word that makes sense in that blank is a noun. For instance, “The gold seemed okay.”

An adjective is a word that describes or identifies a noun. Any word is an adjective if it will fit into this blank and make sense: “The _____ thing seemed okay.” For instance, “The golden thing seemed okay.”

Adjective	=	Noun	+ Suffix
golden	=	<i>gold</i>	+ <i>en</i>
waxen	=	<i>wax</i>	+ <i>en</i>

Adjective	=	Noun	+ Suffix
earthen	=	<i>earth</i>	+ <i>en</i>
wooden	=	<i>wood</i>	+ <i>en</i>
woolen	=	<i>wool</i>	+ <i>en</i>

4 **-en³**, turns adjectives into verbs. For example, the adjective *bright* plus *-en* gives us the verb *brighten*.

The following are three different ways of describing a verb:

1. A verb is a word that changes its spelling and pronunciation to show a change in time: "Yesterday it seemed okay" vs. "Right now it seems okay."
2. A verb is a word that shows action or a state of being.
3. Most verbs will make sense in one of the following blanks:

"They _____ okay."

or

"It _____ okay."

Verb	=	Adjective	+ Suffix
brighten	=	<i>bright</i>	+ <i>en</i>
darken	=	<i>dark</i>	+ <i>en</i>
deepen	=	<i>deep</i>	+ <i>en</i>
fatten	=	<i>fat + t</i>	+ <i>en</i>
flatten	=	<i>flat + t</i>	+ <i>en</i>
harden	=	<i>hard</i>	+ <i>en</i>
lighten	=	<i>tight</i>	+ <i>en</i>
moisten	=	<i>moist</i>	+ <i>en</i>

5 Now try some the other way around, showing any changes:

Adjective	+	Suffix	=	Verb
sad+d	+	en	=	<i>sadden</i>
sharp	+	en	=	<i>sharpen</i>
short	+	en	=	<i>shorten</i>
sick	+	en	=	<i>sicken</i>
soft	+	en	=	<i>soften</i>
straight	+	en	=	<i>straighten</i>
sweet	+	en	=	<i>sweeten</i>
thick	+	en	=	<i>thicken</i>
tight	+	en	=	<i>tighten</i>
tough	+	en	=	<i>toughen</i>
weak	+	en	=	<i>weaken</i>
wid e	+	en	=	<i>widen</i>

Teaching Notes.

Item 1. The two suffixes *-er* are introduced in Book 1, Lessons 28-29.

There are three related terms: *homograph*, *homophone*, *homonym*. Notice that the two homographic suffixes *-er* have the same spelling, different meanings, and the same pronunciation. Some homographs have different pronunciations: *buffet* [búfət] “to strike” vs. *buffet* [bəfā] “a type of meal,” for instance, or *bow* [bō] vs. *bow* [boù].

Homophones are words that have the same sound but different spellings and meanings – for instance, the infamous *there*, *their*, *they’re* or *to*, *too*, *two*. The elements in *homophone* are *homo* “same” + *phone* “sound.”

The word *homonym* (*homo* “same” + *onym* “name”) is sometimes used to mean either *homophone* or, less often, *homograph*. But technically, homonyms are words that are both homographs and homophones—for instance, *bear* “the animal that lives in the woods” and *bear* “to carry or endure.” In this sense the two suffixes *-er* and the five suffixes *-en* would be homonyms, but it seems better to reserve the word *homonym* to refer just to words, so we call the suffixes in question homographs not homonyms.

Item 2. Actually, the <r> in *children* is also an old plural ending: In Old English a few

nouns formed their plural with the *-r* suffix: *child, childer*. In the case of *children*, the original plural with *-r* was later not recognized as a plural, so the then-more-common plural suffix *-en* was added. Thus, *children* is actually a double plural. In Old English the singular *brother* was *brōthor*, the plural was sometimes *brōthor*, sometimes *brōthru*. By Middle English *brother* had acquired three different plural forms: *brōtheres*, *brāther* (as with *goose, geese*), and *brēthren*, with the *-en* ending. In time the old plural *brethren* took on the specialized religious meaning it has today, and the more general plural form was with the regular *-s* plural, *brothers*. So *brethren* is also a double plural.

Item 3. Nouns are introduced in Book 2, Lesson 24. The definition given here of *adjective* is a good starter, but it “leaks” a bit. For instance, although a sentence like “That clock thing seemed okay” makes sense, *clock* is not an adjective. It is a noun used attributively – that is, to provide much the same kind of detail that adjectives provide. But *clock* does not behave the way adjectives do. For instance, from the phrase “that golden thing” we can say “that thing is golden”, but from *that clock thing* we can’t say “*that thing is clock”. Also we can say “that very golden thing”, but not “*that very clock thing”. And we can say “that thing is more golden”, but we cannot say “*that thing is more clock”. *Golden* is an adjective, but *clock* is not; it is a noun. This is probably more grammar than you need to get into.

For fun you might ask the students the difference between a wood stove and a wooden stove, the former being a stove that burns wood, the latter a stove made of wood, which would probably not be too practical.

Item 4. Verbs are introduced in Book 3, Lesson 8.

Lesson Thirty-two More Suffixes Spelled <en>

1 **-en⁴ changes nouns into verbs.** This is actually the same as *-en³*, but we will treat them separately because of the difference between having adjectives or nouns as stems.

Verb	=	Noun	+ Suffix
frighten	=	<i>fright</i>	+ <i>en</i>
happen	=	<i>hap + p</i>	+ <i>en</i>
hasten	=	<i>haste</i>	+ <i>en</i>
hearten	=	<i>heart</i>	+ <i>en</i>
heighten	=	<i>height</i>	+ <i>en</i>
lengthen	=	<i>length</i>	+ <i>en</i>
strengthen	=	<i>strength</i>	+ <i>en</i>
threaten	=	<i>threat</i>	+ <i>en</i>

2 **-en⁵ past participle ending.** You have seen that verbs usually add the suffix *-ed* to show that an action took place in the past. Verbs with that *-ed* suffix are called past tense verbs. We also often use the suffix *-ed* at the end of verbs that are called past participle verbs. Past participle verbs are like past tense verbs (notice that they both have the word *past* in their names). But past participles have an additional meaning. They have the meaning “action that is completed.”

Compare the two sentences “They are finishing their chores” and “They have finished their chores.” The first sentence, with *finishing*, means that the work of doing the chores is still going on, but the second sentence, with *finished* with the suffix *-ed*, means that the work is over or completed, the chores are done. The verb *finished* in the second sentence is a past participle.

Most past participles, like most past tense verbs, end with the suffix *-ed*, but some old past participles end with the suffix *-en*: Compare “They are eating their breakfast” with “They have eaten their breakfast.” The first sentence, with *-ing*, means that they are not done eating yet. The second sentence, with *-en*, means that they have finished eating. The verb *eaten* in the second sentence is a past participle.

3 Analyze each of the following past participles into verb plus suffix:

Past Participle	=	Verb	+ Suffix
beaten	=	<i>beat</i>	+ <i>en</i>
broken	=	<i>brokē</i>	+ <i>en</i>
chosen	=	<i>chosē</i>	+ <i>en</i>
driven	=	<i>drivē</i>	+ <i>en</i>
eaten	=	<i>eat</i>	+ <i>en</i>
fallen	=	<i>fall</i>	+ <i>en</i>
forbidden	=	<i>forbid + d</i>	+ <i>en</i>
frozen	=	<i>frozē</i>	+ <i>en</i>
given	=	<i>givē</i>	+ <i>en</i>
proven	=	<i>provē</i>	+ <i>en</i>

4 Now try some the other way around. Add each verb and suffix to make a past participle:

Verb	+	Suffix	=	Past Participle
<i>risē</i>	+	<i>en</i>	=	<i>risen</i>
<i>spokē</i>	+	<i>en</i>	=	<i>spoken</i>
<i>stolē</i>	+	<i>en</i>	=	<i>stolen</i>
<i>take</i>	+	<i>en</i>	=	<i>taken</i>
<i>got + t</i>	+	<i>en</i>	=	<i>gotten</i>
<i>forbid + d</i>	+	<i>en</i>	=	<i>forbidden</i>
<i>mistakē</i>	+	<i>en</i>	=	<i>mistaken</i>
<i>forgot + t</i>	+	<i>en</i>	=	<i>forgotten</i>
<i>overtakē</i>	+	<i>en</i>	=	<i>overtaken</i>
<i>arisē</i>	+	<i>en</i>	=	<i>arisen</i>

5 Many past participles are used as adjectives, and many of these adjectives appear in compound words. Analyze each of the following compounds:

Compound Word	=	Free Stem #1	+	Verb	+ Suffix
browbeaten	=	<i>brow</i>	+	<i>beat</i>	+ <i>en</i>
downfallen	=	<i>down</i>	+	<i>fall</i>	+ <i>en</i>
heartbroken	=	<i>heart</i>	+	<i>broke</i>	+ <i>en</i>
housebroken	=	<i>house</i>	+	<i>house</i>	+ <i>en</i>
outspoken	=	<i>out</i>	+	<i>spoke</i>	+ <i>en</i>
overtaken	=	<i>over</i>	+	<i>takee</i>	+ <i>en</i>
weatherbeaten	=	<i>weather</i>	+	<i>beat</i>	+ <i>en</i>
downtrodden	=	<i>down</i>	+	<i>trod + d</i>	+ <i>en</i>
handwoven	=	<i>hand</i>	+	<i>wove</i>	+ <i>en</i>
undertaken	=	<i>under</i>	+	<i>takee</i>	+ <i>en</i>

Teaching Notes.

Item 2. Past participles can lead directly to the wonderful intricacy of verb phrases, by which we organize time and signal our perspective on the actions we talk about. As part of the complete verb, or verb phrase, past participles must always have some form of the helping verbs *be* or *have* or both preceding them: *The wallet was stolen. He has stolen the wallet. The wallet has been stolen. He had stolen the wallet. He could have stolen the wallet. He should not have stolen the wallet. The wallet could have been stolen.* And so on. But past participles are also very common as adjectives: *the stolen wallet.*

It is easy enough to see why past participles have the word *past* in their name. The *participle* is less obvious: It comes from the Latin *participium* “a sharing or partaking.” *Participle* is related to *participate*. In English *participle* originally referred to a person or thing that partook of the nature of two different species. This now-obsolete meaning is clear in this 17th century quotation from Sir Thomas Herbert: “Bats, flying fish, and Seals be participles of nature and species of a doubtful kind, participating both of Bird and Beast.” Our participles are so called because they participate both of verb and adjective.

A number of verbs have two past participle forms, one with *-(e)n*, one with *-ed*. Among the most common are *mow* (*mowed*, *mown*), *prove* (*proved*, *proven*), *sew* (*sewed*, *sewn*), *show* (*showed*, *shown*), *swell* (*swelled*, *swollen*).

**Lesson Thirty-three
Test Four**

Words	Analysis
1. <i>gentle</i>	[t] = <u><t></u> [j] = <u><g></u>
2. <i>tattoo</i>	[t] = <u><t></u> and <u><tt></u> , [ū] = <u><oo></u>
3. <i>debts</i>	[t] = <u><bt></u> , <s> = <u>/s/</u>
4. <i>yacht</i>	[t] = <u><cht></u> [o] = <u><a></u>
5. <i>attracting</i>	[t] = <u><tt></u> Prefix + Stem + Suffix = <u>ad + t + tract + ing</u>
6. <i>forgotten</i>	Verb + Suffix = <u>forgot + t + en</u>
7. <i>frightens</i>	<s> = [z] Noun + Suffix ¹ + Suffix ² = <u>fright + en + s</u>
8. <i>taught</i>	[t] = <u><t></u> and <u><ght></u> , [o] = <u><au></u>
9. <i>throttled</i>	[t] = <u><tt></u> Verb + Suffix = <u>throttl + ed</u>
10. <i>heartbroken</i>	Noun + Verb + Suffix = <u>heart + broke + en</u>

Lesson Thirty-four The Prefix *Sub-*

1 You have seen that when the prefix *ad-* is added to a stem, the <d> and [d] often assimilate and become more similar to the stem's first letter and sound, as in *attempt* and *appear*: *ad + t + tempt* and *ad + p + pear* .

In the same way, when the prefix *sub-* is added to a stem, the and [b] often assimilate to become more similar to the stem's first letter and sound. Thus, *sub + m + mon = summon*

2 In each of the words below, the first three letters are some form of the prefix *sub-*. In some of them the and [b] have assimilated, and in some they have not. Analyze each word into its prefix and stem, showing any assimilation:

Word	=	Prefix	+	Stem
summon	=	<i>sub</i>	+	<i>m + mon</i>
success	=	<i>sub</i>	+	<i>c + cess</i>
supply	=	<i>sub</i>	+	<i>p + ply</i>
subject	=	<i>sub</i>	+	<i>ject</i>
suffer	=	<i>sub</i>	+	<i>f + fer</i>
support	=	<i>sub</i>	+	<i>p + port</i>
submarine	=	<i>sub</i>	+	<i>marine</i>
sufficient	=	<i>sub</i>	+	<i>f + ficient</i>
suppose	=	<i>sub</i>	+	<i>p + pose</i>
substitute	=	<i>sub</i>	+	<i>stitute</i>
suburbs	=	<i>sub</i>	+	<i>urbs</i>
succeed	=	<i>sub</i>	+	<i>c + ceed</i>
surrogate	=	<i>sub</i>	+	<i>r + rogate</i>
suppress	=	<i>sub</i>	+	<i>p + press</i>
suggest	=	<i>sub</i>	+	<i>g + gest</i>
submitting	=	<i>sub</i>	+	<i>mitting</i>

2 Sort the words into these two groups:

Words in which the [b] and the . . .

assimilated:	did not assimilate:
<i>summon</i>	<i>subject</i>
<i>success</i>	<i>submarine</i>
<i>supply</i>	<i>substitute</i>
<i>suffer</i>	<i>suburbs</i>
<i>support</i>	<i>submitting</i>
<i>sufficient</i>	
<i>suppose</i>	
<i>succeed</i>	
<i>surrogate</i>	
<i>suppress</i>	
<i>suggest</i>	

3 Now sort the words in which the and [b] assimilated into these groups:

Words in which the changed to . . .

<f>	<c>	<p>
<i>suffer</i>	<i>success</i>	<i>supply</i>
<i>sufficient</i>	<i>succeed</i>	<i>support</i>
		<i>suppose</i>
		<i>suppress</i>

Words in which the changed to . . .

<g>	<m>	<r>
<i>suggest</i>	<i>summon</i>	<i>surrogate</i>



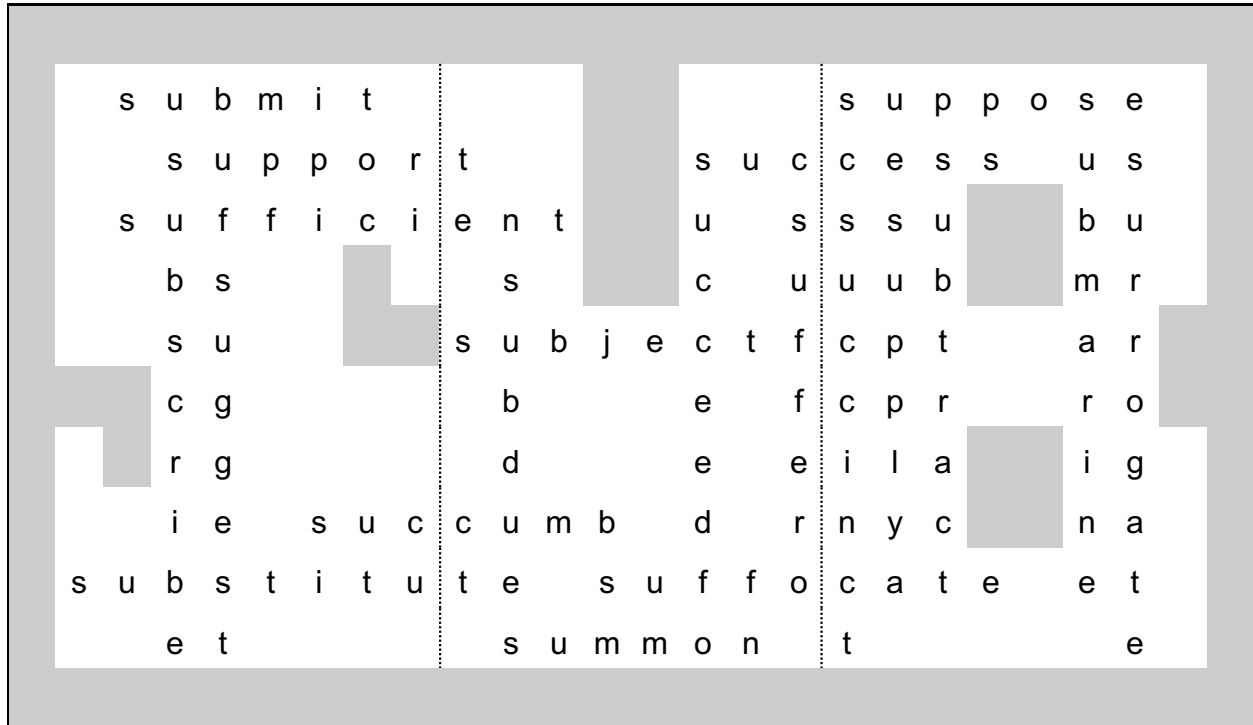
Word Find. This Find contains twenty words that start with some form of the prefix *sub-*:

submit✓
sufficient✓
subscribe✓
substitute✓
succeed✓

success✓
subtract✓
suffocate✓
subject✓
subdue✓

submarine✓
suppose✓
support✓
supply✓
succumb✓

succinct✓
surrogate✓
suffer✓
suggest✓
summon✓



Lesson Thirty-five The Prefixes Spelled <in>

1 English has two prefixes that are spelled <in>. One means "in"; the other means "no, not." Each of the following words contains one of these *in-* prefixes. Analyze each word into prefix and stem:

Word	=	Prefix	+	Stem
include	=	<i>in</i>	+	<i>clude</i>
independent	=	<i>in</i>	+	<i>dependent</i>
invisible	=	<i>in</i>	+	<i>visible</i>
involve	=	<i>in</i>	+	<i>volve</i>
incomplete	=	<i>in</i>	+	<i>complete</i>
insignificant	=	<i>in</i>	+	<i>significant</i>
invent	=	<i>in</i>	+	<i>vent</i>
insane	=	<i>in</i>	+	<i>sane</i>
inexpensive	=	<i>in</i>	+	<i>expensive</i>
intend	=	<i>in</i>	+	<i>tend</i>
inspect	=	<i>in</i>	+	<i>spect</i>
insist	=	<i>in</i>	+	<i>sist</i>

2 Find the six words among these twelve in which *in-* means "no, not." The *in-* means "no, not" if the word means just the opposite of the stem that's left after you take away *in-*. For instance, *independent* means "not dependent," just the opposite of *dependent*. So the *in-* in *independent* means "not." Now sort the twelve words into these two groups:

Words in which *in-* . . .

means “no, not”	does not mean “no, not”
<i>independent</i>	<i>include</i>
<i>invisible</i>	<i>involve</i>
<i>incomplete</i>	<i>invent</i>
<i>insignificant</i>	<i>intend</i>
<i>insane</i>	<i>inspect</i>
<i>inexpensive</i>	<i>insist</i>

4 The meaning of the *in-* that means “in” can be difficult to see in some words, because the meanings of the words have changed so much over the centuries. The following words contain the *in-* that means “in.” For each we’ve given you the stem and its original meaning. Be ready to discuss the connection between the original meaning of the prefix and stem and the modern meaning of each word. For instance, how is our meaning of *include* like shutting in or closing in?

Word	Stem	Meaning of Stem
include	clude	“shut, close”
involve	volve	“roll, turn”
invent	vent	“come”
intend	tend	“stretch”
inspect	spect	“look”
insist	sist	“stand”



Word Venn. Into circle A put only words that contain the sound [t]. In circle B put only words that contain some form of the prefix *sub-*. In circle C put only words that contain one of the prefixes *in-*. Put all other words into area D:

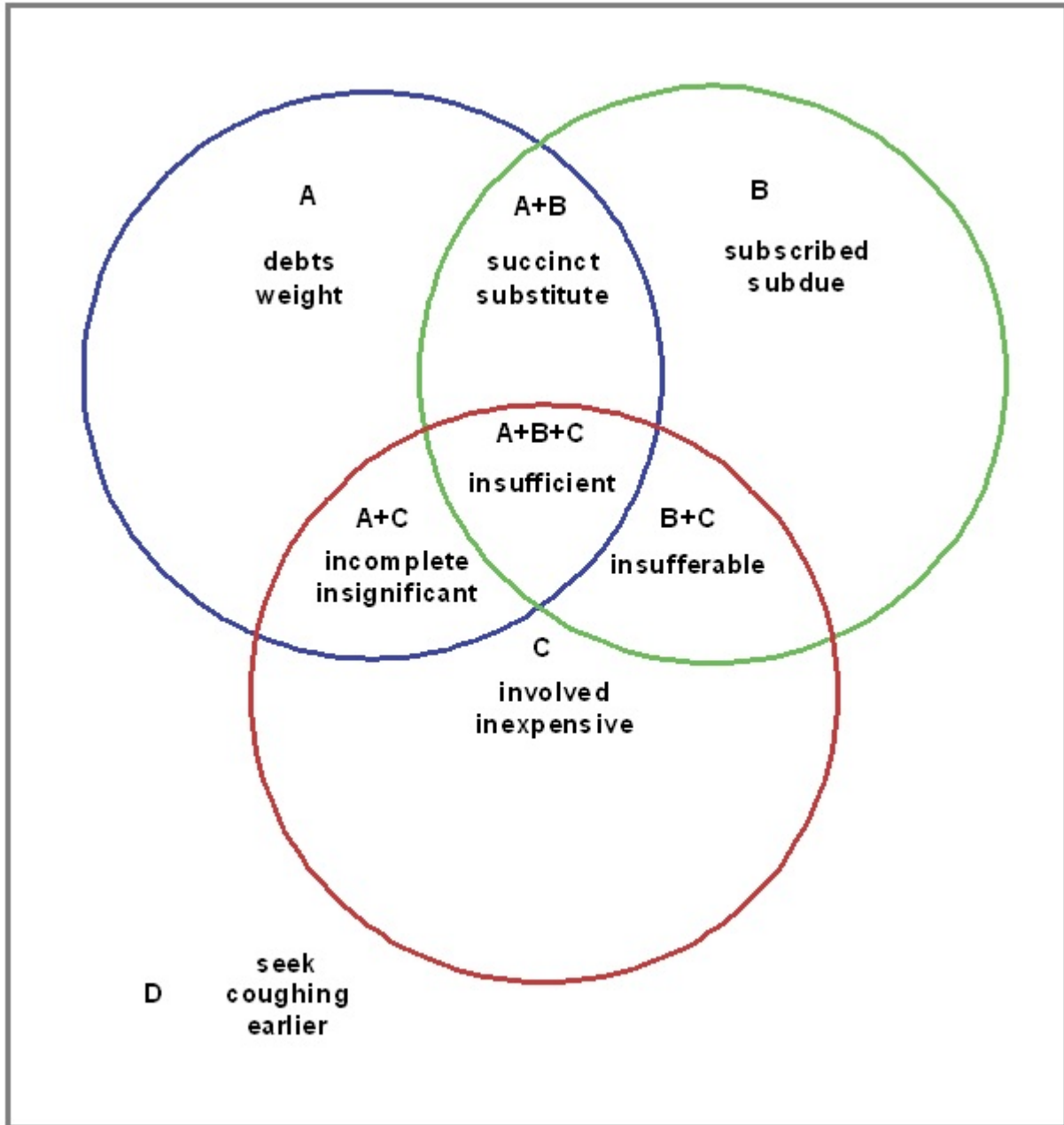
seek✓
debts✓
succinct✓

subscribed✓
insufficient✓
incomplete✓

coughing✓
inexpensive✓
substitute✓

involved✓
subdue✓
weight✓

insignificant✓
earlier✓
insufferable✓



Teaching Notes.

The existence of the two *in*-s explains the sign *inflammable* on tanker trucks that some people wonder about. It is obviously an instance of the *in*- that means “in,” not the one that means “not.”

Item 1. The bases contained in the stems in this table include the following, which are discussed in the Teaching Notes indicated: *vise* (4:13), *sign* (4:13), *fic* (a form of the *fice* in 4:34), *vent* (1:12, 4:13), *tend* (4:12), *spect* (3:43). Other bases in this table are these: *pend* “hang, cause to hang” occurs in *append*, *appendix*, *compendium*, *expend*, *impending*, *pendant*, *pendulous*, *perpendicular*, *suspend*. *Clude* “close, shut” occurs in *exclude*, *preclude*, *occlude*; it has a partner form *cluse*, as in *exclusion*, *recluse*, etc. *Volve* “roll, turn” occurs in *devolve*, *evolve*, *revolve*; it has a partner form *volute*, as in *evolution*, *revolution*...*Plete* “fill” occurs in *complete*, *deplete*, *expletive*, *replete*. *Sane* “health” occurs in *sanitorium*, *sanitary*, *sanitarium*. *Pense* “hang, cause to hang, weight, consider” is a partner form to *pend* (*expend* vs. *expense*, etc.) and occurs in *compensate*, *dispenser*, *pension*, *pensive*, *prepense*, *propensity*, *suspense*. *Sist* “set, place, stand, stop” occurs in *assist*, *consist*, *desist*, *exist* (with the typical <s>-deletion after *ex*-), *persist*, *resistance*, *subsistence* .

Item 4. The discussion answers here can be expected to get a bit loose and idiosyncratic, but what we have in mind are things like “When you include something with something else, you kind of shut them in together” – that sort of thing. The point is to get the students to see that their minds can find sometimes surprising, if sometimes rather attenuated, connections between current word meanings and the earlier meanings of their elements, thus helping dispel some of the arbitrariness that youngsters can feel in the words in the lexicon.

Lesson Thirty-six Sometimes the Two Prefixes *In-* Assimilate

1 When either of the two prefixes *in-* is added to certain stems, the <n> will assimilate and become the same as the first letter of the stem. In all of the following words, the first two letters are some form of one of the *in-* prefixes. Sometimes the <n> remains <n>, and sometimes it assimilates. Analyze each word into its prefix and stem, showing any changes due to assimilation:

Word	=	Prefix	+	Stem
immediate	=	<i>iñ+m</i>	+	<i>mediate</i>
individual	=	<i>in</i>	+	<i>dividual</i>
inform	=	<i>in</i>	+	<i>form</i>
irregular	=	<i>iñ+r</i>	+	<i>regular</i>
illustrate	=	<i>iñ+l</i>	+	<i>lustrate</i>
invested	=	<i>in</i>	+	<i>vested</i>
illusion	=	<i>iñ+l</i>	+	<i>lusion</i>
immense	=	<i>iñ+m</i>	+	<i>mense</i>

2 Sort the words into these groups:

Words in which <n> . . .

changed to <m>	changed to <r>	changed to <l>	did not change
<i>immediate</i>	<i>irregular</i>	<i>illustrate</i>	<i>individual</i>
<i>immense</i>		<i>illusion</i>	<i>inform</i>
			<i>invested</i>

3 So far the prefixes *in-* behave like the prefixes *ad-* and *sub-*: Sometimes they are simply added to the stem with no changes in spelling, and sometimes they assimilate so that the last letter of the prefix is the same as the first letter of the stem.

But in some words the <n> in *in-* changes to an <m> even though the first letter of the stem is not an <m>! For instance: *iñ + m + press = impress*. This change from <n> to <m> – and from [n] to [m] — still makes the word easier to say. It is called partial assimilation.

4 All of the following words contain one of the prefixes *in-*. In some words the <n> has assimilated partially by changing to an <m> in front of stems that don't start with [m] or <m>. In some words the <n> has not assimilated at all. Analyze each word to show what happened when *in-* was added to the stem in that word:

Word	=	Prefix	+	Stem
impress	=	<i>iñ+m</i>	+	<i>press</i>
inquire	=	<i>in</i>	+	<i>quire</i>
improve	=	<i>iñ+m</i>	+	<i>prove</i>
insufficient	=	<i>in</i>	+	<i>sufficient</i>
important	=	<i>iñ+m</i>	+	<i>portant</i>
indicted	=	<i>in</i>	+	<i>dicted</i>
imbalance	=	<i>iñ+m</i>	+	<i>balance</i>
impossible	=	<i>iñ+m</i>	+	<i>possible</i>

5 The five words in which the <n> changed to <m> are . . .

<i>impress</i>	<i>important</i>	<i>impossible</i>
<i>improve</i>	<i>imbalance</i>	

6 Sometimes the <n> in the prefixes *in-* assimilates partially to <m> before stems that start with the letters and <p>.

Teaching Notes.

Item 1. The word *balance* comes from Latin *bilanx* (*bi* “two” + *lanx* “plate”) – as in the two plates, or pans, in a balance scale.

Item 3. The assimilation of [n] to [m] before [b] and [p] makes pronunciation easier because the mouth has to move less to get from [m] to [b] or [p] than it does to get to [b] or [p] from [n]. The sounds [m], [b], and [p] are all pronounced with the lips together and the tongue in the same position ; the sound [n] is pronounced with the tip of the

tongue pushed against the back of the upper dental ridge. This process of partial assimilation continues. For instance, the word *input* is probably pronounced more often with [m] rather than [n], and *Webster's Third International* lists *imput* as a variant of *input*. Partial assimilation is also behind the tendency of people to pronounce *hypnotize* with [m] rather than [n] and the more rare tendency of youngsters to pronounce *chimney* with [b] rather than [n].

Lesson Thirty-seven The Prefix *Ob-*

1 You have seen that when certain prefixes are added to certain stems, the last consonant in the prefix assimilates. In each of the following words, the first two letters are some form of the prefix *ob-*. Analyze each word to show what happened when the prefix *ob-* was added to the stem:

Word	= Prefix	+ Stem
opposite	= <i>ob</i> + <i>p</i>	+ <i>posite</i>
object	= <i>ob</i>	+ <i>ject</i>
observe	= <i>ob</i>	+ <i>serve</i>
occupy	= <i>ob</i> + <i>c</i>	+ <i>cupy</i>
offer	= <i>ob</i> + <i>f</i>	+ <i>fer</i>
obtain	= <i>ob</i>	+ <i>tain</i>
opportunity	= <i>ob</i> + <i>p</i>	+ <i>portunity</i>
occur	= <i>ob</i> + <i>c</i>	+ <i>cur</i>
obstacle	= <i>ob</i>	+ <i>stacle</i>
occupation	= <i>ob</i> + <i>c</i>	+ <i>cupation</i>
obvious	= <i>ob</i>	+ <i>vious</i>
oppose	= <i>ob</i> + <i>p</i>	+ <i>pose</i>
oblige	= <i>ob</i>	+ <i>lige</i>
occasion	= <i>ob</i> + <i>c</i>	+ <i>casion</i>
offense	= <i>ob</i> + <i>f</i>	+ <i>fense</i>

2 Now sort the twelve words into these two groups:

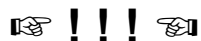
Words in which the . . .

assimilated:		did not assimilate:
<i>opposite</i>	<i>oppose</i>	<i>object</i>
<i>occupy</i>	<i>occasion</i>	<i>observe</i>
<i>offer</i>	<i>offense</i>	<i>obtain</i>
<i>opportunity</i>		<i>obstacle</i>
<i>occur</i>		<i>obvious</i>
<i>occupation</i>		<i>oblige</i>

3 Now sort the nine words in which the assimilated into these three groups:

Words in which changed to . . .

<c>	<f>	<p>
<i>occupy</i>	<i>offer</i>	<i>opposite</i>
<i>occur</i>	<i>offense</i>	<i>opportunity</i>
<i>occupation</i>		<i>oppose</i>
<i>occasion</i>		



Word Spell. How many words of three letters or more can you spell from the letters in the word *opportunity*? There are more than a hundred possible ones.

O P P O R T U N I T Y

Teaching Notes. Here are some of the possible words:

input	piton	putt	tout
into	pity	putty	toy
intro	poi	riot	trio
ion	point	rip	trip
iron	pointy	root	triton
irony	pony	rooty	troop
nip	poor	ropy	trot
nippy	pop	rot	trout
nit	port	rout	try
nitty	portion	ruin	tryout
nor	pot	run	tun
nori	potion	runt	turn
not	potty	runty	turnip
nut	pour	rut	tut
nutty	pout	rutty	tutor
onto	pouty	tin	typo
opt	print	tint	tyro
option	printout	tiny	unit
ort	prion	tip	unity
our	pro	tippy	unrip
out	pronto	tiptop	unroot
out	prop	tiro	unto
point	proton	ton	upon
pin	pry	too	uppity
pinot	pun	toon	uproot
pint	punitory	toot	urn
pinto	punt	top	yip
pinup	punty	tor	yon
piny	puny	torn	you
pion	pup	tort	your
pip	purity	tot	yurt
pit	put	tour	

Lesson Thirty-eight
Review of Prefixes, Stems, and Suffixes

1 Analyze each of the following words into their prefixes, stems and suffixes as indicated in the formulas given in the middle column. 'Pr' equals 'Prefix', 'St' equals 'Stem', and 'Su' equals 'Suffix'. Remember that some stems consist of just a base. Be sure to show all cases of final <e> deletion, twinning, changing of <y> to <i>, and assimilation:

Word	Formula =	Analysis
misaddressed	Pr ¹ +Pr ² +St+Su =	<i>mis + ad + dress + ed</i>
assuring	Pr+St+Su =	<i>ad + s + suré + ing</i>
misinforms	Pr ¹ +Pr ² +St+Su =	<i>mis + in + form + s</i>
submariner	Pr+St+Su =	<i>sub + mariné + er</i>
successfully	Pr+St+Su ¹ +Su ² =	<i>sub + c + cess + ful + ly</i>
observers	Pr+St+Su ¹ +Su ² =	<i>ob + servé + er + s</i>
illustrating	Pr+St =	<i>in + l + lustrating</i>
unimpressed	Pr ¹ +Pr ² +St+Su =	<i>un + in + m + press + ed</i>
reoccurring	Pr ¹ +Pr ² +St+Su =	<i>re + ob + c + cur + r + ing</i>
adventurers	Pr+St+Su ¹ +Su ² =	<i>ad + venture + er + s</i>
disappearing	Pr ¹ +Pr ² +St+Su =	<i>dis + ad + p + pear + ing</i>
inquirers	Pr+St+Su ¹ +Su ² =	<i>in + quiré + er + s</i>
suppliers	Pr+St+Su ¹ +Su ² =	<i>sub + p + ply + i + er + s</i>
unaccompanied	Pr ¹ +Pr ² +St+Su =	<i>un + ad + c + companý + i + ed</i>
uninvolved	Pr ¹ +Pr ² +St+Su =	<i>un + in + volvé + ed</i>
misassigned	Pr ¹ +Pr ² +St+Su =	<i>mis + ad + s + sign + ed</i>
subscribers	Pr+St+Su ¹ +Su ² =	<i>sub + scribe + er + s</i>
disadvantaged	Pr ¹ +Pr ² +St+Su =	<i>dis + ad + vantagé + ed</i>
unassisted	Pr ¹ +Pr ² +St+Su =	<i>un + ad + s + sist + ed</i>
sufferers	Pr+St+Su ¹ +Su ² =	<i>sub + f + fer + er + s</i>

Word	Formula =	Analysis
unaffected	Pr ¹ +Pr ² +St+Su	= un + ad + f + fect + ed
substituting	Pr+St+Su	= sub + stitut e + ing
straightened	St+Su ¹ +Su ²	= straight + en + ed
occupies	Pr+St+Su	= ob + c + cupy + i + es

2 Combine the following prefixes, stems, and suffixes. Again, be sure to show all changes that occur when the elements combine:

Prefixes, Stems, and Suffixes	=	Analysis	=	Word
un + ad + prove + ed	=	un+ad+p+prov e +d	=	unapproved
dis + ad + point + ment + s	=	dis+ad+p+point+ment+s	=	disappointments
in + form + er + s	=	in+form+er+s	=	informers
ad + just + er + s	=	ad+just+er+s	=	adjusters
ad + cid + ent + al + ly	=	ad+c+cid+ent+al+ly	=	accidentally
re + ob + cur + ing	=	re+ob+c+cur+r+ing	=	reoccurring
ob + portune + ist + s	=	ob+p+portun e +ist+s	=	opportunists
sub + gest + ion + s	=	sub+g+gest+ion+s	=	suggestions
sub + tract + ion	=	sub+tract+ion	=	subtraction
ob + posite + ion	=	ob+p+posit e +ion	=	opposition
in + de + pend + ent + ly	=	in+de+pend+ent+ly	=	independently
in + lustr + ate + ion + s	=	in+l+lustr+at e +ion+s	=	illustrations
ad + sort + ment	=	ad+s+sort+ment	=	assortment
ad + sign + ment	=	ad+s+sign+ment	=	assignment
in + lus + ion + s	=	in+l+l+us+ion+s	=	illusions
in + vent + or + s	=	in+vent+or+s	=	inventors
ad + opt + ion	=	ad+opt+ion	=	adoption

Lesson Thirty-nine How Do You Spell [p]?

1 You can hear the sound [p] at the beginning and end of the word *pop* . Underline the letters that spell [p] in the following words:

ac <u>com</u> pany	po <u>is</u> on	equ <u>ip</u> ment	syru <u>p</u>
su <u>pp</u> ly	a <u>pp</u> roved	su <u>pp</u> ort	p <u>re</u> ferred
p <u>ur</u> ple	slee <u>p</u>	in <u>de</u> pendent	wra <u>pp</u> er
im <u>pr</u> ove	a <u>tt</u> empted	wor <u>sh</u> ip	ste <u>pp</u> arent
p <u>at</u> tern	oc <u>cu</u> py	ac <u>co</u> mplish	o <u>pp</u> osite

2 Sort the twenty words into these three groups:

Words with [p] . . .

at the front:	in the middle:		at the end:
<i>purple</i>	<i>accompany</i>	<i>equipment</i>	<i>sleep</i>
<i>pattern</i>	<i>supply</i>	<i>support</i>	<i>worship</i>
<i>poison</i>	<i>purple</i>	<i>independent</i>	<i>syrupe</i>
<i>preferred</i>	<i>improve</i>	<i>accomplish</i>	
	<i>approved</i>	<i>wrapper</i>	
	<i>attempted</i>	<i>stepparent</i>	
	<i>occupy</i>	<i>opposite</i>	

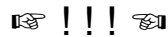
3 You should have found two ways to spell [p]: <p> and <pp> .

4 Does the spelling <pp> come at the front of any of these words? No

How is [p] spelled at the front of words? <p> . Does the <pp> spelling come at the end of any of these words? No . How is [p] spelled at the end of words? <p> .

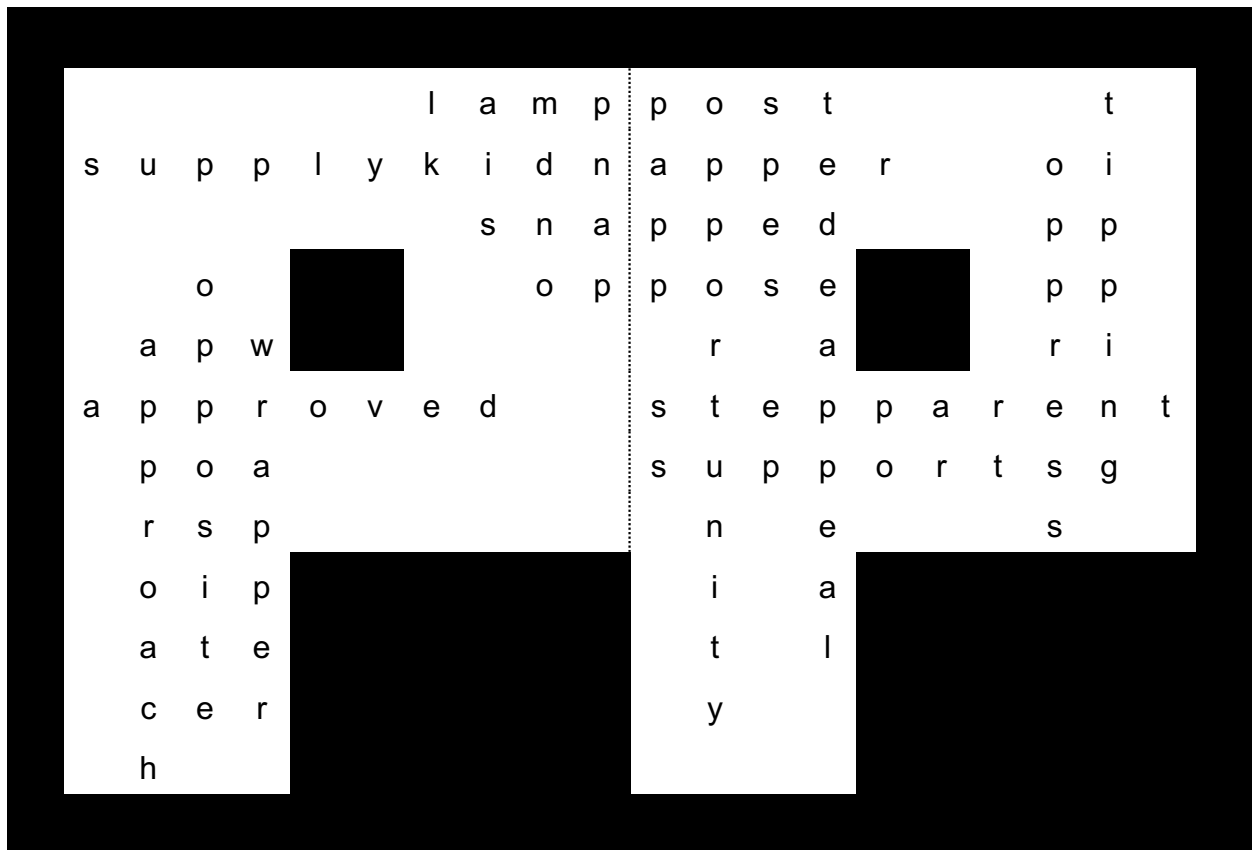
5 More than nine times out of ten [p] is spelled <p> . Very nearly all of the other times

it is spelled <pp>. So the sound [p] is spelled <p> or <pp> nearly 100% of the time. The next lesson will deal with when and why [p] is spelled <pp>.



Word Find. This Word Find contains fifteen words that contain the spelling <pp>:

- | | | | | |
|-----------|-----------|-----------|--------------|-------------|
| supply✓ | support✓ | lamppost✓ | snapped✓ | kidnapper✓ |
| wrapper✓ | approach✓ | tipping✓ | approach✓ | stepparent✓ |
| opposite✓ | appeal✓ | oppose✓ | opportunity✓ | oppress✓ |



Teaching Notes.

Item 2. Some students may point out that although a word like *improve* has a [p] in the middle of it, the [p] is actually at the beginning of the word *prove* within the word *improve*. They may also point out that you can analyze the compound *stepparent* into its two free stems: *step+parent* and that *step* has a [p] at the end while *parent* has a [p] at the beginning. Such questions should be encouraged: They are a sign that the students are seeing complex words in terms of their elements, which is one of the things this program strives for. Tell such students that they are absolutely right, but that in this item they are being asked simply to sort out the words that are in the list. The

rule that is worked out in subsequent lessons for choosing between <p> and <pp> when spelling [p] is not affected by the fact that some of the words listed in this item have [p]'s at the beginning or end of shorter words that they contain.

Lesson Forty

When is [p] Spelled <pp>?

1 You have seen that a double consonant, like <pp>, can be caused by one of these reasons: simple addition, twinning, or assimilation:

A <pp> is caused by simple addition when an element that ends with a <p> joins another element that starts with <p>: *lamp + post = lamppost*

Sometimes <pp> is caused by twinning: *tip + p + ing = tipping*

Some cases of <pp> are caused by the assimilation of the prefixes *ad-*, *sub*, or *ob-* in front of stems that start with a <p>: *ad + p + peal = appeal*

2 Each of the following words contains a <pp> because of one of the three reasons just given. Analyze each word enough to show whether the <pp> was caused by simple addition, twinning, or assimilation. Write the cause in the right column:

Word	=	Analysis	Reason for <pp>
lamppost	=	<i>lamp + post</i>	<i>Simple addition</i>
appears	=	<i>ad+p+pears</i>	<i>Assimilation</i>
tipping	=	<i>tip+p+ing</i>	<i>Twinning</i>
wrapper	=	<i>wrap+p+er</i>	<i>Twinning</i>
suppose	=	<i>sub+p+pose</i>	<i>Assimilation</i>
oppose	=	<i>ob+p+pose</i>	<i>Assimilation</i>
snapped	=	<i>snap+p+ed</i>	<i>Twinning</i>
approaches	=	<i>ad+p+proaches</i>	<i>Assimilation</i>
opportunity	=	<i>ob+p+portunity</i>	<i>Assimilation</i>
supply	=	<i>sub+p+ply</i>	<i>Assimilation</i>
apply	=	<i>ad+p+ply</i>	<i>Assimilation</i>
slipper	=	<i>slip+p+er</i>	<i>Twinning</i>
oppress	=	<i>ob+p+press</i>	<i>Assimilation</i>
suppress	=	<i>sub+p+press</i>	<i>Assimilation</i>

Word	=	Analysis	Reason for <pp>
stepparent	=	<i>step+parent</i>	<i>Simple addition</i>
unwrapped	=	<i>unwrap+p+ed</i>	<i>Twinning</i>
opposite	=	<i>ob+p+posite</i>	<i>Assimilation</i>
support	=	<i>sub+p+port</i>	<i>Assimilation</i>
kidnapping	=	<i>kidnap+p+ing</i>	<i>Twinning</i>

3 Think of another word that contains the spelling <pp> for each of the following reasons. Then analyze each word:

Reason	Word	Analysis
Simple Addition	<i>Answers will vary.</i>	<i>Answers will vary.</i>
Twinning		
Assimilation		

4 Three reasons for spelling [p] <pp> are . . .

<i>Assimilation</i>	<i>Twinning</i>	<i>Simple addition</i>
---------------------	-----------------	------------------------

Lesson Forty-one
Test Five

Words	Fill in the blanks
1. <i>independent</i>	[p] = <u><p></u>
2. <i>opportunity</i>	[p] = <u><pp></u>
3. <i>wrapper</i>	[p] = <u><pp></u> , [r] = <u><wr></u> and <u><r></u>
4. <i>observe</i>	Pr + St = <u>ob + serve</u>
5. <i>sufferers</i>	Pr + St + Su ¹ + Su ² = <u>sub + f + fer + er + s</u>
6. <i>illustrates</i>	Pr + St + Su = <u>il + l + lustrate + s</u>
7. <i>approached</i>	Pr + St + Su = <u>ap + p + roach + ed</u>
8. <i>succeeding</i>	Pr + St + Su = <u>sub + c + ceed + ing</u>
9. <i>substitute</i>	Pr + St = <u>sub + stitute</u>
10. <i>occurring</i>	Pr + St + Su = <u>oc + cur + r + ing</u>

Lesson Forty-two
Spelling [p] After Short and Long Vowels

1 Fill in the blanks with either 'long' or 'short':

In the vcc pattern the vowel will usually be short if it is stressed.

In the vcv pattern the vowel will usually be long if it is stressed.

In the vc# pattern the vowel will usually be short if it is stressed.

2 Underline the letters that spell [p] in each of the following words:

accept
vcc

escape
vcv

worship
vc#

occupy
vcv

aspirin
vcc

whisper
vcc

type
vcv

unwrap
vc#

pepper
vcc

chapter
vcc

glimpse
vcc

baptize
vcc

symptom
vcc

vapor
vcv

friendship
vc#

happiness
vcc

3 Find the closest vowel letter before the [p] in each word. Starting with that vowel, mark the pattern—either vcc, vcv, or vc#. In some of the words there is a consonant between the <p> and the vowel.

There are 4 words with the pattern VCV.

There are 3 words with the pattern VC#.

There are 9 words with the pattern VCC.

4 Sort the sixteen words into the following matrix.

Words with the pattern . . .

	VCC	VCV	VC#
Words with a short vowel before the <p>	<i>accept chaper aspirin glimpse pepper baptize symptom happiness whisper</i>		<i>worship friendship unwrap</i>
Words with a long vowel before the <p>		<i>escape vapor type occupy</i>	

5 After a long vowel in the VCV pattern [p] is always spelled <p>. After a short vowel in the VC# pattern [p] is always spelled <p>. After a short vowel in the VCC pattern [p] is sometimes spelled <p> and sometimes it is spelled <pp>.

6 Sort the words with the VCC pattern into the following two groups:

Words with [p] spelled . . .

<pp>	<p>		
<i>pepper</i>	<i>accept</i>	<i>whisper</i>	<i>baptize</i>
<i>happiness</i>	<i>aspirin</i>	<i>chapter</i>	
	<i>symptom</i>	<i>glimpse</i>	

7 Be ready to discuss this question: Why does the seond [p] in *pepper* and the [p] in *happiness* have to be spelled <pp> while [p] is spelled <p> in words like *aspirin* and *glimpse*?

Teaching Notes.

Item 2. If the first [p] in *pepper* confuses students, just point out that the instructions say to find the closest vowel before the [p] in the word, but there is no vowel before the first [p] in *pepper*, so they do not have to worry about it.

If questions come up about the base of the word *aspirin*, here is the story: The word *aspirin* was originally a German trademark made up from the first letters of the German chemical name *Acetyl Spirsäure* (acetyl salicylic acid) plus the chemical suffix *-in*, common at the end of chemical compounds. *Pepper* is neither something that peps nor something that is more pep; it comes to English through Latin and Greek, ultimately from the Sanskrit word for “pepper tree,” *pippalam*. Sanskrit is an ancient language of India. *Escape* analyzes to *ex+s+cape*. Its original meaning was “to get out of one's cape.” The prefix *ex-* undergoes some unusual assimilations (see *AES*, pp. 181-83). In some French and Italian adoptions, the <x> becomes <s>: *escape*, *escort*, *esplanade*, *espresso*. *Whisper* is a single free base. *Chapter* comes ultimately from Latin *capitulum* (*capit* “head” + *ulum* “little”). Over the centuries the [i] changed to [r]. Notice that we still call chapter titles *headings*. *Vapor* comes from Latin *vapor* “steam, vapor.”

Item 7, The point here is that in words like *aspirin*, *glimpse*, and the other five words with [p] spelled <p> in a VCC pattern, there are other consonants to fill out the CC: the <s> in *aspirin*, the <m> (and for good measure, the <s>) in *glimpse*. In words like *pepper* and *happiness* we need the second <p> to fill out the VCC pattern. Remind them that the need for a second consonant in VCC patterns is what causes us to twin final consonants in words like *wrapper*.

Lesson Forty-three Words With <ple> and <pple>

Earlier you saw that with the spelling of [t] before the letters <le> there are two special smaller patterns that we called the **VCle** and the **VCCle** patterns, as in *title* and *tattle*.

In the VCle pattern, as in *title*, the vowel will be long, but in the VCCle pattern, as in *tattle*, the vowel will be short.

The VCle and VCCle patterns hold for words that have the letters <le> right after the sound [p]. Underline the letters that spell [p] in each word:

pineapple cripple sample staple ample
 simple ripple temple quadruple maple
 disciple steeple example supple people

2 Sort the fifteen words into this matrix:

Words in which the [p] comes right after a . . .

	consonant sound	long vowel sound	short vowel sound
Words with [p] spelled <p>:	<i>simple</i> <i>sample</i> <i>temple</i> <i>example</i> <i>ample</i>	<i>disciple</i> <i>steeple</i> <i>staple</i> <i>quadruple</i> <i>maple</i> <i>people</i>	
Words with [p] spelled <pp>:			<i>pineapple</i> <i>cripple</i> <i>ripple</i> <i>supple</i>

3 In words that have a [p] sound with <le> right after it, if the [p] comes right after a consonant or long vowel, the [p] is spelled <p>. But if the [p] comes right after a short vowel sound, the [p] is spelled <pp>.

4 Sort the words with short vowels before the [p] into these two groups:

Words with [p] spelled . . .

<p>	<pp>
<i>simple</i>	<i>pineapple</i>
<i>sample</i>	<i>cripple</i>
<i>temple</i>	<i>ripple</i>
<i>example</i>	<i>supple</i>
<i>ample</i>	

If there is a consonant between the short vowel and the [p], we only need a single <p> because the other consonant will fill out the VCCle pattern. But if there is no other consonant, we need both <p>'s.

5 In the VCle pattern the vowel is long, but in the VCCle pattern the vowel is short.

6 Two ways of spelling [p] are <p> and <pp>.

Word History. Although its name analyzes to *pine* + *apple*, a pineapple is neither pine nor an apple. In earlier centuries the word *apple* was often used to refer to fruit in general, and the word *pineapple* originally was used to refer to the fruit of the pine tree – that is, the pine cone. Later it was used to refer to the fruit from Hawaii because pineapples look very much like large pine cones.

Teaching Notes.

Item 1. *Cripple* and *steep* are free bases, probably related to *creep* and *steep*. *Ripple* is a free base, of uncertain origin and structure though possibly related to *rip* “a turbulent piece of water.” *Sample* is a shortened form of *example*, though we now treat it as a free base. *Staple* “metal fastener” is a free base that comes from Old English *stapol* “post, pillar, column”; *maple* comes from Old English *mapultræow* “maple tree.”

Triple and *couple*, both with short vowels, might appear to be holdouts to the VCle pattern, but both were adopted from French and are thus covered by the French Lemon Rule, which shortens otherwise long vowels and is discussed in Book Eight, Lesson 13.

Item 2. Again, it should be made clear to the students that the way the directions are given, other than underlining them, they do not have to worry about the initial <p>'s in *pineapple* and *people*.

Lesson Forty-four

Four More Suffixes: *-ful*, *-less*, *-ly*, and *-y*

1 Each of these four suffixes changes a noun into an adjective. Notice that *knot* is a noun; it names a thing: "There is a knot in that board." But if we add *-y* or *-less* to it, we get adjectives, words that describe nouns: "That board is knotty, but the other board is knotless." *Knotty* and *knotless* are adjectives describing the noun *board*.

2 Also, the word *man* is a noun: "He is a man." But if we add *-ful* or *-ly* to it, we get adjectives: "He is a manful person" and "He is a manly fellow." *Manful* is an adjective describing *person*, and *manly* is an adjective describing *fellow*.

3 The suffixes *-ful*, *-less*, *-ly*, and *-y* can be used to change nouns into adjectives.

4 Combine the nouns and suffixes below to make adjectives:

Noun	+	Suffix	=	Adjective
doubt	+	less	=	<i>doubtless</i>
doubt	+	ful	=	<i>doubtful</i>
sleep	+	less	=	<i>sleepless</i>
sleep	+	y	=	<i>sleepy</i>
cheer	+	less	=	<i>cheerless</i>
cheer	+	ful	=	<i>cheerful</i>
cheer	+	y	=	<i>cheery</i>
weight	+	y	=	<i>weighty</i>
weight	+	less	=	<i>weightless</i>
thought	+	ful	=	<i>thoughtful</i>
thought	+	less	=	<i>thoughtless</i>
daughter	+	ly	=	<i>daughterly</i>

5 Each of the following adjectives consists of a noun plus one of the four suffixes you've been working with in this lesson. Analyze each adjective into its stem noun and suffix:

Adjective	=	Noun	+	Suffix
successful	=	<i>success</i>	+	<i>ful</i>
delightful	=	<i>delight</i>	+	<i>ful</i>
tricky	=	<i>trick</i>	+	<i>y</i>
sightless	=	<i>sight</i>	+	<i>less</i>
worshipful	=	<i>worship</i>	+	<i>ful</i>
knightly	=	<i>knight</i>	+	<i>ly</i>
knotty	=	<i>knot + t</i>	+	<i>y</i>
bottomless	=	<i>bottom</i>	+	<i>less</i>
flavorful	=	<i>flavor</i>	+	<i>ful</i>
twisty	=	<i>twist</i>	+	<i>y</i>
syrupy	=	<i>syrup</i>	+	<i>y</i>
lovely	=	<i>love</i>	+	<i>ly</i>
joyful	=	<i>joy</i>	+	<i>ful</i>
motherless	=	<i>mother</i>	+	<i>less</i>
rightful	=	<i>right</i>	+	<i>ful</i>
peppery	=	<i>pepper</i>	+	<i>y</i>
friendly	=	<i>friend</i>	+	<i>ly</i>
motherly	=	<i>mother</i>	+	<i>ly</i>

6 Four suffixes that turn nouns into adjectives are -ful, -less, -ly, and -y.

Teaching Notes.

Item 2. There is a second suffix spelled <ly> that is used to form adverbs out of adjectives, as in *calm* and *calmly* or *quick* and *quickly*. The students study this second -ly suffix in Lesson 30 of Book 7.

Item 4. It may be useful to point out to the students that *-ful* and *-less* form adjectives with almost exactly opposite meanings: *truthful* vs. *truthless*, for instance. The suffixes *-y* and *-less* also often form pairs of opposites, as in *knotty* and *knotless*.

Lesson Forty-five The Letter <v> After Short and Long Vowels

1 Earlier we saw that, except for the word *of* , the sound [v] is always spelled one way.

That way is <v> .

One reason we have spellings with double letters like <pp> and <tt> is to mark the difference between long and short vowels:

taped	tapped
vcv	vcc
later	latter
vcv	vcc

But since we don't regularly use <vv>, we have no way to mark short vowels before [v] the way we use <pp> and <tt> to mark them before [p] and [t] in words like *tapped* and *latter* . So the letter <v> cannot tell us whether the vowel in front of it is long or short.

2 Put a 'c' for "consonant" under the <v> in each of the following words. Then mark the letter right in front of the <v> and the letter right after the <v> with either another 'c' if it's a consonant or with a 'v' if it's a vowel:

avenue vcv	arriving vcv	driven vcv	remove vcv	novel vcv
flavor vcv	having vcv	driver vcv	woven vcv	overtake vcv
haven't vcv	gives vcv	shovel vcv	several vcv	civilized vcv
haven vcv	evening vcv	improve vcv	fever vcv	lovely vcv

3 You should have found that all twenty words have the same pattern. That pattern is VCV .

4 Sort the twenty words into the following two groups:

Words in which the <v> comes right after a . . .

short vowel:		long vowel:	
<i>avenue</i>	<i>shovel</i>	<i>flavor</i>	<i>improve</i>
<i>haven't</i>	<i>several</i>	<i>haven</i>	<i>remove</i>
<i>having</i>	<i>novel</i>	<i>arriving</i>	<i>woven</i>
<i>gives</i>	<i>civilized</i>	<i>evening</i>	<i>fever</i>
<i>driven</i>	<i>lovely</i>	<i>driver</i>	<i>overtake</i>

5 Usually in the pattern VCV the first vowel is long. But do all of the words with <v> as the consonant in the pattern VCV have a long vowel right in front of the <v>? No.

6 The word *ambiguous* means “to be indefinite; to have more than one possible meaning.” Be ready to discuss this question: Why can we say that so far as long and short vowels are concerned, the letter <v> is ambiguous?

Word History. *Ambiguous* analyzes to *amb* + *ig* + *uous*. The prefix *amb(i)-* means “both.” The base *ig* means “drive, lead, act.” The suffix *-uous* forms adjectives with a meaning like “tending to.” So *ambiguous* has a root meaning like “tending to drive both ways or act both ways, tending to wander around.”

Teaching Notes.

Item 1. In English we avoid <vv> because in earlier English, before <u> and <v> came to be treated as two separate letters and were still used more or less interchangeably for spelling both vowel and consonant sounds, <uu>, or <vv>, grew together to become the letter <w>, “double-u” (see AES, pp. 128-29, 207-08).

Item 2. *Avenue* is from a French word that meant “arrival,” which is in turn from Latin *advenire* “to come to.” Its earliest meanings were more like “an approach,” especially

the tree-lined drive leading to a country estate. It was not used to refer to a wide, often tree-lined city street until the 19th century. It analyzes to *ad* + *venē* + *ue*. *Shovel* comes from an Old English word and is related to *shove* and *shuffle*. *Driver* and *driven* illustrate nicely the ambiguity of <v> so far as the VCV pattern is concerned. Both are formed from the infinitive *drive*, with a long <i>. In *driver* (*drive*+*er*) the <i> stays long; in *driven* (*drive*+*en*) it is shortened to [i], as with other old past participles: *ride*, *ridden*; *bite*, *bitten*, etc.

Lesson Forty-six Review

1 Below you are given some words. For each word you are given a spelling feature – either the spelling of one of the sounds in the word or the presence of a silent final <e>. In the right hand column you should fill in the reason for the spelling feature – that is, the pattern or change that explains why the sound is spelled the way it is or the function of the silent final <e> in the word – as we have done with *example*:

Word	Spelling Feature	Reason
example	[p]=<p>	<i>VCCle pattern</i>
immediate	[m]=<mm>	<i>Assimilation of in- to -im</i>
knotty	[t]=<tt>	<i>Twinning</i>
immense	Silent final <e>	<i>Insulating <s></i>
shuttle	[t]=<tt>	<i>VCCle pattern</i>
attempted	[t]=<tt>	<i>Assimilation of ad- to at-</i>
occurred	[k]=<cc>	<i>Assimilation of ob- to oc-</i>
kidnapped	[p]=<pp>	<i>Twinning</i>
supporting	[p]=<pp>	<i>Assimilation of sub- to sup-</i>
lose	Silent final <e>	<i>Marking long vowel and insulating <s></i>
subscribe	Silent final <e>	<i>Marking long vowel in VCV pattern</i>
maple	Silent final <e>	<i>Marking long vowel in VCle pattern</i>

2 Analyze each of the following words into its elements according to the formula you are given for each one. 'Pr' = 'Prefix', 'FrSt' = 'Free Stem', 'BndSt' = 'Bound Stem', and 'Su' = 'Suffix'. Remember that some stems consist of just a base. Be sure to show any changes that occur:

Word	Formula	Analysis
unfriendly	Pr+FrSt+Su	<i>un + friend + ly</i>
thoughtful	FrSt+Su	<i>thought+ful</i>
unimpressive	Pr ¹ +Pr ² +FrSt+Su	<i>un+im+press+ive</i>

Word	Formula	Analysis
obtained	Pr+BndSt+Su	<i>ob+tain+ed</i>
rightfully	FrSt+Su ¹ +Su ²	<i>right+ful+ly</i>
indebted	Pr+FrSt+Su	<i>in+debt+ed</i>
involved	Pr+BndSt+Su	<i>in+volve+ed</i>
sufferers	Pr+BndSt+Su ¹ +Su ²	<i>sub+f+fer+er+s</i>
suffocate	Pr+BndSt+Su	<i>sub+f+foc+ate</i>
reappeared	Pr ¹ +Pr ² +BndSt+Su	<i>re+ad+p+pear+ed</i>
disputing	Pr+BndSt+Su	<i>dis+pute+ing</i>
sleepiest	FrSt+Su ¹ +Su ²	<i>sleep+y+i+est</i>

3 Combine the following elements into words. Be sure your analysis shows any changes that occur:

Elements	Analysis	Word
in+sub+fice+ient	<i>in+sub+f+fice+ient</i>	<i>insufficient</i>
in+de+pend+ence	<i>in+de+pend+ence</i>	<i>independence</i>
in+sist+ed	<i>in+sist+ed</i>	<i>insisted</i>
dis+ad+vant+age+ed	<i>dis+ad+vantage+ed</i>	<i>disadvantaged</i>
un+wrap+ed	<i>un+wrap+p+ed</i>	<i>unwrapped</i>
ad+sign+ment+s	<i>ad+s+sign+ment+s</i>	<i>assignments</i>
in+sign+i+fic+ant	<i>in+sign+i+fic+ant</i>	<i>insignificant</i>
sub+gest+ion+s	<i>sub+g+gest+ion+s</i>	<i>suggestions</i>
ear+ly+est	<i>ear+ly+i+est</i>	<i>earliest</i>
ob+case+ion+al	<i>ob+c+case+ion+al</i>	<i>occasional</i>
de+light+ful+ly	<i>de+light+ful+ly</i>	<i>delightfully</i>
in+lustr+ate+ion	<i>in+l+lustr+ate+ion</i>	<i>illustration</i>

Teaching Notes.

Items 1 and 2. Students may ask questions about final <e>'s on some of these bases: How do we know *involved* should analyze to *volve* rather than *volv*, which would not require a final <e> deletion – *in+volv+ed? Ditto with *pute* vs. *put* in *disputing*, and *foc* vs. *foce* in *suffocate*. We choose *volve* rather than *volv* because of *involve*, with the final <e>. We choose *pute* because of *dispute*. The base in *suffocate* means “neck, throat,” and there is no word with that base spelled with a final <e>, so we assume *foc*. (The root meaning behind *suffocate* is that of putting your hands under (*sub-*) one's throat.) In Item 2 the same line of argument follows: The base in *occasional* is the free base *case*. The *fice* in *insufficient* is due to *suffice*. There are two forms of the base: *fice* in, for example, *suffice*; and *fic* in *terrific*. We choose *fic* in *insignificant* as the simpler of the two choices, with no final <e> deletion required.

Lesson Forty-seven Review

1 Analyze each of the following words enough to show all of the suffixes and prefixes they contain. Show any changes:

Word	Analysis
misadvised	<i>mis+ad+vise+ed</i>
unsuccessful	<i>un+subb+c+cess+ful</i>
impresses	<i>im+press+es</i>
insane	<i>in+sane</i>
reoccurred	<i>re+obb+c+cur+r+ed</i>
typists	<i>type+ist+s</i>
gentlest	<i>gentle+est</i>
regularize	<i>regul+ar+ize or reg+ul+ar+ize</i>
friendlier	<i>friend+ly+i+er</i>
frightens	<i>fright+en+s</i>
thoughtless	<i>thought+less</i>
naughtier	<i>naught+y+i+er</i>
affection	<i>af+f+fect+ion</i>
subtracting	<i>sub+tract+ing</i>
informers	<i>in+form+er+s</i>
invisible	<i>in+vise+ible</i>
oppressive	<i>op+p+press+ive</i>
escapist	<i>ex+s+cape+ist</i>
happiest	<i>hap+p+y+i+est</i>
vaporized	<i>vapor+ize+ed</i>
lovelier	<i>love+ly+i+er</i>
lengthening	<i>length+en+ing</i>

Word	Analysis
rightful	<i>right+ful</i>
pointlessness	<i>point+less+ness</i>
cheery	<i>cheer+y</i>
unassisted	<i>un+ad+s+sist+ed</i>
suggests	<i>sub+g+gest+s</i>
offense	<i>ob+f+fense</i>
opportunist	<i>ob+p+portuné+ist</i>
simplest	<i>simple+est</i>
individualize	<i>in+di+vidé+ual+ize</i>
motherly	<i>mother+ly</i>
moistened	<i>moist+en+ed</i>
flavorful	<i>flavor+ful</i>
sightless	<i>sight+less</i>
knotty	<i>knot+t+y</i>

2 Sort the words into the following groups:

Words with the prefix . . .				
ad-	in⁻¹ “not”	in⁻² “in”	ob-	sub-
<i>misadvised</i>	<i>insane</i>	<i>impresses</i>	<i>reoccurred</i>	<i>unsuccessful</i>
<i>affection</i>	<i>invisible</i>	<i>informers</i>	<i>oppressive</i>	<i>subtracting</i>
<i>unassisted</i>		<i>individualize</i>	<i>offense</i>	<i>suggests</i>
			<i>opportunist</i>	

Words with the suffix . . .			
-en	-est	-ful	-ist
<i>frightens</i>	<i>gentlest</i>	<i>unsuccessful</i>	<i>typists</i>
<i>lengthening</i>	<i>happiest</i>	<i>rightful</i>	<i>escapist</i>
<i>moistened</i>	<i>simplest</i>	<i>flavorful</i>	<i>opportunist</i>

Words with the suffix . . .			
-ize	-less	-ly	-y
<i>regularize</i>	<i>thoughtless</i>	<i>friendlier</i>	<i>naughtier</i>
<i>vaporized</i>	<i>pointlessness</i>	<i>lovelier</i>	<i>happiest</i>
<i>individualize</i>	<i>sightless</i>	<i>motherly</i>	<i>cheery</i>
			<i>knotty</i>

3 Among the words above you should be able to find at least four that contain each of the following things:

An example of changing <y> to <i>:	An example of deleting silent final <e>:	A prefix or suffix other than the ones listed above:
<i>friendlier</i>	<i>misadvised</i>	<i>misadvised</i>
<i>naughtier</i>	<i>typists</i>	<i>unsuccessful</i>
<i>happiest</i>	<i>gentlest</i>	<i>impresses</i>
<i>lovelier</i>	<i>escapist</i>	<i>reoccurred</i>

Teaching Notes.

Item 1. This table contains some analyses that may raise questions: The base *naught* in *naughtier* is from an obsolete noun that meant “wickedness, evil, moral wrong, mischief.” *Escapist* contains a rare assimilation of *ex-* that occurs in a few adoptions from French and Italian: *ex+s+capé+ist*. Some students may want to analyze the base *portune* into *port+une*. There’s something to be said for such an analysis: Compare the words like *fortune*, *tribune*, *jejune*, in which <une> looks and feels like a suffix. But apparently the <une> in *opportune* is better treated as part of the base rather than as a

suffix. The suffix *-ual* in *individual* may seem odd to the students: It is a form of the more common *-al*, which forms adjectives and nouns.

Item 3. Other words with final <e> deletion: *opportunist*, *simplest*. Other words with prefixes or suffixes not listed in the tables: *typists*, *friendlier*, *frightens*, *naughtier*, *affection*, *subtracting*, *informers*, *invisible*, *oppressive*, *escapist*, *vaporized*, *lovelier*, *lengthening*, *pointlessness*, *unassisted*, *suggests*, *individualize*, *moistened*.

Lesson Forty-eight
Test Six

Words	Fill in the blanks
1. <i>assignments</i>	Prefix + Stem + Suffix + Suffix = <u>ad + s + sign + ment + s</u>
2. <i>suggested</i>	Prefix + Stem + Suffix = <u>sub + g + gest + ed</u>
3. <i>informers</i>	Prefix + Stem + Suffix + Suffix = <u>in + form + er + s</u>
4. <i>opposites</i>	Prefix + Stem + Suffix = <u>ob + p + posite + s</u>
5. <i>typists</i>	Stem + Suffix + Suffix = <u>type + ist + s</u>
6. <i>unhappiest</i>	Prefix + Stem + Suffix = <u>un + happy + i + est</u>
7. <i>lovelier</i>	Stem + Suffix + Suffix = <u>love + ly + i + er</u>
8. <i>frightening</i>	Stem + Suffix + Suffix = <u>fright + en + ing</u>
9. <i>unsuccessful</i>	Prefix + Stem + Suffix = <u>un + sub + c + cess + ful</u>
10. <i>thoughtless</i>	Stem + Suffix = <u>thought + less</u>