

Book Seven

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Lesson One

Review of Elements: Prefixes, Bases, and Suffixes

1 **Elements** are the smallest parts that add meaning to written words. For instance, *repainted* contains three elements: *re+paint+ed*. The element *re-* at the front of the word adds the meaning "again." The element *-ed* at the end of the word adds the meaning "in the past" or "action completed." The element *paint* in the middle of the word gives the word its basic meaning, "paint."

Elements like *re-* at the front of words are called **prefixes**. Elements like *-ed* at the end of words are called **suffixes**. And elements like *paint* that give the word its basic meaning are called **bases**.

Bases like *paint* that can stand free as separate words are called **free bases**. But many bases cannot stand free as words – for instance, the base *cept* occurs in words like *reception*, *perception*, *concept*, *intercept*, and *accept*, but we do not have a word spelled <cept>, so *cept* is not a free base. Bases like *cept* that cannot stand free as separate words are called **bound bases**.

2 Each of the following words contains three elements – a prefix up front, a free base in the middle, and a suffix at the end. Analyze each word into its three elements as we have done with *repainted* :

Word	= Prefix	+ Free Base + Suffix	
repainted	= <i>re</i>	+ <i>paint</i>	+ <i>ed</i>
unlucky	= <i>un</i>	+ <i>luck</i>	+ <i>y</i>
informer	= <i>in</i>	+ <i>form</i>	+ <i>er</i>
overcooked	= <i>over</i>	+ <i>cook</i>	+ <i>ed</i>
restriction	= <i>re</i>	+ <i>strict</i>	+ <i>ion</i>
preschooler	= <i>pre</i>	+ <i>school</i>	+ <i>er</i>
undoubted	= <i>un</i>	+ <i>doubt</i>	+ <i>ed</i>
disclaimer	= <i>dis</i>	+ <i>claim</i>	+ <i>er</i>
exactness	= <i>ex</i>	+ <i>act</i>	+ <i>ness</i>
mistakes	= <i>mis</i>	+ <i>take</i>	+ <i>s</i>
requested	= <i>re</i>	+ <i>quest</i>	+ <i>ed</i>
misjudges	= <i>mis</i>	+ <i>judge</i>	+ <i>s</i>

3 All of the words you just analyzed contained **free bases** that could stand alone as separate words. But there are many bases that cannot stand alone as separate words. Before these **bound bases** can stand free as words, they must have other elements added to them. Each of the following words contains a prefix, a bound base, and a suffix. Analyze each word into its three elements as we have done with *addiction*:

Word	=	Prefix	+	Free Base	+	Suffix
addiction	=	<i>ad</i>	+	<i>dict</i>	+	<i>ion</i>
abruptly	=	<i>ab</i>	+	<i>rupt</i>	+	<i>ly</i>
products	=	<i>pro</i>	+	<i>duct</i>	+	<i>s</i>
instructor	=	<i>in</i>	+	<i>struct</i>	+	<i>or</i>
completeness	=	<i>com</i>	+	<i>plete</i>	+	<i>ness</i>
compliment	=	<i>com</i>	+	<i>pli</i>	+	<i>ment</i>
reception	=	<i>re</i>	+	<i>cept</i>	+	<i>ion</i>
perfected	=	<i>per</i>	+	<i>fect</i>	+	<i>ed</i>
recruiter	=	<i>re</i>	+	<i>cruit</i>	+	<i>er</i>
commits	=	<i>com</i>	+	<i>mit</i>	+	<i>s</i>
repeating	=	<i>re</i>	+	<i>peat</i>	+	<i>ing</i>
exceeded	=	<i>ex</i>	+	<i>ceed</i>	+	<i>ed</i>

- 4
- The smallest parts that add meaning to written words are called elements.
 - Elements that are added to the front of words are called prefixes.
 - Elements that are added to the end of words are called suffixes.
 - Elements that give the basic meaning to words are called bases.
 - Bases that can stand free as words are called free bases.
 - Bases that cannot stand free as words are called bound bases.

Teaching Notes.

Item 1. Elements, free bases, and suffixes are introduced in Book 1, Lesson 28. Prefixes are introduced in Book 2, Lesson 40. Bound bases are introduced Book 3, Lesson 43.

Item 3. The bound base *pli* in *compliment* is related to the base *ply* in *comply*. It carries the root meaning “fill.”

Lesson Two

Review of Stems and Simple Addition

1 If we start with the word *repainted* and take away the prefix *re-*, we have the base and suffix left, *painted*. But if we start with the word *repainted* and take away the suffix *-ed*, we have the prefix and base left, *repaint*. In either case, the part that we have left after we take away the prefix or suffix is called the **stem**. The **stem** is whatever we have left when we take away prefixes or suffixes. Notice that what the stem is in a word depends on what we are taking away from the word.

A stem always has to contain at least one base. It may or may not contain prefixes or suffixes, but it always must contain a base. A **free stem** can stand free as a separate word; a **bound stem** cannot.

We also use the word *stem* to refer to the base plus any other elements to which we are going to add a prefix or a suffix. So if we wanted to add the meaning "in the past" to the verb *repaint*, we could add the suffix *-ed* to the stem *repaint*. And if we wanted to add the meaning "again" to the verb *painted*, we could add the prefix *re-* to the stem *painted*.

2 Analyze each of the following words into prefix or suffix and stem as directed in the Formula column. Some of the stems will be free and some will be bound:

Word	Formula	Analysis
disclaimer	Prefix+stem	<i>dis+claimer</i>
disclaimer	Stem+suffix	<i>disclaim+er</i>
instructor	Prefix+stem	<i>in+structor</i>
instructor	Stem+suffix	<i>instruct+or</i>
reduction	Prefix+stem	<i>re+duction</i>
reduction	Stem+suffix	<i>reduct+ion</i>
uncooked	Prefix+stem	<i>un+cooked</i>
uncooked	Stem+suffix	<i>uncook+ed</i>
perfected	Prefix+stem	<i>per+fected</i>
perfected	Stem+suffix	<i>perfect+ed</i>
preschooler	Prefix+stem	<i>pre+schooler</i>
preschooler	Stem+suffix	<i>preschool+er</i>

3 Usually when elements combine to make new words, they simply add together, with no change in spelling. This process is called **simple addition**, and the Rule of Simple Addition is the biggest, simplest, and most important spelling rule:

The Rule of Simple Addition. Unless you know some special reason for making a change, when you add two elements together to spell a word, simply add them together and don't make any changes in their spelling.

4 Below you are given some elements – prefixes, bases (both free ones and bound ones), and suffixes. Combine them to make words. They all combine by simple addition:

Elements	= Word
dis+claim+er	= <i>disclaimer</i>
ab+rupt+ly	= <i>abruptly</i>
phys+ic+s	= <i>physics</i>
re+cept+acle+s	= <i>receptacles</i>
intro+duct+ion+s	= <i>introductions</i>
re+cept+ion+ist	= <i>receptionist</i>
sub+ject+ive+ly	= <i>subjectively</i>
re+com+mend+er	= <i>recommender</i>
un+doubt+ed+ly	= <i>undoubtedly</i>
per+fect+ion+ist+s	= <i>perfectionists</i>
in+ex+act+ly	= <i>inexactly</i>
pro+duct+ion	= <i>production</i>

5 Usually when elements combine to make words, they go together by simple addition. A stem always contains at least one base. Two things that can be either free or bound are bases and stems.

Teaching Notes.

Item 1. Stems and free stems are introduced in Book 3, Lesson 5, bound stems in Book 3, Lesson 43.

Lesson Three Review of Twinning

1 The Rule of Simple Addition says that elements combine without change unless you know some special reason for making a change. One special reason is **twinning**:

Twinning Rule. You twin the final consonant of a free stem that has one vowel sound in it when you add a suffix that starts with a vowel and the stem ends in the pattern CVC. You twin the final consonant of a free stem that has more than one vowel sound in it when you add a suffix that starts with a vowel and the stem ends CVC only when there is stress on the last vowel of the stem before and after the suffix is added:

twin + ing = twin + n + ing = twinning
occur + ence = occur + r + ence = occurrence

2 Analyze each of the following words into free stem plus suffix. Show any cases of twinning in your analysis. Then answer the questions in the columns on the right. Assume that in any free stems that have only one vowel sound, that vowel is stressed:

Word = Free Stem + Suffix	Does the suffix start with a vowel?	Does the stem end in the pattern CVC?	Is there stress on the last vowel in the stem before you add the suffix?	Does the stress stay on the last vowel of the stem after you add the suffix?
twinning = <i>twin + n + ing</i>	Yes	Yes	Yes	Yes
occurrence = <i>occur+r+ence</i>	Yes	Yes	Yes	Yes
kidnapper = <i>kidnap+p+er</i>	Yes	Yes	Yes	Yes
lucky = <i>luck+y</i>	Yes	No	Yes	Yes
committed = <i>commit+t+ed</i>	Yes	Yes	Yes	Yes
symbolic = <i>symbol+ic</i>	Yes	Yes	No	Yes
commitment = <i>commit+ment</i>	No	Yes	Yes	Yes
displayed = <i>display+ed</i>	Yes	No	Yes	Yes
limiting = <i>limit+ing</i>	Yes	Yes	No	No
exceeding = <i>exceed+ing</i>	Yes	No	Yes	Yes

Word = Free Stem + Suffix	Does the suffix start with a vowel?	Does the stem end in the pattern CVC?	Is there stress on the last vowel in the stem before you add the suffix?	Does the stress stay on the last vowel of the stem after you add the suffix?
cooking = <i>cook+ing</i>	Yes	No	Yes	Yes
repellant = <i>repel+l+ant</i>	Yes	Yes	Yes	Yes
compelling = <i>compel+l+ing</i>	Yes	Yes	Yes	Yes
logical = <i>logic+al</i>	Yes	Yes	No	No
informer = <i>inform+er</i>	Yes	No	Yes	Yes
submits = <i>submit+s</i>	No	Yes	Yes	Yes
exacting = <i>exact+ing</i>	Yes	No	Yes	Yes
recruiter = <i>recruit+er</i>	Yes	No	Yes	Yes

3 Look over the results of your work. You should find that for each word in which twinning occurred you have "Yes" in all four columns on the right. You should also find that for each word in which twinning did not occur you have at least one "No" in the columns on the right. If things did not work out that way, check over your work. If you get stuck, don't be afraid to ask for some help.

Twinning Rule. You twin the final consonant of a free stem that has one vowel sound in it when you add a suffix that starts with a vowel and the stem ends in the pattern CVC. You twin the final consonant of a free stem that has more than one vowel sound in it when you add a suffix that starts with a vowel and the stem ends in the pattern CVC only when there is stress on the last vowel of the stem before and after the suffix is added.

4 Combine the following free stems and suffixes. Show any cases of twinning:

Free stem + Suffix =	Word
commit + <i>t</i> + ee	= <i>committee</i>
complex + ity	= <i>complexity</i>
remark + able	= <i>remarkable</i>
logic + ian	= <i>logician</i>
symbol + ism	= <i>symbolism</i>
occur+r + ence	= <i>occurrence</i>
refer + ence	= <i>reference</i>
recruit + ing	= <i>recruiting</i>
repel+/ + ing	= <i>repelling</i>
overlook + ed	= <i>overlooked</i>
republic + an	= <i>republican</i>
reveal + ing	= <i>revealing</i>
compel+/ + ing	= <i>compelling</i>
resubmit+t + ed	= <i>resubmitted</i>
kidnap+p + ing	= <i>kidnapping</i>

Teaching Notes.

Item 1. The treatment of twinning is quite abbreviated here. For a more detailed and extended introduction to twinning, see Book 1, Lessons 34-37 (for twinning in stems with a single vowel sound) and Book 3, Lessons 45-47 (for twinning in stems with two or more vowel sounds). For more on twinning see *AES*, pp. 161-76.

Item 4. Re: *complexity*. Since final <x> always spells the complex sounds [ks], free stems that end in <x>, even though in terms of letters they seem to end CVC, in terms of sounds they end CVCC and thus do not twin. We never twin the letter <x>.

Lesson Four Review of Final <e> Deletion

1 Another change that can occur when elements combine involves silent final <e>. Usually when we add a suffix that starts with a vowel to a free stem that ends with a silent final <e>, we delete the final <e>: *delete + ion = deleté + ion = deletion*. If we did not delete the final <e>, we would end up with the incorrect spelling *deleteion.

Final <e> Deletion Rule. You delete a silent final <e> that marks a soft <c> or soft <g> when you add a suffix that starts with an <e>, <i>, or <y>. Except for a few stems that end in <oe> or <ee>, you delete all other silent final <e>'s anytime you add a suffix that starts with any vowel.

2 Combine the stems and suffixes. Make sure that your description of the process shows any final <e> deletion that occurs:

Free Stem + Suffix	Process	Word
delete + ion	<i>deleté + ion</i>	<i>deletion</i>
complete + ion	<i>completé + ion</i>	<i>completion</i>
accommodate + ion	<i>accommodaté + ion</i>	<i>accommodation</i>
observe + er	<i>observé + er</i>	<i>observer</i>
collapse + ed	<i>collapsé + ed</i>	<i>collapsed</i>
advantage + ous	<i>advantage + ous</i>	<i>advantageous</i>
sacrifice + ing	<i>sacrificé + ing</i>	<i>sacrificing</i>
agree + able	<i>agree + able</i>	<i>agreeable</i>
illuminate + ed	<i>illuminaté + ed</i>	<i>illuminated</i>
assimilate + ion	<i>assimilaté + ion</i>	<i>assimilation</i>
canoe + ing	<i>canoe + ing</i>	<i>canoeing</i>
agree + ed	<i>agreeé + ed</i>	<i>agreed</i>

3 Analyze each word into a free stem plus suffix. Show any final <e> deletion that occurred when the stem and suffix combined. Answer "Yes" or "No" in the right hand column:

Word	Free stem + suffix	Was there final <e> deletion?
assurance	<i>assuré + ance</i>	Yes
accumulating	<i>accumulaté+ing</i>	Yes
horseshoer	<i>horseshoé+er</i>	Yes
alleged	<i>allegé+ed</i>	Yes
courageous	<i>courage+ous</i>	No
admirable	<i>admiré+able</i>	Yes
mistaking	<i>mistaké+ing</i>	Yes
peaceable	<i>peace+able</i>	No
education	<i>educaté+ion</i>	Yes
observer	<i>observé+er</i>	Yes
squeezing	<i>squeezé+ing</i>	Yes
judgement	<i>judge+ment</i>	No

4 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 starts with an <e>, <i>, or <y>. Except for a few stems that end in <ee> or <oe>, you delete all other silent final <e>'s anytime you add a suffix that starts with any vowel.

Teaching Notes.

Item 1. Final <e> deletion is discussed in detail in Book 2, Lessons 20-21; Book 3, Lessons 32, 35, 39, 41; Book 4, Lesson 19. Deleting final <e> in stems that end in <ee> and <oe> is discussed in Book 6, Lessons 1-3.

Item 3. There are two accepted spellings *judgment* and *judgement*, of which the former is the more common. However, since the suffix does not start with a vowel, there is no motivation for deleting the final <e>. The Principle of Preferred Regularity encourages us to prefer the spelling that fits the relevant rules or patterns, so we prefer the spelling *judgement*. For more on the Principle of Preferred Regularity, see AES, pp. 25-26.

Lesson Five Review of Assimilation

1 Three important rules that govern the way elements combine to spell words are the Rule of Simple Addition, the Twinning Rule, and the Final <e> Deletion Rule. A fourth important rule governs the changes that occur in the final consonants of some prefixes when they are added to certain stems. The consonants change their sound and spelling to be more like, or similar to, the first sound and letter in the stem. When sounds and letters change this way to be more similar to a sound or letter near them, the process is called **assimilation**.

For instance, the word *assimilate* actually contains an assimilated spelling of the prefix *ad-*: *ad + similate = ad+s + similate = assimilate*. The sound [d] and the letter <d> in *ad-* change to [s] and <s> to be more similar to – or in this case, exactly the same as – the first sound and letter in the stem *similate*.

2 All of the following words start with some form of the prefix *ad-*. Sometimes the prefix assimilated when it combined with the stem; sometimes it combined by simple addition. Analyze each word into its prefix and stem. Be sure that your analysis shows any assimilation that took place when the prefix and stem combined.

Word	Prefix + Stem
assimilate	<i>ad + s + similate</i>
accelerate	<i>ad+c+celerat</i>
affectionate	<i>ad+f+fectionate</i>
admirable	<i>ad+mirable</i>
allegation	<i>ad+l+legation</i>
addicted	<i>ad+dicted</i>
approximately	<i>ad+p+proximately</i>
advisor	<i>ad+visor</i>
assurance	<i>ad+s+surance</i>
accumulate	<i>ad+c+cumulate</i>
advantage	<i>ad+vantage</i>
adult	<i>ad+ult</i>
applause	<i>ad+p+plause</i>

Word	Prefix + Stem
advancing	<i>ad+vancing</i>
accomplish	<i>ad+c+complish</i>

3 Other prefixes that often assimilate the way *ad-* does are *sub-*, *in-*, *ob-*, *com-*, and *ex-*. Each one of the following words starts with one of these five prefixes. Sometimes they have assimilated, and sometimes they have combined by simple addition. Analyze each word into its prefix and stem. Be sure that your analysis shows any assimilation that has taken place:

Word	Prefix + Stem
accomplished	<i>ad +c+complish</i>
collapse	<i>com+l+lapse</i>
corruption	<i>com+r+ruption</i>
compliment	<i>com+pliment</i>
incredible	<i>in+credible</i>
exclusively	<i>ex+clusively</i>
effortless	<i>ex+f+fortless</i>
immigrant	<i>in+m+migrant</i>
observance	<i>observ+ance</i>
illuminate	<i>in+l+luminate</i>
opportunity	<i>ob+p+portunity</i>
offensive	<i>ob+f+fensive</i>
irregular	<i>in+r+regular</i>
effectively	<i>ex+f+fectively</i>
occurred	<i>ob+c+curred</i>

4 When the last consonant in a prefix changes its sound and spelling to be more similar to the sound and spelling at the beginning of the stem, the process is called assimilation.

Teaching Notes.

Item 1. Assimilation is treated in more detail in the following lessons: Book 4, Lessons 12-14 (especially the prefix *ad-*); Book 4, Lesson 23 (especially 'tt' spellings); Book 4, Lessons 34-38 (especially *sub-*, *in*^{1,2}, and *ob-*); Book 5, Lesson 3 (a review); Book 5, Lessons 4-6 (especially *com-*); Book 5, Lessons 11-13 (especially *ex-*); Book 6, Lesson 13 (especially 'rr' spellings); Book 6, Lessons 36-38 (especially *dis-* and *syn-*).

Lesson Six Full and Partial Assimilation

1 When the consonant sound and letter at the end of the prefix change to be exactly the same as the sound and letter at the beginning of the stem, the process is called **full assimilation**. In many words the consonant sound and letter in the prefix change enough to be more similar to the sound and letter at the beginning of the stem but not exactly like it. This process is called **partial assimilation**. For instance, *com + crete = corh + n + crete = concrete*. Like full assimilation, partial assimilation makes the word easier to pronounce.

2 All of the following words contain the prefix *com-*. Sometimes the prefix and stem combined by simple addition, sometimes by full assimilation, sometimes by partial assimilation. Analyze each one to show the process involved when the prefix and stem combined:

Word	Prefix + Stem
college	<i>corh + l + lege</i>
conscious	<i>corh + n + scious</i>
commentary	<i>com + mentary</i>
congress	<i>corh + n + gress</i>
collapsed	<i>corh + l + lapsed</i>
confession	<i>corh + n + fession</i>
correctly	<i>corh + r + rectly</i>
contracts	<i>corh + n + tracts</i>
companion	<i>com + panion</i>
correspondent	<i>corh + r + respondent</i>
community	<i>com + munity</i>
condemned	<i>corh + n + demned</i>
complexion	<i>com + plexion</i>
conscience	<i>corh + n + science</i>
commission	<i>com + mission</i>
conventional	<i>corh + n + ventional</i>

Word	Prefix + Stem
consistent	<i>con</i> + <i>n</i> + <i>sistent</i>
committee	<i>com</i> + <i>mittee</i>
compelling	<i>com</i> + <i>PELLING</i>
collected	<i>col</i> + <i>l</i> + <i>lected</i>

2 The following words contain some special cases of partial assimilation. Analyze each one as best you can and be ready to talk about why you think these words are spelled the way they are:

Acquaintance, *acquire*, *acquiesce*, and *acquit* contain a partially assimilated form of the prefix *ad-* and stems that start with <qu>. Analyze them:

Word	Prefix + Stem
acquaintance	<i>ad</i> + <i>c</i> + <i>quaintance</i>
acquire	<i>ad</i> + <i>c</i> + <i>quire</i>
acquiesce	<i>ad</i> + <i>c</i> + <i>quiesce</i>
acquit	<i>ad</i> + <i>c</i> + <i>quit</i>

3 *Ecstasy* contains a partially assimilated form of the prefix *ex-* and a stem that starts with <s>:

Word	Prefix + Stem
ecstasy	<i>ex</i> + <i>c</i> + <i>stasy</i>

4 When the last consonant in a prefix changes to be exactly like the first consonant in the stem, the process is called full assimilation. When the last consonant in a prefix changes to be more like, but not exactly like, the first consonant in the stem, the process is called partial assimilation.

Teaching Notes.

Item 1. The increased ease of pronunciation has to do essentially with the position in the mouth in which adjacent sounds are pronounced: The [m] in *com-* is a bilabial sound, pronounced out at the lips. The [k] at the front of *crete* is a velar sound, pronounced back deep in the mouth, at the velum. From the lips to the velum is a long movement. By changing the [m] to an [n], which is an alveolar sound, pronounced with the tongue against the back of the tooth ridge, the movement is shortened and pronunciation eased.

Item 2. The discussion should bear on how [dk] would be a difficult sequence, but <qq> is not allowed in our language, so we use hard <c>, spelling the same [k] as does <q>. Another way of saying it is that <cq> is a kind of double-<q>. The base in *acquaint* is *quaint* which is a Middle English respelling of an Old French that came from Latin and carries the root meaning “know.” *Acquaint* comes from the same Latin word that gave us *recognize* and *cognitive*. The development of senses in *quaint* is a tangled and somewhat obscure story, told well in the *OED*.

The base *quire* in *acquire* comes from a Latin word that meant “to seek, to seek to obtain, to make inquiry about” and also gave us the words *query* and *question*. The base in *acquiesce* is *qui*, which carries the root meaning “quiet” and is closely related to *quiescent* and *quiet*. The base of *acquit* is the free base *quit* and carries the root meaning “free, clear.”

Item 3. The base of *ecstasy* is *stas* “to place, to cause to stand.” The prefix *ex-*, of course, means “out.” So the sense of *ecstasy* is close to our phrases like “out of his mind” or an “out of body experience.” *Ecstasy* comes from a Greek word that meant “trance, distaction.”

Lesson Seven

Review of Vowel and Consonant Patterns

1 In each of the following words find the vowel letter marked with a 'v'. Then mark the next two letters – 'v' for a vowel, 'c' for a consonant. If you come to the end of the word before you have marked all three letters, use the tic-tac-toe sign (#) to mark the end of the word:

confession	accommodate	judgement	illuminate
vcc	vcv	vcc	vcv
ecstasy	disagree	courageous	excelling
vcc	vv#	vcv	vcc
legal	mystical	republican	calculator
vcv	vcc	vcc	vcv
consistent	collapsing	symbol	equip
vcc	vcc	vcc	vc#
rhythmic	zodiac	acquired	acquiesce
vcc	vcv	vcv	vcc
tissue	canoe	picnic	maniac
vcc	vv#	vc#	vc#

In the words with the pattern VV# the second vowel is always the same letter. What letter is it? <e>. For that reason we will call this the Ve# pattern.

2 Now sort the twenty-four words into the following matrix:

	Words with the pattern . . .			
	VCC	VC#	VCV	Ve#
Words in which the marked vowel is short	<i>confession judgement ecstasy excelling mystical republican consistent collapsing symbol rhythmic acquiesce tissue</i>	<i>equip picnic maniac</i>		
Words in which the marked vowel is long			<i>accommodate illuminate courageous legal calculator zodiac acquired</i>	<i>disagree canoe</i>

3 A vowel sound will usually be short if it is the first vowel in the patterns VCC or VC#. A vowel sound will usually be long if it is the first vowel in the patterns VCV or Ve#.

4 Each of the following words contains two vowel letters side by side. Sometimes the two work together to spell a single vowel sound – as in *play* and *gauze*. Sometimes they spell two separate vowel sounds – as in *diet* and *fluid*.

Put a '1' after words in which the two vowel letters spell a single sound and a '2' after those in which they spell two separate sounds.

recruit	1	peaceful	1	defiant	2	poetry	2
society	2	obedience	2	acquiesce	2	realize	2

recruit	1	peaceful	1	defiant	2	poetry	2
entertain	1	acquaint	1	displayed	1	friendly	1
celestial	1	scientist	2	burial	2	suicide	2
annual	2	violence	2	idea	2	undoubtedly	1

5 Sort the twenty words into these two groups:

Words in which the two vowel letters spell . . .

two separate vowel sounds		a single vowel sound
<i>society</i>	<i>acquiesce</i>	<i>recruit</i>
<i>annual</i>	<i>burial</i>	<i>entertain</i>
<i>obedience</i>	<i>idea</i>	<i>celestial</i>
<i>scientist</i>	<i>poetry</i>	<i>peaceful</i>
<i>violence</i>	<i>realize</i>	<i>acquaint</i>
<i>defiant</i>	<i>suicide</i>	<i>displayed</i>
		<i>friendly</i>
		<i>undoubtedly</i>

6 In those words in which the two vowel letters spell two separate vowel sounds, is the first vowel sound long or is it short? long

7 **V.V. Rule.** When two vowel sounds are side by side and spell two separate sounds, the first letter will spell a long vowel sound.

The period in "V.V" is to remind us that there are two separate vowel sounds there.

Teaching Notes.

Item 1. The Ve# pattern is introduced in Book 3, Lesson 16.

Item 2. The VCC and VCV contrast is introduced in Book 1, Lesson 24. The CVC# pattern is introduced in Book 1, Lesson 26.

Item 4. Concerning *celestial*: *Webster's 3rd Unabridged* shows the minor pronunciation [sələstēəl] with two rather than one vowel sounds spelled by <ia>, but most dictionaries show only [sələschəl], which is the one assumed in this table.

Item 5. The V.V pattern is introduced in Book 5, Lesson 7.

**Lesson Eight
Test One**

Words	Analysis
1. <i>compelling</i>	Prefix + bound base + suffix = <u>com + pel + l + ing</u>
2. <i>disclaimer</i>	Prefix + free base + suffix = <u>dis + claim + er</u>
3. <i>displayed</i>	Prefix + bound base + suffix = <u>dis + play + ed</u>
4. <i>instructor</i>	Prefix + bound base + suffix = <u>in + struct + or</u>
5. <i>overcooked</i>	Free base + free base + suffix = <u>over + cook + ed</u>
6. <i>perfectly</i>	Prefix + bound base + suffix = <u>per + fect + ly</u>
7. <i>preschoolers</i>	Prefix + free base + suffix ¹ + suffix ² = <u>pre + school + er + s</u>
8. <i>recruitment</i>	Prefix + bound base + suffix = <u>re + cruit + ment</u>
9. <i>reduction</i>	Prefix + free base + suffix = <u>re + duct + ion</u>
10. <i>undoubtedly</i>	Prefix + free base + suffix ¹ + suffix ² = <u>un + doubt + ed + ly</u>

Teaching Notes. Re: *displayed*.: The bound base *play*¹ is a homophone and homograph with the free base *play*², as in “to play the game.” Other than their spelling and pronunciation, the two words are not related: The bound base *play*¹ comes from a Latin word meaning “to fold” which also is the source of the bases in such words as *apply*, *complicate*, *employ*, *explicate*. *Play*² is from an Old English word that meant pretty much what *play* means today.

Re: *reduction*. The base is the free base *duct*, as in “air duct.” It carries the root meaning “lead, direct” and is closely related to the bound base *duce* (*produce*, *introduce*, *educate*).

Lesson Nine How Do You Spell [k]?

1 The sound [k] is spelled many different ways. Underline the letters that you think are spelling [k] in the following words. Then write the letters that spell [k] in the blanks. You should find that [k] is spelled eleven different ways!

Word	[k] =	Word	[k] =
zodiac <u> </u>	<c>	ac <u> </u> quired	<cq>
remark <u> </u> able	<k>	<u> </u> khan	<kh>
equ <u> </u> ally	<q>	sac <u> </u> charine	<cch>
hock <u> </u> ey	<ck>	book <u> </u> case	<kc>
sch <u> </u> emer	<ch>	trekk <u> </u> ie	<kk>
accommodations	<cc>		

2 In spite of all these different spellings of [k], more than nine times out of ten [k] will be spelled either <c>, <k>, or <ck>. And we can usually predict which of these three spellings to choose. Underline the letters that spell [k] at the beginning of each of the following words:

<u> </u> counterfeit	<u> </u> kitchen	<u> </u> crime	<u> </u> community
<u> </u> career	<u> </u> cavity	<u> </u> kindly	<u> </u> climate
<u> </u> condemn	<u> </u> campaign	<u> </u> congress	<u> </u> capital
<u> </u> key	<u> </u> climate	<u> </u> kettle	<u> </u> conscience

3 Sort the sixteen words into these two groups:

Words in which [k] is spelled . . .

<k>	<c>	
<i>key</i>	<i>c<u> </u>ounterfeit</i>	<i>c<u> </u>rime</i>
<i>k<u> </u>itchen</i>	<i>c<u> </u>areer</i>	<i>c<u> </u>ongress</i>

<k>	<c>	
<i>kindly</i>	<i>condemn</i>	<i>community</i>
<i>kettle</i>	<i>cavity</i>	<i>climate</i>
	<i>campaign</i>	<i>capital</i>
	<i>climate</i>	<i>conscience</i>

4 Underline the letter that comes right after the <c> or <k> in each of the sixteen words above. Then sort the words into this matrix:

Words in which [k] is spelled . . .

	<c>	<k>
Words with an <i> or <e> right after the [k]		<i>key</i> <i>kitchen</i> <i>kindly</i> <i>kettle</i>
Words with no <i> or <e> right after the [k]	<i>counterfeit</i> <i>career</i> <i>condemn</i> <i>cavity</i> <i>campaign</i> <i>climate</i>	<i>crime</i> <i>congress</i> <i>community</i> <i>climate</i> <i>capital</i> <i>conscience</i>

5 In each of these words is there a [k] sound at the beginning of the word, in the middle, or at the end? At the beginning

6 You should have seen that each time a word starts with [k] with an <i> or <e> right after it, the [k] is spelled <k>. Otherwise, [k] at the beginning of a word is spelled <c>. Have you ever seen a word begin with <ck>? No If you saw one, like maybe <ckurp>, wouldn't it look odd? Yes

7 At the beginning of a word, [k] is never spelled <ck>; it is usually spelled <c> or <k>. If the [k] has an <i> or an <e> right after it, it is usually spelled <k>; otherwise, it is usually spelled <c>.

Teaching Notes.

Item 7. The *usually's* in this conclusion are important in two ways:

1. As the students have already seen, [k] can be spelled several different ways, and this conclusion only speaks of those words that have an initial [k] that is spelled either <c> or <k>. It says nothing yet about words like *queen* or *chrome*, in which initial [k] is spelled some way other than <c> or <k>. This lesson and the following are concerned only with sorting out <c>, <k>, and <ck>, which are far and away the most common spellings of [k].

2. There are a number of words, though very few that are commonly used, that have initial [k] spelled <k> with something other than the <e>, <i>, or <y> following that the conclusion calls for. In most cases they are quite recent adoptions that still reflect the spelling patterns of their source languages: *kangaroo* (Australian), *kayak* (Eskimo), *kona* (Hawaiian). Some are from Greek and still have the Greek kappa translated as <k>: *kaleidoscope*, *krypton*. *Kleptomania*, also Greek, has the more regular spelling *cleptomania*. *Krypton* has the same Greek base as cryptic and *crypt* but retains the older spelling with <k>, probably because it is used only in technical language (and, of course, *Superman*), and technical language tends to be conservative in its treatment of words and their spelling. *Kaleidoscope* is somewhat similar: The Greek base *kal(l)-* means "beautiful" and is appears, with a different, and more regular, spelling, in such words as *calligraphy* and *callisthenics*.

For more on the spelling of [k], see *AES*, pp. 355-72.

Lesson Ten Spelling [k] at the End of Words

1 All of the following words end in the sound [k]. Underline the letters that spell the final [k] in each word. Final <e>'s are not part of the spelling of [k]:

remark <u>ck</u>	economic <u>ck</u>	break <u>k</u>	seismic <u>ck</u>
wreck <u>ck</u>	shriek <u>ck</u>	o'clock <u>ck</u>	speck <u>ck</u>
mistake <u>ck</u>	scientific <u>ck</u>	brook <u>ck</u>	hook <u>ck</u>
struck <u>ck</u>	knock <u>ck</u>	rebuke <u>ck</u>	provoke <u>ck</u>
unmask <u>ck</u>	overlook <u>ck</u>	earthquake <u>ck</u>	shark <u>ck</u>

2 Sort the twenty words into these three groups:

Words in which the final [k] is spelled . . .

<c>	<ck>	<k>	
<i>economic</i>	<i>wreck</i>	<i>remark</i>	<i>brook</i>
<i>scientific</i>	<i>struck</i>	<i>mistake</i>	<i>rebuke</i>
<i>seismic</i>	<i>knock</i>	<i>unmask</i>	<i>earthquake</i>
	<i>o'clock</i>	<i>shriek</i>	<i>hook</i>
	<i>speck</i>	<i>overlook</i>	<i>provoke</i>
		<i>break</i>	<i>shark</i>

3 Now sort the twenty words into these two groups:

Words with a consonant sound right in front of the final [k]	Words with a vowel sound right in front of the final [k]	
<i>remark</i>	<i>economic</i>	<i>shriek</i>
<i>unmask</i>	<i>scientific</i>	<i>overlook</i>

Words with a consonant sound right in front of the final [k]	Words with a vowel sound right in front of the final [k]	
<i>shark</i>	<i>seismic</i>	<i>break</i>
	<i>wreck</i>	<i>brook</i>
	<i>struck</i>	<i>rebuke</i>
	<i>knock</i>	<i>earthquake</i>
	<i>o'clock</i>	<i>hook</i>
	<i>speck</i>	<i>provoke</i>
	<i>mistake</i>	

4 Here are some words with short vowel sounds: *bat, bet, bit, bog, book, but*. And here are some with long vowel sounds: *bait, beet, bite, boat, boot, beaut*. Now sort into this matrix the seventeen words from Item 3 with a vowel sound in front of the final [k]:

Words in which the final [k] is spelled . . .

	<c> or <ck>	<k>
Words with a short vowel sound spelled with a single letter in front of the [k]	<i>wreck</i> <i>struck</i> <i>economic</i> <i>scientific</i> <i>knock</i> <i>o'clock</i> <i>seismic</i> <i>speck</i>	
Words with a short vowel sound spelled with a digraph in front of the [k]		<i>overlook</i> <i>brook</i> <i>hook</i>

	<c> or <ck>	<k>
Words with a long vowel sound in front of the [k]		<i>mistake</i> <i>shriek</i> <i>rebuke</i> <i>break</i> <i>earthquake</i> <i>provoke</i>

5 How is the final [k] spelled in the three words that have a consonant sound in front of it? <k> How is it spelled in the five words that have a long vowel in front of it? <k>
How is it spelled in the three words that have a short vowel spelled with a digraph right in front of it? <k>

6 At the end of a word, [k] will usually be spelled <k> if it has a long vowel or consonant sound or a short vowel sound spelled with a digraph right in front of it; but it will usually be spelled <ck> or <c> if it has a short vowel sound right in front of it spelled with a single vowel letter.

Teaching Notes.

Item 5. The statement that a final [k] preceded by a consonant is a good and strong one. But there are a few holdouts, usually new and quite rare: *arc*, *disc* (also *disk*), *franc*, *narc* (also *nark*), *sync* (also *synch*), *talc*, *zinc*

Lesson Eleven

Words That End in <c> and <ck>

1 Below are some words that end with the sound [k]. Underline the letters that spell the final [k] in each of them. Don't worry yet about the columns labeled 'Sounds':

Word	Sounds	Word	Sounds	Word	Sounds	Word	Sounds
poetic <u>ck</u>	3	wreck <u>ck</u>	1	specific <u>ck</u>	3	spe <u>ck</u>	1
str <u>ck</u>	1	athletic <u>ck</u>	3	elastic <u>ck</u>	3	enthusiastic <u>ck</u>	5
scientific <u>ck</u>	4	qu <u>ck</u>	1	zodiac <u>ck</u>	3	che <u>ck</u>	1
kn <u>ck</u>	1	s <u>ck</u>	1	economic <u>ck</u>	4	sympathetic <u>ck</u>	4
traff <u>ck</u>	2	seismic <u>ck</u>	2	schl <u>ck</u>	1	patriotic <u>ck</u>	4

2 Now pronounce each word carefully. Listen for the number of vowel sounds in each word. In the 'Sounds' columns write that number. Eight of the words have one vowel sound. Two have two vowel sounds. Five have three vowel sounds. Four have four vowel sounds, and one has five.

3 Now sort the twenty words into this matrix:

Words with the final [k] spelled . . .

	<c>	<ck>
Words with only one vowel sound		<i>struck</i> <i>knock</i> <i>wreck</i> <i>quick</i> <i>sick</i> <i>schlock</i> <i>speck</i> <i>check</i>

	<c>	<ck>
Words with more than one vowel sound	<i>poetic</i> <i>scientific</i> <i>traffic</i> <i>athletic</i> <i>reissue</i> <i>specific</i>	<i>elastic</i> <i>zodiac</i> <i>economic</i> <i>enthusiastic</i> <i>sympathetic</i> <i>patriotic</i>

4 If a word ends in [k] with a short vowel sound in front of it, the [k] will usually be spelled either <ck> or <c>. If the word has only one vowel sound, the [k] will usually be spelled <ck>. If the word has more than one vowel sound, the [k] will usually be spelled <c>.

5 The following words all contain two vowel sounds but still end in <ck>. Be ready to discuss why they can be analyzed to show that they actually do not contradict the conclusion that in words with only vowel sound final [k] will usually be spelled <ck>:

Word	Analysis
horseback	<i>horse + back</i>
aftershock	<i>after + shock</i>
o'clock	<i>o' + clock</i>
airsick	<i>air + sick</i>
thunderstruck	<i>thunder + struck</i>
yardstick	<i>yard + stick</i>

Teaching Notes.

Item 4. There are *usually*'s in these statements because there are a very few holdouts to these generalizations: *attack*, for instance, and *tic*, *sic*, *sac*.

Item 5. The discussion should point out that each of the long words in the table are compounds that end with a free stem that has one vowel sound and ends <ck>: *back*, *shock*, etc.

Lesson Twelve
Review of <c>, <k>, and <ck>

1 **Spelling A Final [k]:** These twenty words all end in the sound [k]. Sort them into the matrix:

zodiac	struck	hook	o'clock	sympathetic
provoke	shriek	picnic	school	unmask
shark	milk	rebuke	break	brook
remark	traffic	knock	seismic	enthusiastic

Words with final [k] spelled . . .

	<c>	<ck>	<k>
Words with final [k] after a consonant			<i>shark remark milk unmask</i>
Words with final [k] after a long vowel			<i>provoke shriek rebuke break</i>
Words with final [k] after a short vowel spelled with a digraph			<i>hook schnook brook</i>
Words with final [k] after a short vowel spelled with one letter	<i>zodiac traffic picnic seismic sympathetic enthusiastic</i>	<i>struck knock o'clock</i>	

2 A final [k] following a consonant is usually spelled <k>. A final [k] following a long vowel is usually spelled <k>. A final [k] following a short vowel spelled with a

digraph is usually spelled <k>. A final [k] following a short vowel spelled with one letter is usually spelled <ck> or <c>. If there is only one vowel sound in a word that ends with a [k] following a short vowel sound, the [k] is usually spelled <ck>. If there is more than one vowel sound in a word that ends with a [k] following a short vowel sound, the [k] is usually spelled <c>.

3 Spelling An Initial [k]: Here are twenty words that start with the sound [k]. Sort them into the matrix:

campaigned	conscience	kinship	kept	climate
collapsed	kettle	kidnapper	capital	committed
kindliness	community	courageous	crocodile	counterfeit
conventions	correspondent	keyboard	kitchens	kissed

Words that start with [k] spelled . . .

	<c>	<k>
Words with an <i> or <e> following the [k]		<i>kindliness kettle kinship kidnapper keyboard kept kitchens kissed</i>
Words with no <i> or <e> following the [k]	<i>campaigned collapses conventions conscience community correspondent courageous</i>	<i>capital crocodile climate committed counterfeit</i>

5 If an initial [k] has an <e> or an <i> right after it, the [k] is usually spelled <k>; otherwise it will usually be spelled <c>.

Teaching Notes.

Item 5. Again remember the importance of the *usually's* here and that this series of lessons deals only with choosing among the <c>, <k>, and <ck> spellings of [k]. The other eight [k] spellings were identified in lesson 9. The spellings discussed in lessons 20 and 21 are a separate issue.

Lesson Thirteen

Spelling [k] in the Middle of Words

1 Often when a [k] is in the middle of a word, it is actually at the beginning or the end of a shorter word, or free stem, inside the longer one. For instance, there is a [k] in the middle of *recall*. But *recall* actually is made up of the prefix *re-* and the free stem *call*: *recall* = *re* + *call*. The [k] in *call* behaves just the way it is supposed to at the front of a word: It is spelled <c> rather than <k> because it does not have an <e> or <i> after it, and it is not spelled <ck> because words don't start with <ck>.

The word *darkroom* has a [k] in the middle. But *darkroom* is a compound that analyzes to the two free stems *dark* and *room*: *darkroom* = *dark* + *room*. So the [k] in *darkroom* is really at the end of the free stem *dark* – and it behaves just as it is supposed to: It is spelled <k> rather than <c> or <ck> because of the consonant in front of it.

2 All of the following words have a [k] somewhere in the middle. Each of the words actually contains a free stem that has the [k] either at the beginning or the end.

First, underline the letters that spell [k].

Second, analyze each word enough to show the free stem that begins or ends with [k].

Third, be ready to talk about why the [k] is spelled the way it is in the free stems.

Word	Analysis
che <u>ck</u> out	<i>check</i> + <i>out</i>
un <u>co</u> nscious	<i>un</i> + <i>conscious</i>
un <u>ki</u> ndly	<i>un</i> + <i>kind</i> + <i>ly</i>
rema <u>rk</u> able	<i>remark</i> + <i>able</i>
in <u>co</u> nconsistent	<i>in</i> + <i>consist</i> + <i>ent</i>
unenthusi <u>asti</u> cally	<i>unenthusiastic</i> + <i>al</i> + <i>ly</i>
tr <u>ic</u> kiest	<i>trick</i> + <i>y</i> + <i>i</i> + <i>est</i>
pass <u>key</u>	<i>pass</i> + <i>key</i>
break <u>fa</u> st	<i>break</i> + <i>fast</i>

Word	Analysis
music <u>ality</u>	<i>music + al + ity</i>
enc <u>ourage</u>	<i>en + courage</i>
tr <u>ick</u> ster	<i>trick + ster</i>
sick <u>eningly</u>	<i>sick + en + ing + ly</i>
wreck <u>age</u>	<i>wreck + age</i>
mistak <u>enly</u>	<i>mistaké + en + ly</i>
jack <u>knife</u>	<i>jack + knife</i>
book <u>case</u>	<i>book + case</i>
schlock <u>iest</u>	<i>schlock + y + i + est</i>
back <u>cast</u>	<i>back + cast</i>
unl <u>uckily</u>	<i>un + luck + y + i + ly</i>

3 **<K>-insertion.** In a very few words there is a <ck> spelling that occurs when a free stem that ends in <c> has a suffix added to it that starts with <e>, <i>, or <y>: A <k> is inserted after the <c>: For instance, *panic + ed = panic + k + ed = panicked*. The <k> is inserted to avoid having the <c> look as if it should be pronounced as a soft <c>, [s], before the <e>, <i>, or <y>, as it would in *paniced.

Here are some other words with <k> insertion. Analyze each one to show how the the <k> was inserted:

Word	Analysis: Free stem + suffix
panicked	<i>panic + k + ed</i>
panicky	<i>panic + k + y</i>
picnicking	<i>picnic + k + ing</i>
trafficker	<i>traffic + k + er</i>
bivouacked	<i>bivouac + k + ed</i>
sicked*	<i>sic + k + ed</i>

* As in "He sicked his dog on the burglar."

Teaching Notes.

Item 2. Notice that in *jackknife* the second <k> is part of the <kn> spelling of [n]. *Bookcase* and *backcast* are both shown in dictionaries with two [k] sounds: [bùk-kās] and [bak-kast]. But it seems likely that in relaxed everyday speech the two [k]'s merge into one. This merging would make for some odd spellings of [k]: <kc> and <ckc>.

Item 3. Forms of the verb *sic* have variant spellings, the less regular *sicced*, *siccing* . Again, we invoke the Principle of Preferred Regularity to choose the more ruly of variants: *sicked*, *sicking* with the regular <k>-insertion.

Lesson Fourteen Elements with [k] in the Middle

1 You've seen that when [k] comes at the end or the beginning of a word, you can usually predict when to use <c>, <ck>, or <k> to spell it. You've seen, too, that when the [k] is at the end or the beginning of a free stem inside a word, you can usually predict among <c>, <ck>, and <k>. The same pattern holds when the [k] is in the middle of a word but is not at the beginning or end of a stem; that is, when [k] is in the middle of an element, as in *skip* and *scold*.

2 All of the following words contain a [k] in the middle of an element. In each word underline the letter or letters that spell that [k]. Then sort the words into the three groups described below:

contract <u>or</u>	subje <u>ct</u> s	skele <u>t</u> on	sacr <u>if</u> ice
pic <u>n</u> ics	perfec <u>t</u> ly	colle <u>ct</u> s	fun <u>ct</u> ion
instru <u>ct</u> ion	ank <u>l</u> e	affec <u>t</u> ionate	pic <u>t</u> ure
infec <u>t</u> ion	descri <u>b</u> e	pick <u>l</u> e	electr <u>ic</u> ian
restri <u>ct</u> ion	spectac <u>l</u> e	croco <u>d</u> ile	intellec <u>t</u> ual
transc <u>ri</u> ption	prod <u>uc</u> tion	introduc <u>t</u> ion	instinc <u>t</u> ive
chuck <u>l</u> e	sk <u>i</u> rts	don <u>k</u> ey	wrinkl <u>e</u> s
sketch <u>e</u> s	skyscra <u>p</u> er	sk <u>i</u> es	tack <u>l</u> e

Words with the [k] in the middle of an element and spelled . . .

<c>		<k>		<ck>	
<i>contractor</i>	<i>skyscraper</i>	<i>sketches</i>	<i>chuckle</i>		
<i>picnics</i>	<i>collects</i>	<i>ankle</i>	<i>pickle</i>		
<i>instruction</i>	<i>affectionate</i>	<i>skirts</i>	<i>tackle</i>		
<i>infection</i>	<i>crocodile</i>	<i>skyscraper</i>			
<i>restriction</i>	<i>introduction</i>	<i>donkey</i>			
<i>transcription</i>	<i>sacrifice</i>	<i>skies</i>			
<i>subjects</i>	<i>function</i>	<i>wrinkles</i>			

<c>		<k>	<ck>
<i>perfectly</i>	<i>picture</i>	<i>skeleton</i>	
<i>describe</i>	<i>electrician</i>		
<i>spectacle</i>	<i>intellectual</i>		
<i>production</i>	<i>instinctive</i>		

3 Now underline the letter that **follows** that middle [k] sound in each of the words above and sort the words into this matrix:

Words with the [k] in the middle of an element and spelled . . .

	<c>	<k>	<ck>
Words with <e>, <i>, or <y> following the [k]		<i>sketches</i> <i>skirts</i> <i>skyscraper</i> <i>donkey</i> <i>skies</i> <i>skeleton</i>	
Words with no <e>, <i>, or <y> following the [k]	<i>contractor</i> <i>picnics</i> <i>instruction</i> <i>infection</i> <i>restriction</i> <i>transcription</i> <i>subjects</i> <i>perfectly</i> <i>describe</i> <i>spectacle</i> <i>production</i>	<i>skyscraper</i> <i>collects</i> <i>affectionate</i> <i>crocodile</i> <i>introduction</i> <i>sacrifice</i> <i>function</i> <i>picture</i> <i>electrician</i> <i>intellectual</i> <i>instinctive</i>	<i>ankle</i> <i>wrinkles</i> <i>chuckle</i> <i>pickle</i> <i>tackle</i>

4 When the sound [k] is in the middle of an element and is followed by <e>, <i>, or <y>, it will usually be spelled <k>. If it is not followed by <e>, <i>, or <y>, it will usually be spelled <c>.

Teaching Notes.

Item 2. Be sure the youngsters realize that they only have to worry here about the [k] sounds that are not at the beginning or end of free stems.

Items 3-4. Sharp-eyed students may notice that *ankle*, *wrinkles*, *chuckle*, *pickle*, and *tackle* don't fit the conclusion in Item 4 very well. As usual, words that end in <le> form a regular little subgroup, as will be examined in the next lesson.

The reservations and complications mentioned earlier apply here, too: There are a number of words with medial [k] spelled <k> in front of something other than the <e>, <i>, or <y> the conclusion calls for. Some of them are recent adoptions that still retain their foreign spellings: *vodka* (Russian), *ukulele* (Hawaiian), *swastika* (Sanskrit), *polka* (German or French), *pekoe* (Chinese), *paprika* (Hungarian), *okapi* (African), *mazurka* (French and Polish), *skunk* (American Indian). Some are odd, made-up words: *bazooka* and *kazoo*. Some are only apparent problems, since the [k] actually comes at the end of a word that has fallen out of use: *awkward* [awk+ward] and *cockney* [cock+ney, probably]. *Jackal* probably got mistakenly associated with the name *Jack*, *oakum* perhaps with the word *oak*. Others are less easy to account for: *skull*, *skate*, *reckon*, *cuckoo*, *hickory*, *hackney* – all of which once had more regular spellings that for some reason were abandoned in favor of the current ones.

Lesson Fifteen
The Sound [k] before <le>#

1 Here are some words that have [k] right in front of an <le> that comes at the end of the word. Sometimes the [k] is spelled <k>, sometimes <ck>, sometimes <c>. Sort the words into the two groups described below:

wrinkle	ankle	sparkle	trickle	tackle
spectacle	tickle	barnacle	miracle	obstacle
particle	cycle	chronicle	twinkle	vehicle
icicle	chuckle	freckle	article	bicycle
pickle	heckle	shackle	receptacle	oracle

Words in which the [k] follows a . . .

vowel			consonant
<i>spéctacle</i>	<i>héckle</i>	<i>árticle</i>	<i>wrinkle</i>
<i>párticle</i>	<i>bárnacle</i>	<i>recéptacle</i>	<i>ankle</i>
<i>ícicle</i>	<i>chrónicle</i>	<i>táckle</i>	<i>sparkle</i>
<i>píckle</i>	<i>fréckle</i>	<i>óbstacle</i>	<i>twinkle</i>
<i>tíckle</i>	<i>sháckle</i>	<i>véhicle</i>	
<i>cýcle</i>	<i>tríckle</i>	<i>bícycle</i>	
<i>chúckle</i>	<i>míracle</i>	<i>óracle</i>	

2 In words in which [k] follows a consonant and is in turn followed by an <le> that comes at the end of the word, the [k] is spelled <k>.

3 Read aloud each of the words in which the [k] follows a vowel. In each word mark the vowel that has strong stress on it, like this: *wríngle* and *spéctacle*. The vowel with strong stress will not always be the vowel right in front of the [k]. If you get confused, don't be afraid to ask for help or to look words up in your dictionary.

4 Now sort the words you just marked into these two groups:

Words in which the vowel right in front of the [k] . . .

has strong stress		does not have strong stress	
<i>pickle</i>	<i>shackle</i>	<i>spectacle</i>	<i>vehicle</i>
<i>cycle</i>	<i>tackle</i>	<i>particle</i>	<i>barnacle</i>
<i>heckle</i>	<i>freckle</i>	<i>article</i>	<i>bicycle</i>
<i>tickle</i>		<i>icicle</i>	<i>miracle</i>
<i>chuckle</i>		<i>obstacle</i>	<i>receptacle</i>
<i>trickle</i>		<i>chronicle</i>	<i>oracle</i>

5 In words that have a [k] right in front of an <le> that comes at the end of the word and a vowel that does not have strong stress right in front of the [k], the [k] is spelled <c> .

6 Now read over your list of words with a vowel with strong stress right in front of the [k]. Sort the words into these two groups:

Words in which the vowel right in front of the [k] is . . .

short			long
<i>pickle</i>	<i>chuckle</i>	<i>tackle</i>	<i>cycle</i>
<i>heckle</i>	<i>trickle</i>	<i>freckle</i>	
<i>tickle</i>	<i>shackle</i>		

7 In words that have a [k] right in front of an <le> that comes at the end of the word and a vowel with strong stress right in front of the [k], the [k] is spelled <ck> if the vowel is short, and it is spelled <c> if the vowel is long.

8 In words that have a [k] right in front of an <le> that comes at the end of the word:

(i) If there is a stressed short vowel right in front of the [k], the [k] is spelled <ck> ;

(ii) If there is a weak vowel or a strong long vowel right in front of the [k], the [k] is spelled <c> ; and

(iii) If there is a consonant right in front of the [k], the [k] is spelled <k> .

Teaching Notes.

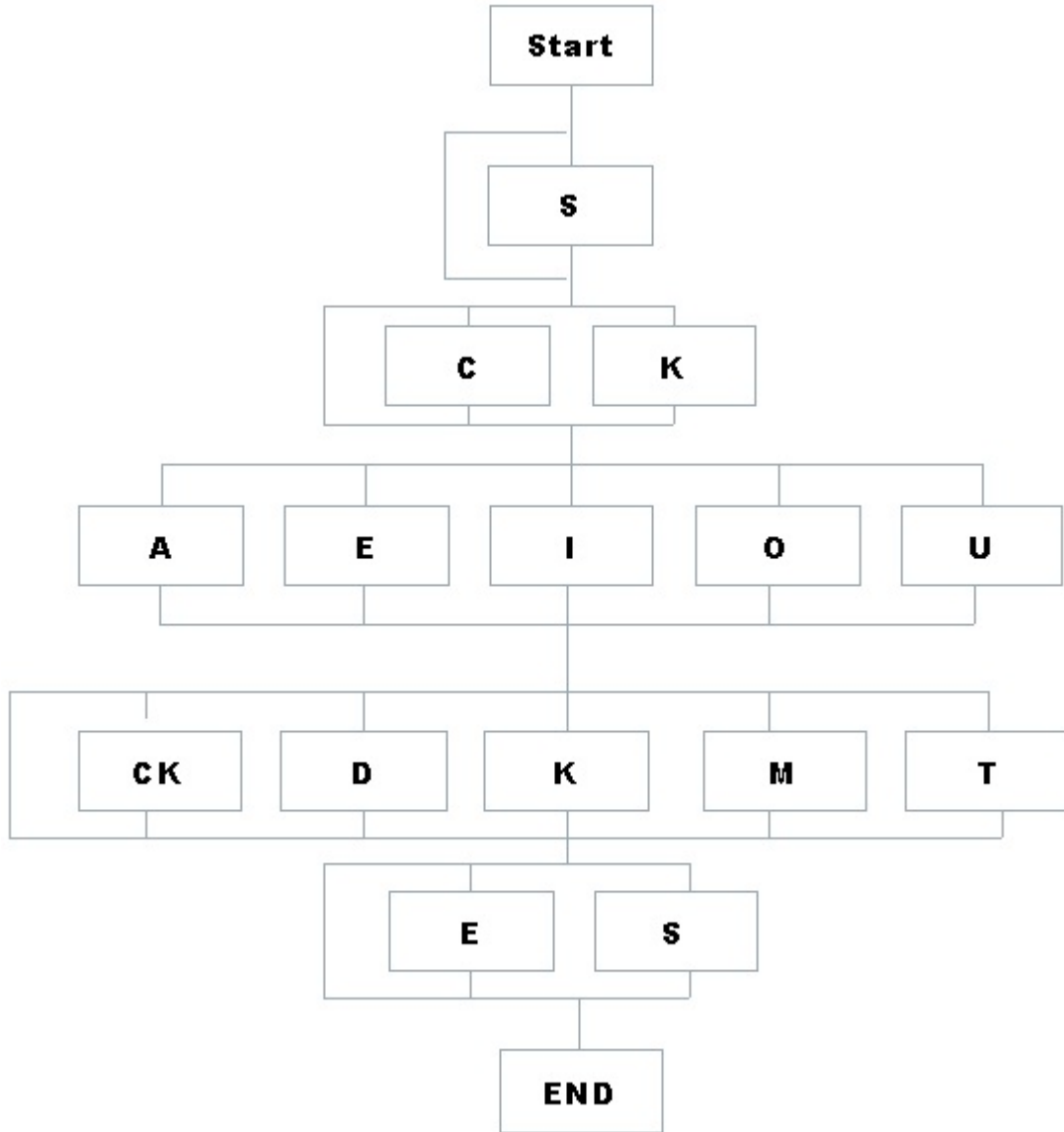
Item 2. The statement that [k] is spelled <k> between a consonant and word-final <le> is a good one, but there are two glaring holdouts: *circle* and *uncle*. *Circle* comes from the Latin *circulus* and appeared in Old English as *círcul*. During the Middle English period it was spelled with <k> as often as with <c>, as for instance, *cerkle*, *cirkle*, *cerkil*, *serkle*, *serkell*. The spelling with <cle> became standard during the 16th century's enthusiasm for making the spelling of English words reflect their Latin roots. *Uncle* comes from the Old French *uncle*, which in turn came from the Latin *avunculus* "mother's brother." During Middle and Early Modern English *uncle* suffered even a wider variety of spellings with <k> than did *circle*: *unkle*, *unckle*, *unkel*, *vnkel*, *unkell*, *unkil*, *unkyl*, *hunckyl*, *ownkyll*, *onkill*, *unckall*

Though the <le> is not at word's end, *nuclear* could also be seen as somewhat odd.

This pattern is discussed in more detail in *AES*, pp. 366-67 and 149-51. (If you are particularly interested, there is still more information referenced at the item "VC'C'le" in the index.)

Lesson Sixteen
Practice with [k] Spelled <c>, <ck>, and <k>

With this Word Flow you can trace out more than fifty words that contain the sound [k], spelled either <c>, <k>, or <ck>. As you find the words, list them in the three columns described below. Some words will go into more than one column.



Words with [k] spelled . . .

<c>		<k>	<ck>
<i>cad</i>	<i>cute</i>	<i>uke</i>	<i>cock</i>
<i>cads</i>	<i>scads</i>	<i>coke</i>	<i>cocks</i>
<i>cam</i>	<i>scam</i>	<i>kick</i>	<i>kick</i>
<i>cams</i>	<i>scams</i>	<i>kicks</i>	<i>kicks</i>
<i>came</i>	<i>scat</i>	<i>kid</i>	<i>sack</i>
<i>cat</i>	<i>scats</i>	<i>kids</i>	<i>sacks</i>
<i>cats</i>	<i>Scot</i>	<i>kit</i>	<i>sick</i>
<i>cock</i>	<i>Scots</i>	<i>kits</i>	<i>sock</i>
<i>cocks</i>	<i>scud</i>	<i>kite</i>	<i>socks</i>
<i>cod</i>	<i>scuds</i>	<i>sake</i>	<i>suck</i>
<i>cods</i>	<i>scum</i>	<i>skate</i>	<i>sucks</i>
<i>code</i>	<i>scums</i>	<i>skid</i>	
<i>come</i>		<i>skids</i>	
<i>cot</i>		<i>skim</i>	
<i>cots</i>		<i>skims</i>	
<i>cud</i>		<i>skit</i>	
<i>cuds</i>		<i>skits</i>	
<i>cuke</i>			
<i>cut</i>			
<i>cuts</i>			

Teaching Notes. I'm pretty sure that there are other words that could legitimately produced by this Word Flow.

Lesson Seventeen
Test Two

Words	Analysis
1. <i>collapsed</i>	[k] = <c> Prefix + free base + suffix = <u>corh+l+lapsē+ed</u>
2. <i>zodiac</i>	[z] = <z> [ē] = <i> [k] = <c>
3. <i>communities</i>	Prefix + bound base + suffix ¹ + suffix ² = <u>com+mune+ity+i+es</u>
4. <i>remarkable</i>	[k] = <k> Prefix + free base + suffix = <u>re+mark+able</u>
5. <i>conscience</i>	[k] = <c> Prefix + free stem = <u>corh+n+science</u>
6. <i>picnicked</i>	[k] = <c> & <ck> Free stem + suffix = <u>picnic+k+ed</u>
7. <i>courageous</i>	[k] = <c> [j] = <g> Free stem + suffix = <u>courage+ous</u>
8. <i>knocked</i>	[k] = <ck> [n] = <kn> Free stem + suffix = <u>knock + ed</u>
9. <i>capital</i>	[k] = <c> Bound base + suffix = <u>capit+al</u>
10. <i>ankle</i>	[a] = <a> [ŋ] = <n> [k] = <k>

Teaching Notes.

Re: *communities*. Our analysis recognizes a silent final <e> in the base because of the included free stem *commune*. But if students were not to show that <e> and its deletion in their analyses, I do not think I would dock them for it.

Lesson Eighteen Some Prefixes That Make <cc>

1 What always comes before <kle>, a vowel or a consonant? a consonant

What always comes before <ckle>, a long vowel, a short vowel, or a consonant?

a short vowel What usually comes in front of the <cle>, a vowel or a consonant? a vowel

2 When they are added to stems that start with <c>, the three prefixes *ad-*, *sub*-, and *ob-* assimilate to *ac-*, *suc-*, and *oc-*, making a <cc> toward the front of the word. Sometimes the <cc> spells the sound [k]; sometimes it spells [ks]. All of the following words contain one of these prefixes. Analyze each word into prefix and stem to show where the two <c>'s come from:

Word	Prefix + Stem
accelerate	<i>ad</i> + <i>c</i> + <i>celerate</i>
according	<i>ad</i> + <i>c</i> + <i>cord</i>
account	<i>ad</i> + <i>c</i> + <i>count</i>
occasionally	<i>ob</i> + <i>c</i> + <i>asionally</i>
successful	<i>sub</i> + <i>c</i> + <i>cessful</i>
occurrence	<i>ob</i> + <i>c</i> + <i>currence</i>
occupy	<i>ob</i> + <i>c</i> + <i>cupy</i>
accident	<i>ad</i> + <i>c</i> + <i>cident</i>
accurate	<i>ad</i> + <i>c</i> + <i>curate</i>
access	<i>ad</i> + <i>c</i> + <i>cess</i>
occupation	<i>ob</i> + <i>c</i> + <i>cupation</i>
accompany	<i>ad</i> + <i>c</i> + <i>company</i>
accommodate	<i>ad</i> + <i>c</i> + <i>commodate</i>
succinctly	<i>sub</i> + <i>c</i> + <i>cinctly</i>
accuse	<i>ad</i> + <i>c</i> + <i>cuse</i>
accumulate	<i>ad</i> + <i>c</i> + <i>cumulate</i>

3 Sort the words into these two groups:

Words in which the <cc> spells . . .

[k]		[ks]
<i>according</i>	<i>occupation</i>	<i>accelerate</i>
<i>account</i>	<i>accompany</i>	<i>successful</i>
<i>occasionally</i>	<i>accommodate</i>	<i>accident</i>
<i>occurrence</i>	<i>accuse</i>	<i>access</i>
<i>occupy</i>	<i>accumulate</i>	<i>succinctly</i>
<i>accurate</i>		

4 Look carefully at the letter that comes right after the <cc> in each of the words. Then sort the words into this matrix:

Words in which the <cc> spells . . .

	[k]	[ks]
Words that have <e> or <i> following the <cc>		<i>accelerate</i> <i>successful</i> <i>accident</i> <i>access</i> <i>succinctly</i>
Words that do not have <e> or <i> following the <cc>	<i>according</i> <i>occupation</i> <i>account</i> <i>accompany</i> <i>occasionally</i> <i>accommodate</i> <i>occurrence</i> <i>accuse</i> <i>occupy</i> <i>accumulate</i> <i>accurate</i>	

5 Be ready to discuss this question: Why do the words sort out the way they do in the matrix in Item 4?

Teaching Notes.

Item 2. The assimilation pattern for *ad-* is introduced in Book 4, Lessons 11-13. That for *sub-* is introduced in Book 4, Lesson 34, and that for *ob-* in Book 4, Lesson 37. These patterns are treated in *AES* as follows: *ad-*, pp. 188-93; *sub-*, pp. 183-86; *ob-*, pp. 195-96.

Item 5. The discussion should get to the way in which <c> before <e>, <i>, or <y> spells soft <c>, [s], while before other letters it spells hard <c>, [k]. Thus the first <c> in <cc> must be hard since it is followed by a <c>, while the second <c> will be soft or hard, depending on the letter following it.

Lesson Nineteen
More Words with <cc> – and More on [ks]

1 The following words all contain assimilated forms of the prefixes *ad-*, *sub-*, or *ob-*. Analyze each one into prefix plus stem to show where the <cc> comes from, and fill in the blanks:

Word	Analysis: Prefix + Stem	The letter after <cc> is ...	The <cc> spells the sound ...
accounting	<i>ad</i> + <i>c</i> + <i>counting</i>	<o>	[k]
accessory	<i>ad</i> + <i>c</i> + <i>cessory</i>	<e>	[ks]
accompanied	<i>ad</i> + <i>c</i> + <i>companied</i>	<o>	[k]
occurred	<i>ob</i> + <i>c</i> + <i>curred</i>	<u>	[k]
occasionally	<i>ob</i> + <i>c</i> + <i>casionally</i>	<a>	[k]
accidentally	<i>ad</i> + <i>c</i> + <i>cidentally</i>	<i>	[ks]
accomplishment	<i>ad</i> + <i>c</i> + <i>complishment</i>	<o>	[k]
successor	<i>sub</i> + <i>c</i> + <i>cessor</i>	<e>	[ks]
succinctly	<i>sub</i> + <i>c</i> + <i>cinctly</i>	<i>	[ks]
occupation	<i>ob</i> + <i>c</i> + <i>cupation</i>	<u>	[k]

2 When there is an <i> or an <e> right after <cc>, the <cc> is pronounced [ks] ; otherwise <cc> is pronounced [k] .

3 You've seen that sometimes <cc> spells [k] and sometimes it spells [ks]. All of the following words contain the sound [ks], spelled different ways. Underline the letters that spell the [ks] in each of these words:

ex <u>cl</u> usive	ex <u>cl</u> amation	ex <u>per</u> ience
hawk <u>s</u>	complex <u>it</u> y	shark <u>s</u>
picnic <u>s</u>	expl <u>od</u> e	ex <u>tra</u> ordinary
ext <u>en</u> d	shriek <u>s</u>	knock <u>s</u>
wreck <u>s</u>	economic <u>s</u>	medic <u>s</u>

4 Sort the fifteen words into these groups:

Words in which [ks] is spelled . . .

<cs>	<cks>	<ks>	<x>
<i>picnics</i>	<i>knocks</i>	<i>hawks</i>	<i>exclusive</i>
<i>economics</i>	<i>wrecks</i>	<i>shrieks</i>	<i>extend</i>
<i>medics</i>		<i>sharks</i>	<i>exclamation</i>
			<i>complexity</i>
			<i>explode</i>
			<i>experience</i>
			<i>extraordinary</i>

5 Look at the words in which [ks] is spelled <cs>, <cks>, or <ks>. Each one consists of a free stem and a suffix. Analyze each word to show what the free stem and suffix are:

Word	Analysis: Free Stem + Suffix
<i>picnics</i>	<i>picnic + s</i>
<i>economics</i>	<i>economic + s</i>
<i>medics</i>	<i>medic + s</i>
<i>knocks</i>	<i>knock + s</i>
<i>wrecks</i>	<i>wreck + s</i>
<i>hawks</i>	<i>hawk + s</i>
<i>shrieks</i>	<i>shriek + s</i>
<i>sharks</i>	<i>shark + s</i>

5 When [ks] is spelled <cs>, <ks>, or <cks> the <s> is usually the suffix -s.

Teaching Notes.

Item 3. Re: *economics*. The suffix *-ics* is defined in the *Random House Unabridged* as “a suffix of nouns that denote a body of facts, knowledge, principles, etc. usually corresponding to adjectives ending in *-ic*”. However, they also describe *-ics* as the plural of *-ic*, which explains our analysis.

Re: the <x> words. For more on the <x> spelling of [ks] and of the voiced counterpart [gz] (in *exact*), see Book 6, Lesson 43, especially the teaching notes.

Lesson Twenty

Sometimes [k] is Spelled <q>, Sometimes <qu>

1 In a few words the letter <q> is used in the spelling of the sound [k]. The letter <q> always is followed by the letter <u>. Sometimes the <u> spells the sound [w] so that the <qu> spells [kw]. Sometimes the <qu> spells just [k]. Read the following words, paying special attention to whether the <qu> in each spells [kw] or just [k]:

antique	conquest	consequently	mosquito	requirement
earthquake	equality	equipment	squadron	square
equivalent	physique	exquisite	frequently	squirrel
liquor	liquid	unique	request	squeak
quantity	quarrel	question	technique	subsequently
quickly	picturesque	quietly	quotation	squeeze

2 Sort the words into these two groups:

Words in which <qu> spells . . .

[kw]			[k]
<i>earthquake</i>	<i>consequently</i>	<i>quotation</i>	<i>antique</i>
<i>equivalent</i>	<i>equipment</i>	<i>requirement</i>	<i>liquor</i>
<i>quantity</i>	<i>exquisite</i>	<i>square</i>	<i>physique</i>
<i>quickly</i>	<i>question</i>	<i>squirrel</i>	<i>picturesque</i>
<i>conquest</i>	<i>quietly</i>	<i>squeak</i>	<i>unique</i>
<i>equality</i>	<i>squadron</i>	<i>subsequently</i>	<i>mosquito</i>
<i>liquid</i>	<i>frequently</i>	<i>squeeze</i>	<i>turquoise</i>
<i>quarrel</i>	<i>request</i>		

3 In words in which <qu> spells [kw], the <u> spells [w], so [k] is spelled <q>. But in words in which the <u> does not spell [w], [k] is spelled <qu>.

4 Whether it's spelling [kw] or [k], <qu> nearly always comes at the very beginning or the very end of the element it is in.

In the thirty words above there are eleven in which the the [k] spelled either <q> or <qu> is the first or the last sound in the word. When it comes at the end, it has a silent final

<e> insulating the <u>. Find the eleven words and copy them into the table below.

Words in which the [k] spelled <q> or <qu> is the ...

first sound in the word		last sound in the word	
<i>quantity</i>	<i>question</i>	<i>antique</i>	<i>unique</i>
<i>quickly</i>	<i>quietly</i>	<i>physique</i>	<i>technique</i>
<i>quarrel</i>	<i>quotation</i>	<i>picturesque</i>	

5 When the [k] is not the first or last sound of the word it is in, it nearly always is the first or last sound of the element it is in. For instance, *conquest* is *corh* + *n* + *quest*, with the [k] spelled <q> the first sound in the free stem *quest*. Analyze each of the following words. Show any assimilation.

Word	Formula	Analysis
conquest	Prefix + free base	<i>corh</i> + <i>n</i> + <i>quest</i>
exquisite	Prefix + bound stem	<i>ex</i> + <i>quisite</i>
requirement	Prefix + bound base + suffix	<i>re</i> + <i>quire</i> + <i>ment</i>
request	Prefix + free base	<i>re</i> + <i>quest</i>
liquor	Bound base + suffix -or	<i>liqu</i> + <i>or</i>
liquid	Bound base + suffix	<i>liqui</i> + <i>id</i>
equality	Bound base + suffix + suffix	<i>equ</i> + <i>al</i> + <i>ity</i>
subsequently	Prefix + bound base + suffix -ent + suffix ²	<i>sub</i> + <i>sequ</i> + <i>ent</i> + <i>ly</i>
consequently	Prefix + bound base + suffix ¹ + suffix ²	<i>corh</i> + <i>n</i> + <i>sequ</i> + <i>ent</i> + <i>ly</i>
turquoise	Bound base + suffix -oise	<i>turqu</i> + <i>oise</i>
bouquet	Bound base + suffix -et	<i>bouqu</i> + <i>et</i>
mosquito	Bound base + suffix -ito	<i>mosqu</i> + <i>ito</i>
frequently	Bound base + suffix ¹ + suffix ²	<i>frequ</i> + <i>ent</i> + <i>ly</i>

6 In five of the thirty words in Item 1 in which [k] is spelled <q>, the <qu> is part of the cluster <squ>. Those five words are:

<i>squadron</i>	<i>square</i>	<i>squirrel</i>	<i>squeak</i>	<i>squeeze</i>
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7 Where does the <squ> cluster come in these five words? At the front

8 The <q> or <qu> that spell [k] are nearly always at the very front or end of the element in which they occur.

Teaching Notes.

Item 5. The bases *quest*, *quis*, *quire* are all closely related and carry the root meaning “seek, ask, inform oneself, ask for.” The base *sequ* means “follow.” *Turqu* is French for *Turk*, turquoise being “the stone from Turkey.” *Bouqu* carries the root meaning “forest,” and *-et* is a French diminutive suffix: A bouquet is a little forest. *Mosqu* means “fly” and *-ito* is a Spanish diminutive suffix: “little fly.”

Lesson Twenty-one

Sometimes [k] is Spelled <ch>, Sometimes <lk>

1 We borrowed the letters of our alphabet from the Romans. The Romans had borrowed their alphabet from a group of people called the Etruscans. And the Etruscans had borrowed their alphabet from the Greeks. One of the Greeks' letters looked like our <X>. It was called *chi*, pronounced [kī], and it spelled the sound [k]. When we borrowed Greek words that contained chi, we changed the spelling from <x> to <ch>, still pronounced [k]—as in words like *chorus*, *school*, and *Christmas*. Most of the words in English that contain the sound [k] spelled <ch> come from old Greek words with chi. Underline the <ch> spellings of [k] in each of the following words:

<u>o</u> rchestra	s <u>ch</u> ool	a <u>rch</u> itect	p <u>sch</u> iatrist
<u>ch</u> orus	<u>ch</u> aos	e <u>ch</u> o	s <u>ch</u> olar
<u>ch</u> ronicle	m <u>ech</u> anic	<u>ch</u> aracter	o <u>rch</u> id
<u>a</u> che	<u>s</u> chedule	<u>s</u> cheme	<u>ch</u> ord
p <u>sch</u> ology	<u>ch</u> emical	a <u>nc</u> hor	<u>Ch</u> ristmas
m <u>on</u> arch	st <u>om</u> ach	t <u>ech</u> nical	<u>ch</u> lorophyll

2 Sort the words into the three groups described below:

Words in which [k] is spelled <ch> . . .

at the front	in the middle		at the end
<i>chorus</i>	<i>orchestra</i>	<i>scheme</i>	<i>ache</i>
<i>chronicle</i>	<i>psychology</i>	<i>anchor</i>	<i>monarch</i>
<i>chaos</i>	<i>school</i>	<i>technical</i>	<i>stomach</i>
<i>chemical</i>	<i>mechanic</i>	<i>psychiatrist</i>	
<i>character</i>	<i>schedule</i>	<i>scholar</i>	
<i>chord</i>	<i>architect</i>	<i>orchid</i>	
<i>Christmas</i>	<i>echo</i>		
<i>chlorophyll</i>			

3 There is one other spelling of [k] that is worth a special look. In a few words [k] is spelled <lk> — as in *chalk*. A long time ago the <l> was pronounced, but no longer. All of the following words contain an <l> that is usually no longer pronounced. Six of them end in the sound [k] spelled <lk>. Sort the sixteen words into the four groups described below:

salmon	talk	stalk	halve
walk	yolk	palm	chalk
folk	halfway	psalm	calves
calf	calm	salve	behalf

Words that end . . .

<lk>	<lf>	<lm>	<lve>
<i>walk</i>	<i>calf</i>	<i>salmon</i>	<i>salve</i>
<i>folk</i>	<i>halfway</i>	<i>calm</i>	<i>halve</i>
<i>talk</i>	<i>behalf</i>	<i>palm</i>	<i>calves</i>
<i>yolk</i>		<i>psalm</i>	
<i>stalk</i>			
<i>chalk</i>			

4 In the words in which [k] is spelled <lk>, what letter usually is right in front of the <l>? <a>. In words in which [k] is spelled <lk>, what other letter sometimes is right in front of the <l>? <o>. In words that end <alk>, which does the <a> spell: [a] or [o]? [o]. In words that end <olk>, which does the <o> spell: [o] or [ō]? [ō].

Word Histories. The first letter of the Greek word for Christ was chi – or <X> – which is why we sometimes abbreviate our word *Christmas* to *Xmas*. The <x> in *Xmas* is really the old Greek chi.

Teaching Notes.

Item 1. *Ache* is not from Greek; it is from Old English. The verb form was originally spelled <ake>. For more see the Word Histories in Book 6, Lesson 11.

Chord has the homophone *cord* “a string or thin rope.” *Chord* is most often used to refer to a combination of musical notes, though it has other technical meanings. Notice that it is *chord* in the phrase “to strike a chord,” meaning to create a feeling in someone.

Item 2. *Saccharin* contains the spelling [k]= <cch>, which reflects a Greek word with the sequence kappa followed by chi, <kkh,> which in Latin usually became <cch>. *Zucchini* also contains [k]= <cch>. In this case the <cch> comes from Italian. *Zucchini* was spelled *succini* in America as late as 1929 but was then respelled to reflect its Italian origins.

Item 3. The similar <lm> spelling of [m] is treated in a supplementary lesson in the teaching notes to Book 5, Lesson 35.

Lesson Twenty-two Practice Spelling [k]

1 This review is in the form of a Wordspell. You are given the sixteen letters with which to spell twenty words, all of which contain [k]. You are also given blanks for the twenty words. We've given you a start by filling in the letters in each word that spell the sound [k]. Here the sixteen letters:

O U N I E R O P Y A D L T S R I

Here are the blanks for the twenty words:

Words with [k] spelled <qu>:

U	N	I	Q	U	E	
A	N	T	I	Q	U	E

Words with [k] spelled <q>:

L	I	Q	U	O	R
L	I	Q	U	I	D

Words with [k] spelled <lk>:

T	A	L	K	
Y	O	L	K	
S	T	A	L	K

Words with [k] spelled <cc>:

O	C	C	U	R			
O	C	C	U	P	Y		
A	C	C	U	S	E		
A	C	C	O	U	N	T	
A	C	C	U	R	A	T	E

Words with [k] spelled <ch>:

A	C	H	E		
E	C	H	O		
C	H	A	O	S*	
C	H	O	R	U	S**
S	C	H	O	O	L
O	R	C	H	I	D***

* Or *chord*. ** Or *chords*. *** Or *anchor*.

2 Here are some words that end in [k] Read them carefully and then fill in the blanks:

knock	brook	walk	gigantic
quick	hook	folk	traffic
wreck	earthquake	milk	zodiac
picnic	provoke	rebuke	thunderstruck
maniac	retake	shark	aftershock

a. When a word ends in [k] with a long vowel in front of it, the [k] is usually spelled <k>.

b. When a word ends in a [k] with a consonant in front of it, the [k] is usually spelled <k>.

c. When a word ends in a [k] with a short vowel in front of it, the [k] is usually spelled either <c> or <ck>. If the word has only one vowel sound in it, [k] will usually be spelled <ck>, but if it has more than one vowel sound in it, the [k] will usually be spelled <c>.

Lesson Twenty-three The Suffixes *-ance* and *-ence*

1 The suffixes *-ance* and *-ence* are added to verbs and to bound stems to form nouns:

inherit (a verb) + *ance* = *inheritance* (a noun)
obedi (a bound base) + *ence* = *obedience* (a noun)

2 The suffixes *-ance* and *-ence* can create problems for spellers because although they have the same pronunciation, [əns], and the same meaning and function (forming nouns), they have different spellings. There are no simple and absolutely reliable rules for predicting when to use *-ance* and when to use *-ence*, but there are some patterns that can help you know when to use *-ence*.

If you can add [ənsʰəl] (spelled <ential>) to the stem and get a recognizable word, the [əns] is *-ence*. For instance, if you can't decide between <confidence> and <confidance>, and you replace the [əns] with [ənsʰəl], the result is a word you should recognize: *confidential*. In any [əns] word that can take [ənsʰəl] this way, you can be sure that the [əns] suffix is *-ence*.

In the middle column below add [ənsʰəl], spelled <ential>, to the verb in the first column. Then in the right hand column add the correct spelling of [əns]:

Verb	Verb + [ənsʰəl]	Verb + [əns]
confide	<i>confidential</i>	<i>confidence</i>
differ	<i>differential</i>	<i>difference</i>
exist	<i>existential</i>	<i>existence</i>
prefer	<i>preferential</i>	<i>preference</i>
refer	<i>referential</i>	<i>reference</i>
reside	<i>residential</i>	<i>residence</i>
revere	<i>reverential</i>	<i>reverence</i>

3 The table below is just like the preceding one except that rather than starting with a verb, you start with a bound stem:

Bound Stem	Bound Stem + [ɛnʃəl]	Bound Stem + [əns]
consequ	<i>consequential</i>	<i>consequence</i>
evid	<i>evidential</i>	<i>evidence</i>
experi	<i>experiential</i>	<i>experience</i>
influ	<i>influential</i>	<i>influence</i>
sent	<i>sentential</i>	<i>sentence</i>

4 Another helpful hint is looking at the stem to which the [əns] has been added. If it is a bound stem, you can be fairly certain that the [əns] is *-ence*. In the right column below add [əns] to the bound stem:

Bound Stem	Bound Stem + [əns]
influ	<i>influence</i>
consci	<i>conscience</i>
consequ	<i>consequence</i>
evid	<i>evidence</i>
experi	<i>experience</i>
innoc	<i>innocence</i>
intellig	<i>intelligence</i>
obedi	<i>obedience</i>
pati	<i>patience</i>
sci	<i>science</i>
sil	<i>silence</i>
viol	<i>violence</i>

Teaching Notes.

Item 3. The bound stem *sent* in *sentence* is not the same as, nor even related to, *sent* “past tense of *send*.” The *sent* in *sentence* comes from Latin and carries the root meaning “feel.” It occurs in *sentient*, *sentiment*, *sentinel*, *assent*, *consent*, *dissent*, *resent* .

Lesson Twenty-four More About *-ance* and *-ence*

1 You have seen two patterns that can help you know when to choose *-ence* rather than *-ance*.

a. Stems that can form adjectives ending in [enshəl] spelled <ential> will form nouns with *-ence*, as in *confidential* and *confidence*.

b. Bound stems that form nouns ending in [əns] usually take *-ence*, as in *patience*.

It would be easy if we could just say that everyplace else you should choose *-ance*. Alas, it is more complicated than that, though there are some things we can say that can directly help you know when to use *-ance*.

But nouns that end in either *-ence* or *-ance* very often have a partner word, an adjective that ends in either *-ent* or *-ant*. For instance, the noun *confidence* has the partner adjective *confident*. And if a noun ends in *-ence* and has such a partner adjective, the adjective will always have *-ent*. If a noun ends in *-ance* and has such a partner adjective, the adjective will be have *-ant*.

This does not directly help us choose between *-ance* and *-ence*, but sometimes we can remember how to spell the adjective but not the noun, or vice versa, so it can help to remember that *-ance* goes with *-ant* while *-ence* goes with *-ent*.

2 Fill in the blanks. Some of the adjectives can also be used as nouns:

Noun	Adjective
assistance	<i>assistant</i>
confidence	<i>confident</i>
<i>difference</i>	different
<i>attendance</i>	attendant
consequence	<i>consequent</i>
existence	<i>existent</i>
<i>defiance</i>	defiant
<i>convenience</i>	convenient

Noun	Adjective
evidence	<i>evident</i>
resistance	<i>resistant</i>
<i>independence</i>	independent
<i>violence</i>	violent
ignorance	<i>ignorant</i>
innocence	<i>innocent</i>
<i>silence</i>	silent
<i>reference</i>	referent
importance	<i>important</i>
intelligence	<i>intelligent</i>
<i>obedience</i>	obedient
<i>patience</i>	patient
residence	<i>resident</i>
presence	<i>present</i>

Teaching Notes.

The *OED* tells the tangled tale of *-ance* and *-ence* in two tight paragraphs, at *-ance* and *-ence*.

**Lesson Twenty-five
Test Three**

Words	Analysis
1. <i>accountant</i>	Prefix + free base + suffix = <u>ad+c+count+ant</u>
2. <i>chaos</i>	[k] = <u><ch></u> [ā] = <u><a></u> in the pattern <u>V.V</u>
3. <i>consequence</i>	[k] = <u><c></u> and <u><q></u> Prefix+bound base+suffix = <u>con+n+sequ+ence</u>
4. <i>existing</i>	Free stem + suffix = <u>exist+ing</u>
5. <i>experience</i>	[ks] = <u><x></u> Prefix+bound base+suffix = <u>ex+peri+ence</u>
6. <i>influence</i>	Prefix+free base+suffix = <u>in+flu+ence</u>
7. <i>obedient</i>	[ō] = <u><o></u> [ē] = <u><e></u> and <u><i></u> in the patterns <u>V CV</u> and <u>V.V</u>
8. <i>patiently</i>	Bound base + suffix ¹ + suffix ² = <u>pati+ent+ly</u>
9. <i>silent</i>	[ɪ] = <u><i></u> in the pattern <u>VCV</u>
10. <i>unique</i>	[yū] = <u><u></u> [ē] = <u><i></u> [k] = <u><qu></u>

Teaching Notes.

Re: *existing*. The free stem *exist* analyzes to *ex+~~s~~ist*, with the <s> deletion typical after <x>.

Re: *influence*. The free base *flu* is not related to the free base *flue* “a duct for smoke or air.” *Flue* is apparently from Old English; *flu* is from Latin. The noun *flu* “a common illness” was clipped from *influenza*.

Lesson Twenty-six The Suffixes *-ic* and *-al*

1 The suffixes *-ic* and *-al* can be used to turn nouns into adjectives. Nouns are words that name persons, places, or things and make sense in this blank:

The _____ seemed okay.

Adjectives are words that modify or describe nouns and make sense in this blank:

It's a very _____ thing.

For instance, *prophet* is a noun that names a kind of person; it fits in the noun sentence: "The prophet seemed okay." But if we add the suffix *-ic* to it, we get *prophetic*, an adjective that describes nouns and that fits into the adjective sentence: "It's a very prophetic thing."

Person is also a noun: "The person seemed okay." But if we add the suffix *-al*, we get the adjective *personal*: "It's a very personal thing."

2 Combine the nouns and suffixes below to make adjectives:

Noun	Suffix	Adjective
athlete	ic	<i>athletic</i>
occasion	al	<i>occasional</i>
profession	al	<i>professional</i>
patriot	ic	<i>patriotic</i>
nation	al	<i>national</i>
rhythm	ic	<i>rhythmic</i>
echo	ic	<i>echoic</i>
accident	al	<i>accidental</i>
education	al	<i>educational</i>
artist	ic	<i>artistic</i>

3 Now try it the other way around: Each of the following adjectives consists of a noun and either the suffix *-ic* or the suffix *-al*. Analyze each adjective into its noun and suffix.

Watch for final <e>'s that have been deleted:

Adjective	Noun	Suffix
enthusiastic	<i>enthusiast</i>	<i>ic</i>
democratic	<i>democrat</i>	<i>ic</i>
universal	<i>universé</i>	<i>al</i>
normal	<i>norm</i>	<i>al</i>
natural	<i>naturé</i>	<i>al</i>
personal	<i>person</i>	<i>al</i>
rhythmic	<i>rhythm</i>	<i>ic</i>
agricultural	<i>agriculturé</i>	<i>al</i>
heroic	<i>hero</i>	<i>ic</i>
original	<i>origin</i>	<i>al</i>

4 Sometimes the suffix *-ic* is added to a bound stem to make a noun or an adjective: *crit + ic = critic*. Then the noun will add on the suffix *-al* to make an adjective: *critic + al = critical*. Here are some more that follow this pattern:

Adjective	Stem	Suffix #1	Suffix #2
critical	<i>crit</i>	<i>ic</i>	<i>al</i>
mechanical	<i>mechan</i>	<i>ic</i>	<i>al</i>
medical	<i>med</i>	<i>ic</i>	<i>al</i>
electrical	<i>electr</i>	<i>ic</i>	<i>al</i>
chemical	<i>chem</i>	<i>ic</i>	<i>al</i>
historical	<i>histor</i>	<i>ic</i>	<i>al</i>
technical	<i>techn</i>	<i>ic</i>	<i>al</i>
identical	<i>ident</i>	<i>ic</i>	<i>al</i>
musical	<i>musé</i>	<i>ic</i>	<i>al</i>
practical	<i>pract</i>	<i>ic</i>	<i>al</i>

Teaching Notes.

Item 4. The free base *muse*¹ refers to one of the Greek goddesses of the arts, the muses. It also occurs in *museum* and *music* and is related to the base in *mosaic*. It is not related to the free base *muse*² which probably carries the root meaning “muzzle” and occurred in Old French *muser* “to ponder or loiter; literally, stay with one’s nose in the air.” *Muse*² occurs in *amuse*, where the root meaning is something like “to cause to stand with one’s muzzle in the air, to cause to ponder or loiter.”

Lesson Twenty-seven Another Suffix *-al*

1 You have seen that one suffix *-al* can be used to make adjectives out of nouns: *instruction* , a noun, becomes *instructional* , an adjective. There is another suffix *-al* that can be used to make nouns out of verbs. A verb is a word that shows action or state of being and that will make sense in a blank like this one:

They will _____ them.

For example, *renew* is a verb: *They will renew them.*

A verb is also a word that changes its form to show changes in time: *Tomorrow they will renew them . vs. Yesterday they renewed them .*

A noun is a name of a person, place, or thing and will make sense in a blank like this one:

The _____ seemed okay.

If we add *-al* to the verb *renew* , we make *renewal* , a noun: *The renewal seemed okay.*

2 Combine the verbs and suffixes below to make new nouns:

Verb	Suffix	Noun
<i>commit+t</i>	al	<i>committal</i>
<i>approv/e</i>	al	<i>approval</i>
<i>arriv/e</i>	al	<i>arrival</i>
<i>dismiss</i>	al	<i>dismissal</i>
<i>remov/e</i>	al	<i>removal</i>
<i>refer+r</i>	al	<i>referral</i>
<i>dispos/e</i>	al	<i>disposal</i>
<i>bur/y+i+al</i>	al	<i>burial</i>
<i>propos/e</i>	al	<i>proposal</i>
<i>tr/y+i</i>	al	<i>trial</i>
<i>refus/e</i>	al	<i>refusal</i>
<i>sign</i>	al	<i>signal</i>

3 Which two nouns did you make that had twinning in them?

<i>committal</i>	<i>referral</i>
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4 In which two nouns did you have to change a <y> to <i> when you added the suffix?

<i>burial</i>	<i>trial</i>
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5 In which six nouns did you have to delete a final <e> when you added the suffix?

<i>approval</i>	<i>removal</i>	<i>proposal</i>
<i>arrival</i>	<i>disposal</i>	<i>refusal</i>

5 Proofreading Quiz. There are six misspelled words in the following paragraph. Each misspelling involves a double consonant that is there but shouldn't be, or should be there but isn't. Find the six misspelled words, cross them out, and spell each one correctly above its misspelling:

Our word *school* comes from an old Greek word that meant "leisure"! That might seem to be a rather odd ^{beginning}beginning for a word that ^{refers}refers to the place where so many people put in so many hours of work. But the ^{classical}classical philosophers ^{preferred}preferred to think of leisure as a time for study and learning. So these words all ^{stemmed}stemmed from a Greek word that meant "a holding back, a rest, leisure": *school, schooling, schoolhouse; scholar, scholarly, scholarship, scholastic, scholastically*. In all of these words that <ch> spelling of [k] comes from the Greek letter *chi*, which is ^{written}written in our alphabet as <ch> pronounced [k].

Lesson Twenty-eight Bound Stems with *-ic* and *-al*

1 You have seen that the suffixes *-ic* and *-al* are sometimes added to bound stems. For instance, the word *mechanical* can be analyzed into *-ic* plus *-al* added to the bound stem *mechan*. When *-ic* or *-al* are added to bound stems, it can be hard sometimes to recognize that the suffixes are there. So here are some nouns and adjectives to analyze for practice. They all contain a bound stem plus either *-ic* or *-al*, or both:

Noun or Adjective	Bound Stem + Suffix or Suffixes
mystical	<i>myst + ic + al</i>
legal	<i>leg + al</i>
medical	<i>med + ic + al</i>
mortal	<i>mort + al</i>
mental	<i>ment + al</i>
technical	<i>techn + ic + al</i>
liberal	<i>liber + al</i>
public	<i>publ + ic</i>
physical	<i>phys + ic + al</i>
social	<i>soci + al</i>
criminal	<i>crimin + al</i>
elastic	<i>elast + ic</i>

2 Now try some the other way around:

Bound Stem + Suffix or Suffixes	Noun or Adjective
<i>myst + ic + al</i>	<i>mystical</i>
<i>mechan + ic + al</i>	<i>mechanical</i>
<i>chem + ic + al</i>	<i>chemical</i>
<i>loc + al</i>	<i>local</i>

Bound Stem + Suffix or Suffixes	Noun or Adjective
equ + al	<i>equal</i>
re + al	<i>real</i>
princip + al	<i>principal</i>
republ + ic	<i>republic</i>
gigant + ic	<i>gigantic</i>
capit + al	<i>capital</i>
com + ic + al	<i>comical</i>
immort + al	<i>immortal</i>

3 Some of the bound stems in these words are in several other words. For instance, the bound stem *mort* in *mortal* means "death" and is in the following words. Underline the bound stem *mort* in each of them:

<u>m</u> ortgage	<u>m</u> ortify	<u>m</u> ortician	a <u>m</u> ortize	<u>m</u> ortuary
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The bound stem in *liberal* is *liber*, "free." Underline it in each of the following:

<u>l</u> iberty	<u>l</u> iberality	un <u>l</u> iberated	ill <u>l</u> iberal
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The bound stem *ment* in *mental* means "mind." Underline it in each of the following:

<u>m</u> entality	d <u>m</u> ented	<u>m</u> ention	co <u>m</u> ment
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The bound stem *myst* means "secret." Underline it in each of the following:

<u>m</u> ystical	<u>m</u> ysterious	<u>m</u> ysticism	<u>m</u> ystery	<u>m</u> ystify
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The bound stem *med* in *medical* means "heal." Underline it:

<u>m</u> edication	<u>m</u> edicine	re <u>m</u> edy	re <u>m</u> edial	me <u>d</u> ics
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Teaching Notes.

Item 3. *Amortize* "to liquidate or extinguish a debt" comes from a Latin word that meant "to extinguish, to put to death."

Lesson Twenty-nine
The Suffixes -al, -ial, and -ual

1 We have two suffixes spelled <al>. One -al changes verbs to nouns: *renew + al = renewal*. The other -al changes nouns and bound bases into adjectives: *incident + al = incidental* and *capit + al = capital*. Analyze each of the following words into its stem plus -al. Show any changes that took place when the stem and suffix combined. Then answer the questions in the two right hand columns:

Original Word	Analysis: Stem + Suffix	Is the original word a noun, or is it an adjective, or is it both?	Is the stem a noun, or is it a verb, or is it bound?
survival	<i>survivé + al</i>	Noun	Verb
dismissal	<i>dismiss + al</i>	Noun	Verb
principal	<i>princip + al</i>	Both	Bound
physical	<i>physic + al</i>	Both	Noun
occasional	<i>occasion + al</i>	Adjective	Noun
trial	<i>try + i + al</i>	Noun	Verb
referral	<i>refer + r + al</i>	Noun	Verb
natural	<i>naturé + al</i>	Both	Noun
professional	<i>profession + al</i>	Noun	Noun
refusal	<i>refusé + al</i>	Noun	Verb
agricultural	<i>agriculture + al</i>	Adjective	Noun
arrival	<i>arrivé + al</i>	Noun	Verb

2 The suffix -al that changes nouns and bound stems to adjectives has two other forms, -ial and -ual. We will look at the reasons for these two forms later, but for now we will just analyze some adjectives that contain them, in order to get used to seeing and hearing them. Analyze each of the following adjectives into a stem plus either -ial or -ual, showing any changes that took place when the stem and suffix combined. Then answer the question in the right hand column

Adjective	=	Stem + Suffix	Is the stem a noun, or is it bound?
actual	=	<i>act + ual</i>	<i>Noun</i>
eventual	=	<i>event + ual</i>	<i>Noun</i>
presidential	=	<i>president + ial</i>	<i>Noun</i>
commercial	=	<i>commercé + ial</i>	<i>Noun</i>
financial	=	<i>financé + ial</i>	<i>Noun</i>
editorial	=	<i>editor + ial</i>	<i>Noun</i>
intellectual	=	<i>intellect + ual</i>	<i>Noun</i>
racial	=	<i>racé + ial</i>	<i>Noun</i>
official	=	<i>officé + ial</i>	<i>Noun</i>
usual	=	<i>usé + ual</i>	<i>Noun</i>
individual	=	<i>individé + ual</i>	<i>Bound</i>
annual	=	<i>ann + ual</i>	<i>Bound</i>
spiritual	=	<i>spirit + ual</i>	<i>Noun</i>
essential	=	<i>essent + ial</i>	<i>Bound</i>
celestial	=	<i>celest + ial</i>	<i>Bound</i>

Teaching Notes.

Item 2. *Act*, *finance*, and *use* can serve also as verbs. The bound stem *individe* contains the free stem *divide*.

The suffixes *-ial* and *-ual* will be discussed in the treatment of [sh] in lessons 40-42 in this book and in treatment of [j] in Book 8, Lesson 32, and in the treatment of [ch] in Book 8, Lesson 40.

Lesson Thirty The Suffixes Spelled <ly>

1 Each of the italicized words below is either an adjective or a noun. Write 'Adjective' or 'Noun' in the blank at the end of each sentence, depending on what the italicized word is:

1. Christine is her very best *friend*. Noun
2. She's a very *friendly* person. Adjective
3. The store just sent us our *monthly* bill. Adjective
4. I thought we paid them off last *month*. Noun
5. Their dog started howling again last *night*. Noun
6. But its howling has become a *nightly* event. Adjective
7. Her *father* just got up and left. Noun
8. That's not a very *fatherly* thing to do. Adjective

2 The four adjectives you just identified all end with the suffix *-ly* that has been added to a noun: *friend*, a noun, becomes *friendly*, an adjective. There is another suffix that is spelled <ly>. This second suffix *-ly* changes adjectives to adverbs.

In the sentence *They are bold fighters*, *bold* is an adjective modifying the noun *fighters*.

In the sentence *They fought boldly*, *boldly* is an adverb modifying the verb *fought*.

Adverbs come in many different kinds and do many different things, but for now we are interested in just the ones that are made by adding the suffix *-ly* to an adjective. Adverbs that end in *-ly* usually modify verbs, like the adverb *boldly* in the sentence *They fought boldly*. And usually adverbs modify verbs by answering the question, How? How did they fight? They fought boldly.

3 Analyze each of the following adverbs into an adjective plus the suffix *-ly*:

Adverb	=	Adjective	+ Suffix
boldly	=	<i>bold</i>	+ <i>ly</i>
solemnly	=	<i>solemn</i>	+ <i>ly</i>
correctly	=	<i>correct</i>	+ <i>ly</i>
immediately	=	<i>immediate</i>	+ <i>ly</i>
equally	=	<i>equal</i>	+ <i>ly</i>
slightly	=	<i>slight</i>	+ <i>ly</i>
regularly	=	<i>regular</i>	+ <i>ly</i>
exactly	=	<i>exact</i>	+ <i>ly</i>
occasionally	=	<i>occasional</i>	+ <i>ly</i>
angrily	=	<i>angry</i> + <i>i</i>	+ <i>ly</i>
accidentally	=	<i>accidental</i>	+ <i>ly</i>
joyfully	=	<i>joyful</i>	+ <i>ly</i>
necessarily	=	<i>necessary</i> + <i>i</i>	+ <i>ly</i>
sufficiently	=	<i>sufficient</i>	+ <i>ly</i>
approximately	=	<i>approximate</i>	+ <i>ly</i>

4 In the table below you can use one or more of the following suffixes to change each noun into one or more adjectives: *-al, -ate, -ful, -less, -ous, -ual, -y*. Write the adjectives in the Adjective column. Then in the Adverb column change each adjective into an adverb. Watch out for changes that occur when you add the suffixes:

Noun	Adjective	Adverb
accident	<i>accidental</i>	<i>accidentally</i>
act	<i>actual</i>	<i>actually</i>
care	<i>careless, careful</i>	<i>carelessly, carefully</i>
faith	<i>faithful, faithless</i>	<i>faithfully, faithlessly</i>
fortune	<i>fortunate, fortuneless</i>	<i>fortunately</i>
fury	<i>furious</i>	<i>furiously</i>

Noun	Adjective	Adverb
haste	<i>hasty</i>	<i>hastily</i>
heart	<i>heartly, heartless</i>	<i>heartily, heartlessly</i>
joy	<i>joyous, joyful, joyless</i>	<i>joyously, joyfully, joylessly</i>
occasion	<i>occasional</i>	<i>occasionally</i>
origin	<i>original</i>	<i>originally</i>
person	<i>personal, personate</i>	<i>personally, personately</i>
success	<i>successful, successless</i>	<i>successfully, successlessly</i>
thought	<i>thoughtful, thoughtless</i>	<i>thoughtfully, thoughtlessly</i>
use	<i>useful, useless, usual</i>	<i>usefully, uselessly, usually</i>

Teaching Notes.

Item 1. Nouns are introduced in Book 2, Lesson 24, adjectives in Book 4, Lesson 3.

Item 3. Be sure the students get the double <l>'s in the adverbs *joyfully*, *accidentally*, *occasionally*, and *equally* – one <l> from *-al*, one from *-ly*.

Item 4. We ask the students for only one adjective and adverb for each noun, but some nouns can take more than one of the given suffixes to form different adjectives. The listing in the table above is fairly exhaustive. There is apparently no adverb *fortunelessly*, though its meaning is clear and it may well become used at any time. The adjective *personate* is from botany and zoology. There may well be other adjectives and adverbs that are not given above: The language changes, and dictionaries don't always agree. My personal criterion is, "If you can find it in a respected dictionary, it's a word."

Lesson Thirty-one The Suffixes *-ed* and *-ing* with *-ly*

1 The suffix *-ed* adds the meanings "in the past" and "action completed" to verbs:

They cooked the turkey yesterday. (*-ed* = "in the past")
The turkey is already cooked. (*-ed* = "action completed")

The suffix *-ing* adds to verbs the meanings "right now, in the present" and "action still going on, action not yet completed."

They are cooking the turkey right now. (*-ing* = "in the present")
The turkey was cooking but now it's cooked. (*-ing* = "action not yet completed"; *-ed* = "action completed.")

Using *-ed* to mean the two things it means makes sense, because if something is in the past, probably it is completed, and if it is now completed, it must have happened in the past. Be ready to discuss this question: Why does it make sense to use *-ing* to mean both "in the present" and "action not yet completed"?

2 Once the suffix *-ing* with the meaning "action not yet completed" or *-ed* with the meaning "action completed" is added to a verb, we can use that new word as an adjective. And we can add *-ly* to that adjective to make an adverb:

In the sentence "The puppies entertain us a lot," *entertain* is a verb.
In the sentence "The puppies are very entertaining," *entertaining* is an adjective modifying *puppies*.
In "The puppies play entertainingly," *entertainingly* is an adverb modifying the verb *play*.

We can do the same thing with *-ed*:

In the sentence "His habits disgust her," *disgust* is a verb.
In "She is very disgusted by his habits," *disgusted* is an adjective modifying *she*.
In "She described his habits disgustedly," *disgustedly* is an adverb modifying the verb *described*.

3 Analyze each of the following adverbs into a verb plus suffixes. Two of the adverbs have prefixes in front of the verb:

Adverb	Analysis: Verb + Suffixes
disgustedly	<i>disgust + ed + ly</i>
charmingly	<i>charm + ing + ly</i>
repeatedly	<i>repeat + ed + ly</i>
surprisingly	<i>surprisé + ing + ly</i>
accordingly	<i>accord + ing + ly</i>
decidedly	<i>decidé + ed + ly</i>
hurriedly	<i>hurry + i + ed + ly</i>
supposedly	<i>supposé + ed + ly</i>
exceedingly	<i>exceed + ing + ly</i>
disappointingly	<i>disappoint + ing + ly</i>

4 Combine the following elements to form adverbs. Show any changes that occur when the elements combine:

Elements	Adverb
enter + tain + ing + ly	<i>entertainingly</i>
ad + mit + t + ed + ly	<i>admittedly</i>
ad + p + prové + ing + ly	<i>approvingly</i>
sur + prisé + ing + ly	<i>surprisingly</i>
un + hurry + i + ed + ly	<i>unhurriedly</i>
inter + est + ed + ly	<i>interestedly</i>
pro + misé + ing + ly	<i>promisingly</i>
di + stingu + ish + ed + ly	<i>distinguishedly</i>

Teaching Notes.

Item 1. Be sure that the youngsters all see that *yesterday* signals "in the past" and that *right now* signals "still going on," reinforcing the meaning of the respective suffixes *-ed*

and *-ing*. You might get them to discuss the effect of a mixed sentence like "They are listening to music yesterday," where the meaning of *yesterday* clashes with the meaning of the *-ing* suffix. What is being discussed here is the use of past participles (with *-ed*) and present participles (with *-ing*), which are adjectives that are derived directly from verbs. Past participles are introduced in Book 4, Lesson 32.

Item 4. In *distinguishedly* the prefix *di-* is a partially assimilated form of *dis-*. The suffix *-ish* is a common ending on English verbs borrowed from French: *abolish*, *accomplish*, *banish*, *blandish*, *blemish*, *brandish*, *burnish*, *cherish*, *demolish*, *embellish*, *establish*, *finish*, *flourish*, *furbish*, *furnish*, *garnish*, *impoverish*, *languish*, *nourish*, *perish*, *polish*, *punish*, *ravish*, *relinquish*, *replenish*, *tarnish*, *vanish*, *varnish*.

This suffix *-ish* occurs by analogy in some verbs that are not from French: *admonish*, *astonish*, *diminish*, *distinguish*, *famish*, *lavish*, *publish*, *relish*, etc.

This *-ish*, usually listed in dictionaries as *-ish*², is not related to *-ish*¹, which is added to nouns and adjectives to form adjectives: *boy*, *boyish*; *red*, *reddish*; etc.

Lesson Thirty-two Some Changes with *-ly*

1 Usually when the suffix *-ly* is added to a stem, it just adds on, by simple addition, with no changes. You only need remember that when the stem ends with an <l>, since *-ly* begins with an <l>, there will be two <l>'s, <ll>, in the new word: *careful + ly = carefully*, *illegal + ly = illegally*, *cruel + ly = cruelly*.

2 But there are two cases in which changes do occur when *-ly* is added to stems.

First, if the stem ends in the letter <c> – especially if it ends in the suffix *-ic* – and if we were to add the stem and suffix through simple addition, we would get a misspelling, as in: *basic + ly = *basicly*. What we have to do is insert the suffix *-al* between the stem and the *-ly*: *basic + ly = basic + al + ly = basically*. We insert this *-al* even if we do not have a word that ends in *-al*, such as **basical*.

3 Analyze the following adverbs, to show this insertion, as we've done with the first one:

Adverb	=	Stem ending in <c>	+	-al	+	-ly
basically	=	<i>basic</i>	+	<i>al</i>	+	<i>ly</i>
athletically	=	<i>athletic</i>	+	<i>al</i>	+	<i>ly</i>
democratically	=	<i>democratic</i>	+	<i>al</i>	+	<i>ly</i>
scientifically	=	<i>scientific</i>	+	<i>al</i>	+	<i>ly</i>
characteristically	=	<i>characteristic</i>	+	<i>al</i>	+	<i>ly</i>
sympathetically	=	<i>sympathetic</i>	+	<i>al</i>	+	<i>ly</i>
artistically	=	<i>artistic</i>	+	<i>al</i>	+	<i>ly</i>
heroically	=	<i>heroic</i>	+	<i>al</i>	+	<i>ly</i>
ecstatically	=	<i>ecstatic</i>	+	<i>al</i>	+	<i>ly</i>
patriotically	=	<i>patriotic</i>	+	<i>al</i>	+	<i>ly</i>
enthusiastically	=	<i>enthusiastic</i>	+	<i>al</i>	+	<i>ly</i>
electrically	=	<i>electric</i>	+	<i>al</i>	+	<i>ly</i>

Notice the <ll>'s in all of these words: one for the *-al* , one for the *-ly*. The only known holdout to this *-al* insertion is *publicly*.

4 Look at the italicized words in this sentence: "The *babies* *cried* all during the *trial*." Then fill in the blanks:

The <y>-to- <i> Rule: When you add a suffix to a stem that ends with a <y> that has a consonant letter right in front of it, you change the <y> to <i>.

5 Each of the following adverbs has been made by adding *-ly* to an adjective that ended in <y>. In each case when the *-ly* was added, the <y> at the end of the adjective changed to an <i>. Analyze each adverb and show the way the <y> was changed to an <i>, as we've done with the first one:

Adverb Suffix <i>-ly</i>	=	Adjective that ends in <y>	+
merrily	=	<i>merry</i> + <i>i</i>	+ <i>ly</i>
angrily	=	<i>angry</i> + <i>i</i>	+ <i>ly</i>
busily	=	<i>busy</i> + <i>i</i>	+ <i>ly</i>
extraordinarily	=	<i>extraordinary</i> + <i>i</i>	+ <i>ly</i>
uneasily	=	<i>uneasy</i> + <i>i</i>	+ <i>ly</i>
icily	=	<i>icy</i> + <i>i</i>	+ <i>ly</i>
hastily	=	<i>hasty</i> + <i>i</i>	+ <i>ly</i>
satisfactorily	=	<i>satisfactory</i> + <i>i</i>	+ <i>ly</i>
readily	=	<i>ready</i> + <i>i</i>	+ <i>ly</i>
heartily	=	<i>heart</i> + <i>y</i> + <i>i</i>	+ <i>ly</i>
steadily	=	<i>steady</i> + <i>i</i>	+ <i>ly</i>
heavily	=	<i>heavy</i> + <i>i</i>	+ <i>ly</i>
necessarily	=	<i>necessary</i> + <i>i</i>	+ <i>ly</i>
ordinarily	=	<i>ordinary</i> + <i>i</i>	+ <i>ly</i>
temporarily	=	<i>temporary</i> + <i>i</i>	+ <i>ly</i>

Teaching Notes.

Item 3. Why *publicly* is a holdout to the *-al* insertion pattern is not entirely clear. But it may have something to do with the fact that the <ic> spelling of both *publicly* and *public* came very late. Earlier spellings of *public* were *publyke*, *publike*, *publique*, *publicque*, *publycke*, *publyque*, *publicke*, *publick*, *publiq*. In the 16th century *public* appeared and quickly became the standard. *Publicly* did not appear until the 19th century. The now-obsolete, but more regular, *publically* is given by the *OED* as an accepted variant, though contemporary American-English dictionaries do not list it. The *OED* gives several citations for *publically* from the 20th centuries.

Item 4. There are some complications to the <y> to <i> change: The shift occurs in *daily* (*day+i+ly*) even though the <y> is preceded not by a consonant but by a vowel. In *dryly* and *shyly* the change does not occur, although there is a more regular variant *drily*.

Lesson Thirty-three Review of Adverbs with *-ly*

1 Use the suffix *-ly* to turn the following nouns, adjectives, and verbs into adverbs. Show the procedures that it takes to make each word. Sometimes you will have to add one suffix, sometimes more than one. Remember that you can often use *-less* and *-ful* to turn nouns into adjectives and that you can turn verbs into adjectives by adding *-ed* or *-ing*. Sometimes you may think of two adverbs that you can make from a stem word. If so, go ahead and make both of them. Just squeeze them in somewhere.

Noun, Adjective, or Verb	Process	Adverb
haste	<i>haste</i> + <i>y</i> + <i>i</i> + <i>ly</i>	<i>hastily</i>
accident	<i>accident</i> + <i>al</i>	<i>accident</i> + <i>al</i> + <i>ly</i>
actual	<i>actual</i> + <i>ly</i>	<i>actually</i>
enthusiastic	<i>enthusiastic</i> + <i>al</i> + <i>ly</i>	<i>enthusiastically</i>
extraordinary	<i>extraordinary</i> + <i>i</i> + <i>ly</i>	<i>extraordinarily</i>
heart	<i>heart</i> + <i>y</i> + <i>i</i> + <i>ly</i>	<i>heartily</i>
origin	<i>origin</i> + <i>al</i> + <i>ly</i>	<i>originally</i>
promise	<i>promise</i> + <i>ing</i> + <i>ly</i>	<i>promisingly</i>
necessary	<i>necessary</i> + <i>i</i> + <i>ly</i>	<i>necessarily</i>
patriot	<i>patriot</i> + <i>ic</i> + <i>al</i> + <i>ly</i>	<i>patriotically</i>
success	<i>success</i> + <i>ful</i> + <i>ly</i>	<i>successfully</i>
thought	<i>thought</i> + <i>less</i> + <i>ly</i>	<i>thoughtlessly</i>
disappoint	<i>disappoint</i> + <i>ing</i> + <i>ly</i>	<i>disappointingly</i>
base	<i>base</i> + <i>ic</i> + <i>al</i> + <i>ly</i>	<i>basically</i>
use	<i>use</i> + <i>ual</i> + <i>ly</i>	<i>usually</i>
solemn	<i>solemn</i> + <i>ly</i>	<i>solemnly</i>

Noun, Adjective, or Verb	Process	Adverb
satisfactory	<i>satisfactory</i> + <i>i</i> + <i>ly</i>	<i>satisfactorily</i>
scientific	<i>scientific</i> + <i>al</i> + <i>ly</i>	<i>scientifically</i>
surprise	<i>surpris</i> + <i>e</i> + <i>ing</i> + <i>ly</i>	<i>surprisingly</i>
person	<i>person</i> + <i>al</i> + <i>ly</i>	<i>personally</i>
sun	<i>sun</i> + <i>n</i> + <i>y</i> + <i>i</i> + <i>ly</i>	<i>sunnily</i>
occasion	<i>occasion</i> + <i>al</i> + <i>ly</i>	<i>occasionally</i>
angry	<i>angry</i> + <i>i</i> + <i>ly</i>	<i>angrily</i>
care	<i>care</i> + <i>ful</i> + <i>ly</i>	<i>carefully</i>
steady	<i>steady</i> + <i>i</i> + <i>ly</i>	<i>steadily</i>
uneasy	<i>uneasy</i> + <i>i</i> + <i>ly</i>	<i>uneasily</i>
logic	<i>logic</i> + <i>al</i> + <i>ly</i>	<i>logically</i>
immediate	<i>immediate</i> + <i>ly</i>	<i>immediately</i>
fortune	<i>fortunat</i> + <i>e</i> + <i>ate</i> + <i>ly</i>	<i>fortunately</i>
admit	<i>admit</i> + <i>t</i> + <i>ed</i> + <i>ly</i>	<i>admittedly</i>
decide	<i>decid</i> + <i>e</i> + <i>ed</i> + <i>ly</i>	<i>decidedly</i>
busy	<i>busy</i> + <i>i</i> + <i>ly</i>	<i>busily</i>
ecstatic	<i>ecstatic</i> + <i>al</i> + <i>ly</i>	<i>ecstatically</i>
ice	<i>ic</i> + <i>e</i> + <i>y</i> + <i>i</i> + <i>ly</i>	<i>icily</i>
faith	<i>faith</i> + <i>ful</i> + <i>ly</i>	<i>faithfully</i>

2 Now try some the other way around. Combine the elements you are given to form adverbs:

Elements	Adverb
mus e + ic + al + ly	<i>musically</i>
in + ex + act + ly	<i>inexactly</i>
in + cor n + r + rect + ly	<i>incorrectly</i>
in + stinct + ive + ly	<i>instinctively</i>
im m + m + medi + ate + ly	<i>immediately</i>
inter + est + ed + ly	<i>interestedly</i>
ordin + ary y + i + ly	<i>ordinarily</i>
sub b + c + cinct + ly	<i>succinctly</i>
in + ex f + f + fect + ive + ly	<i>ineffectively</i>
un + hurr y + i + ed + ly	<i>unhurriedly</i>
un + doubt + ed + ly	<i>undoubtedly</i>
tempor + ary y + i + ly	<i>temporarily</i>

Teaching Notes.

Items 1 and 2. It's important that the youngsters put in all of the intermediate steps, as we have done with *hastily*, showing the intermediate adjective form, *hasty* that is necessary to use the *-ly* suffix for changing adjectives to adverbs. Some youngsters may find it easier to figure out in their heads what the adverb is so that they fill out the Adverbs column first and then go back to work out the process that got them there. That's fine, just so long as they eventually get both columns filled out correctly.

Lesson Thirty-four
Test Four

Words	Analysis
1. <i>agricultural</i>	Free stem + suffix = <u><i>agriculture</i> + <i>al</i></u>
2. <i>angrily</i>	Free stem + suffix = <u><i>angry</i> + <i>i</i> + <i>ly</i></u>
3. <i>enthusiastic</i>	Free stem + suffix = <u><i>enthusiast</i> + <i>ic</i></u>
4. <i>medical</i>	Bound base + suffix ¹ + suffix ² = <u><i>med</i> + <i>ic</i> + <i>al</i></u>
5. <i>mystical</i>	Bound base + suffix ¹ + suffix ² = <u><i>myst</i> + <i>ic</i> + <i>al</i></u>
6. <i>occasionally</i>	Free stem + suffix ¹ + suffix ² = <u><i>occasion</i> + <i>al</i> + <i>ly</i></u>
7. <i>original</i>	Free stem + suffix = <u><i>origin</i> + <i>al</i></u>
8. <i>patriotically</i>	Free stem + suffix ¹ + suffix ² + suffix ³ = <u><i>patriot</i> + <i>ic</i> + <i>al</i> + <i>ly</i></u>
9. <i>personally</i>	Free stem + suffix ¹ + suffix ² = <u><i>person</i> + <i>al</i> + <i>ly</i></u>
10. <i>technically</i>	Bound base + suffix ¹ + suffix ² + suffix ³ = <u><i>techn</i> + <i>ic</i> + <i>al</i> + <i>ly</i></u>

Lesson Thirty-five Homophones and Near-Homophones

1 Homophones are two or more words that have different spellings and meanings but sound exactly alike, such as *bare* and *bear*. Near-homophones are two or more words that have different spellings and meanings and sound very much alike, though not exactly, such as the nouns *refuse* “garbage, rubbish” and *refuge* “haven, protection.”

2 Many homophones and near-homophones involve the spellings <s>, <c>, <sc>, and the sounds [s] and [z], like the following twenty-four sets:

<p>advice, advise cell, sell cellar, seller cent, sent, scent cereal, serial cite, sight, site conscience, conscious cymbal, symbol decent, descent device, devise discuss, discuss hiss, his</p>	<p>loose, lose mussel, muscle phase, faze please, pleas pries, prize prose, pros quarts, quartz recent, resent refuse, refuge sects, sex sic(k)s, six vice, vise</p>
---	--

Sort the sets into the following groups:

Homophones		Near-homophones
<i>cell, sell</i>	<i>please, pleas</i>	<i>advice, advise</i>
<i>cellar, seller</i>	<i>pries, prize</i>	<i>conscience, conscious</i>
<i>cent, sent, scent</i>	<i>prose, pros</i>	<i>decent, descent</i>
<i>cereal, serial</i>	<i>sects, sex</i>	<i>device, devise</i>
<i>sight, cite, site</i>	<i>sic(k)s, six</i>	<i>discus, discuss</i>
<i>quarts, quartz</i>	<i>vice, vise</i>	<i>hiss, his</i>
<i>cymbal, symbol</i>		<i>loose, lose</i>
<i>muscle, mussel</i>		<i>recent, resent</i>
<i>phase, faze</i>		<i>refuse, refuge</i>

3 Two of the sets are homophones involve different spellings of [ks]. Write the second set into the following table:

<i>sects, sex</i>	<i>sic(k)s, six</i>
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4 Two of the sets are homophones involve different spellings of the sound [z]:

<i>phase, faze</i>	<i>pries, prize</i>
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5 Nine of the sets are homophones involve different spellings of the sound [s]:

<i>cell, sell</i>	<i>cereal, serial</i>	<i>cymbal, symbol</i>
<i>cellar, seller</i>	<i>cite, sight, site</i>	<i>mussel, muscle</i>
<i>cent, sent, scent</i>	<i>quarts, quartz</i>	<i>vice, vise</i>

6 Six of the sets of near-homophones contain a word with [z] spelled <s>:

<i>advice, advise</i>	<i>hiss, his</i>	<i>recent, resent</i>
<i>device, devise</i>	<i>loose, lose</i>	<i>refuge, refuse</i>

7 Two of the sets of near-homophones involve shifting the stress from the first to the second vowel:

<i>decent, descent</i>	<i>discus, discuss</i>
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8 One of the sets of near-homophones involves an [n] near the end of one of the words that can easily get lost:

<i>conscience, conscious</i>

Lesson Thirty-six More About Homophones and Near-homophones

1 Here are the sets of homophones and near-homophones with which you worked in the previous lessons:

<p>advice, advise cell, sell cellar, seller cent, sent, scent cereal, serial cite, sight, site conscience, conscious cymbal, symbol decent, descent device, devise discuss, discus hiss, his</p>	<p>loose, lose mussel, muscle phase, faze please, pleas pries, prize prose, pros quarts, quartz recent, resent refuse, refuge sects, sex sic(k)s, six vice, vise</p>
--	--

2 Six of the sets contain a word that ends with one of the suffixes *-s* or *-es*. Write them into the left column below and analyse each into its stem and suffix. Then in the right column write in the other words in each of the six sets:

Word = Stem + suffix	Other word in the set
<i>pleas = plea + s</i>	<i>please</i>
<i>pries = pry + i + es</i>	<i>prize</i>
<i>pro + s</i>	<i>prose</i>
<i>quart + s</i>	<i>quartz</i>
<i>sect + s</i>	<i>sex</i>
<i>sic(k) + s</i>	<i>six</i>

3 In three of the words in the “Other words” column the final <e> is insulating an <s> or a <z>. Write the three below:

<i>please</i>	<i>prize</i>	<i>prose</i>
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4 In two of the words in the “Other words” column the letter <x> is spelling [ks]:

<i>sex</i>	<i>six</i>
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5 The short paragraphs below describe six of the sets. Read each description and then after it write in the words that make up that set:

i. *Cent* comes from a Latin word that means “one hundred ,” because there are a hundred cents in a dollar. The base *cent* occurs in other words that have the meaning “one hundred” or “one-hundredth”: *century*, *centimeter*, *centennial*, and *percent*. *Sent* is the past tense and past participle of *send* , which also starts with <s>. *Scent* “aroma, smell” used to be spelled <sent>. In the 17th century people began adding the <c>, and no one is quite sure why. The three words in this set are

<i>cent</i>	<i>sent</i>	<i>scent</i>
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ii. *Cereal* “grasses and their grains used as food” comes from the name *Ceres*, who was the Roman goddess of agriculture. *Serial* analyzes to *seri+al*. The base *seri* carries the root meaning “to join” and occurs in the word *series*, which also begins with <s>. The two words in this set are

<i>cereal</i>	<i>serial</i>
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iii. *Mussel* “a shellfish” used to be spelled just like *muscle*. The spelling with <ss> is quite recent. Both words derive from a Latin word that meant “little mouse.” The connection between mice and muscles is apparently that when you flex your muscles, it looks like little mice running under your skin. The connection between mice and mussels is apparently their color and shape. The two words in this set are

<i>mussel</i>	<i>muscle</i>
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iv. *Symbol* “sign, representation” analyzes to *syn+m+bol* and carries the root meaning “throw together with.” *Cymbal* “a musical instrument” comes from a Greek word that meant “bowl,” and a cymbal looks like a shallow bowl turned upside down. The two words in this set are

<i>symbol</i>	<i>cymbal</i>
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v. *Phase* “a stage of development” comes from a Latin word that meant “appearance, show” and occurs in *emphasis*. It is related to the bases in words like *phantom* and *phenomenon*. *Faze* “to disconcert, to disturb” is actually a form of an old word, *feeze* “drive,” which we no longer use. The two words in this set are

<i>phase</i>	<i>faze</i>
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vi. *Sight* comes from an Old English word that meant “something seen.” Both *sight* and *seen* start with <s>. *Site* “location, place, position” also occurs in the word *situate*. *Cite* “to quote, honor” comes from a Latin word that meant “to set in motion, to call.” It also occurs in *citation*, *excite*, *recite*, and *resuscitate*. The three words in this set are

<i>sight</i>	<i>site</i>	<i>cite</i>
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Teaching Notes.

Item 5iii. The pronunciation of *muscle* is unusual: The <c> before <l> should not be soft; it should be hard as it is, for instance, in *barnacle* and *oracle*. In past centuries some of the spellings indicate that the <c> was hard: *muskle*, *muskel*, *musckle*, *muskell*. Otto Jespersen observes that during the Middle English period [k] in the cluster [sk] was sometimes lost, as in *muscle*. He also suggests a parallel with the very old and common pronunciation of *asked* as [ast] rather than [askt]. Some dictionaries show [ast] as an accepted variant of [askt].

Lesson Thirty-seven The Suffix *-ion*

1 The suffix *-ion* is used to turn verbs into nouns. Analyze each of the following nouns into verb plus *-ion* :

Noun	=	Verb	+	Suffix
concentration	=	<i>concentraté</i>	+	<i>ion</i>
subtraction	=	<i>subtract</i>	+	<i>ion</i>
collection	=	<i>collect</i>	+	<i>ion</i>
communication	=	<i>communicaté</i>	+	<i>ion</i>
perfection	=	<i>perfect</i>	+	<i>ion</i>
infection	=	<i>infect</i>	+	<i>ion</i>
invention	=	<i>invent</i>	+	<i>ion</i>
possession	=	<i>possess</i>	+	<i>ion</i>
supervision	=	<i>supervisé</i>	+	<i>ion</i>
appreciation	=	<i>appreciaté</i>	+	<i>ion</i>

2 Try some the other way around. Add *-ion* to each of the following verbs to turn them into nouns:

Verb	+	Suffix	=	Noun
<i>educaté</i>	+	<i>ion</i>	=	<i>education</i>
<i>instruct</i>	+	<i>ion</i>	=	<i>instruction</i>
<i>legislaté</i>	+	<i>ion</i>	=	<i>legislation</i>
<i>contributé</i>	+	<i>ion</i>	=	<i>contribution</i>
<i>accommodaté</i>	+	<i>ion</i>	=	<i>accommodation</i>
<i>constituté</i>	+	<i>ion</i>	=	<i>constitution</i>
<i>express</i>	+	<i>ion</i>	=	<i>expression</i>
<i>demonstraté</i>	+	<i>ion</i>	=	<i>demonstration</i>

Verb	+	Suffix	=	Noun
restrict	+	<i>ion</i>	=	<i>restriction</i>
distribut e	+	<i>ion</i>	=	<i>distribution</i>
decorat e	+	<i>ion</i>	=	<i>decoration</i>
indicat e	+	<i>ion</i>	=	<i>indication</i>

3 You've seen that *-ion* is very often added to free stems – namely, verbs – to turn them into nouns. It is also often added to bound stems – again to turn them into nouns. Analyze each of the following nouns into bound stem and *-ion*:

Noun	=	Bound Stem	+	Suffix
occasion	=	<i>occas</i>	+	<i>ion</i>
mention	=	<i>ment</i>	+	<i>ion</i>
ambition	=	<i>ambit</i>	+	<i>ion</i>
recognition	=	<i>recognit</i>	+	<i>ion</i>
dimension	=	<i>dimens</i>	+	<i>ion</i>
fraction	=	<i>fract</i>	+	<i>ion</i>
proportion	=	<i>proport</i>	+	<i>ion</i>
fiction	=	<i>fict</i>	+	<i>ion</i>
function	=	<i>funct</i>	+	<i>ion</i>
precaution	=	<i>precaut</i>	+	<i>ion</i>

4 The suffix *-ion* is used to turn verbs into nouns. It is also added to bound stems to make nouns.

Teaching Notes.

Item 3. Technically, the bases in the bound stems of *occasion* and *dimension* are the free base *case* “instance, situation” and the bound base *mense* “measure. Since it may be a bit much to expect students to recognize the connections, I’ve chosen to ignore the <e>’s.

Lesson Thirty-eight More About *-ion*

1 Sometimes *-ion* is added to a bound stem that is closely related to a verb. For instance, in *satisfaction* *-ion* is added to the bound stem *satisfact*. And *satisfact* is closely related to the verb *satisfy*: When you are satisfied, you feel satisfaction.

In the table below analyze each of the nouns into a bound stem plus *-ion*. Then in the Related Verb column write in the verb. To help you with the correct spelling, the related verbs are all listed here so that all you have to do is find each one and write it into its proper blank in the Related Verb column:

admit	decide	explode	permit	repeat
apprehend	describe	extend	receive	satisfy
commit	divide	introduce	recognize	suspect

Noun	Analysis: Bound stem + suffix	Related Verb
satisfaction	<i>satisfact + ion</i>	<i>satisfy</i>
admission	<i>admiss + ion</i>	<i>admit</i>
decision	<i>decis(ē) + ion</i>	<i>decide</i>
repetition	<i>repetit + ion</i>	<i>repeat</i>
introduction	<i>introduc + ion</i>	<i>introduce</i>
extension	<i>extens(ē) + ion</i>	<i>extend</i>
description	<i>descript + ion</i>	<i>describe</i>
commission	<i>commiss + ion</i>	<i>commit</i>
reception	<i>recept + ion</i>	<i>receive</i>
division	<i>divis(ē) + ion</i>	<i>divide</i>
recognition	<i>recognit + ion</i>	<i>recognize</i>
apprehension	<i>apprehens + ion</i>	<i>apprehend</i>
explosion	<i>explos + ion</i>	<i>explode</i>
permission	<i>permiss + ion</i>	<i>permit</i>
suspicion	<i>suspic(ē) + ion</i>	<i>suspect</i>

2 You have seen that the suffix *-ion* is often added to verbs that end with the suffix *-ate*, as in *educate, education, and legislate, legislation*. Because so many nouns end in <ation> people began to use *-ation* as a single suffix for forming nouns. Often the *-ation* is added to a verb. Analyze the nouns below into verb plus *-ation*, showing any changes that occur:

Noun	=	Verb	+ Suffix
admiration	=	<i>admiré</i>	+ <i>ation</i>
civilization	=	<i>civilizé</i>	+ <i>ation</i>
determination	=	<i>determiné</i>	+ <i>ation</i>
examination	=	<i>examiné</i>	+ <i>ation</i>
information	=	<i>inform</i>	+ <i>ation</i>
limitation	=	<i>limit</i>	+ <i>ation</i>
observation	=	<i>observé</i>	+ <i>ation</i>
recommendation	=	<i>recommend</i>	+ <i>ation</i>

3 Like *-ion*, *-ation* is also sometimes added to a bound stem, usually one that is closely related to a verb. Analyze each of the following nouns into a bound stem plus *-ation*. Then for each noun other than *indignation* fill in the related verb. Again, the related verbs are listed below:

acclaim explain reveal
 apply occupy
 exclaim proclaim

Noun	Analysis: Bound stem + suffix	Related Verb
acclamation	<i>acclam + ation</i>	<i>acclaim</i>
occupation	<i>occup + ation</i>	<i>occupy</i>
application	<i>applic + ation</i>	<i>apply</i>
proclamation	<i>proclam + ation</i>	<i>proclaim</i>
revelation	<i>revel + ation</i>	<i>reveal</i>
explanation	<i>explain + ation</i>	<i>explain</i>

Noun	Analysis: Bound stem + suffix	Related Verb
exclamation	<i>exclam</i> + <i>ation</i>	<i>exclaim</i>
indignation	<i>indign</i> + <i>ation</i>	

4 The double suffix *-ation* is often added to verbs and bound stems to make nouns.

Teaching Notes.

Item 1. The bases in five of the bound stems in this table actually end with a silent final <e> that must be deleted when *-ion* is added: (i) *decision* contains the base *cise* “cut”, which also occurs in *concise*; (ii) *repetition* contains *petite* “seek”, which also occurs in *appetite*; (iii) *extension* contains *tense* “stretch” as in *intense*; (iv) *division* contains the bound base *vise* “separate,” as in *devise*; (v) *suspicion* contains *spice* “look at,” as in *auspice*. (*Auspice* analyzes to *au+spice*, the base *au* “bird” being a form of our base *av* as in *avian* and *aviary*. The Latin source word for *auspice* referred to divination and prophecy based on watching the flight of birds.) You can decide whether to require your students to hold to the letter of the law and show the <e> deletions in their analyses or to allow them simple additions, on the grounds that these are pretty subtle relationships, as between *suspicion* and *auspice*, for instance. One strategy might be to have the students work the table on their own, assuming that most of them will choose simple addition for the five listed above. Then you might point out, for instance, that *division* is closely related to *devise* and ask how that knowledge suggests an analysis other than *divis+ion*.

The bases in three of the bound stems look as if they could well end with a silent final <e>: *recognit*, *apprehens*, *explos*. However, there are no known instances of words ending in these bases and thus requiring the final <e>. In the spirit of keeping procedures as simple as possible, we assume simple addition here rather than final <e> deletion.

Item 2. The criterion for deciding that these nouns all take *-ation* rather than *-ion* is that there are no intermediate <ate> forms: We have, say, *admire* and *admiration*, but no **admirate*. Of course, the language is ever changing and intermediate forms in <ate> may well come into use.

Item 3. Today we no longer have a verb spelled <indign>. The *OED* lists an obsolete *indign*, last cited in the 17th century, which meant “to treat with indignity; to resent.” The *OED* offers this intriguing citation: “Diana, indigning this insolency, raised up a scorpion, that slew him.”

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

1 You can hear the sound [sh] at the beginning and end of the word *shush* . One of its best known spellings, not too surprisingly, is <sh>. Underline the letters that spell [sh] in the following words:

<u>s</u> hepherd <u>ess</u>	horse <u>sh</u> oe	acc <u>ompl</u> ish <u>ed</u>	<u>s</u> heriff
nour <u>ish</u>	kin <u>sh</u> ip	<u>sh</u> ocking	friend <u>sh</u> ip
self <u>ish</u>	<u>sh</u> rieked	aft <u>ersh</u> ock	publ <u>ish</u> er
<u>sh</u> oulder	d <u>ist</u> ingu <u>ish</u>	<u>sh</u> udder	van <u>ish</u>

2 Sort the words into these two groups:

Words with [sh] spelled <sh> at the . . .

front of an element	end of an element
<i>shepherdess</i>	<i>nourish</i>
<i>shoulder</i>	<i>selfish</i>
<i>horseshoe</i>	<i>distinguish</i>
<i>kinship</i>	<i>accomplished</i>
<i>shrieked</i>	<i>publisher</i>
<i>shocking</i>	<i>vanish</i>
<i>aftershock</i>	
<i>shudder</i>	
<i>sheriff</i>	
<i>friendship</i>	

3 One common spelling of [sh] is <sh>, which usually comes at the front or at the end of an element.

4 The following words contain two other spellings of [sh] that are not so common as <sh>. Eleven of the words contain [sh] spelled Way #1, and four words contain [sh] spelled Way #2. Underline the letters that spell [sh] in each word and then sort the words into the two different groups described below:

chivalry chaperon schlemiel
 crochet schwa machine
schnook champagne chauffeur
 parachute mustache pistachio
chagrin schlock nonchalant

5 **Words with [sh] spelled . . .**

Way #1		Way #2
<i>chivalry</i>	<i>mustache</i>	<i>schnook</i>
<i>crochet</i>	<i>machine</i>	<i>schwa</i>
<i>parachute</i>	<i>chauffeur</i>	<i>schlock</i>
<i>chagrin</i>	<i>pistachio</i>	<i>schlemiel</i>
<i>chaperon</i>	<i>nonchalant</i>	
<i>champagne</i>		

6: Three ways to spell [sh] are <sh>, <ch>, and <sch>.

Teaching Notes.

Item 2. In order to decide on the location of <sh> in elements, students must work out, either in their heads or on scratch paper, the analysis of words like *horseshoe* (horse+shoe), *kinship* (kin+ship), *accomplished* (accomplish+ed), *aftershock* (after+shock), *friendship* (friend+ship), *publisher* (publish+er). If they have trouble with this more casual act of analysis, you might add a step between Items 1 and 2 in which they work out, perhaps as a group, the analysis of the sixteen words, looking always for an element boundary either right before or right after the <sh>.

Item 4. 1. Although in Old English [sh] was spelled <sc>, and <sh> was not introduced until after the Norman Conquest by the Norman-French scribes, <sh> has become the "normal" or "English" spelling of [sh]. The <ch> spelling is most common in recent French adoptions. (The <ch> spellings of [sh] in *Chicago* and *Michigan* reflect the early French influence in the area.) The <sch> spelling is found in some German words, especially proper names. But usually it is found in words from Hebrew and Yiddish, particularly in a set of Yiddish pejorative terms of which *schlemiel*, *schlock*, and *schnook* are only three. For more on [sh] and its spellings, see *AES*, pp. 407-12.

Lesson Forty Very Often [sh] is Spelled <t>

1 Although we usually think of <sh> as the way [sh] is spelled, actually [sh] is most often spelled <t>. You can see and hear [sh] spelled <t> in the middle of the word *nation* .

In some of the following words [sh] is spelled <t>; in some it is spelled differently. Underline the letters that are spelling [sh] in each word:

educat <u>io</u> nal	president <u>ia</u> l	prescript <u>io</u> n	accommodat <u>io</u> n
impat <u>i</u> ence	init <u>i</u> al	repetit <u>i</u> on	fract <u>i</u> on
indicat <u>i</u> on	possess <u>io</u> n	invent <u>i</u> ons	dimens <u>i</u> on
express <u>i</u> on	quotat <u>i</u> on	exclam <u>a</u> tion	affectionat <u>e</u> ly
missionar <u>ie</u> s	extens <u>i</u> on	subtra <u>ct</u> ion	delet <u>i</u> on

2 Sort the words into these two groups:

Words in which [sh] . . .

is spelled <t>		is not spelled <t>
<i>educational</i>	<i>inventions</i>	<i>expression</i>
<i>impatience</i>	<i>exclamation</i>	<i>missionaries</i>
<i>indication</i>	<i>subtraction</i>	<i>possession</i>
<i>presidential</i>	<i>accommodation</i>	<i>extension</i>
<i>initial</i>	<i>fraction</i>	<i>dimension</i>
<i>quotation</i>	<i>affectionately</i>	
<i>prescription</i>	<i>deletion</i>	
<i>repetition</i>		

3 The <t> spelling of [sh] is very common, but it only occurs in a certain place in a word. Here are a number of words that contain <t>. Sometimes the <t> spells [sh]; sometimes it does not. In the column labeled '<t> spells' write out the sound that <t> spells in each word, as we have done with *judgement* and *partial*:

Words	<t> spells	Words	<t> spells	Words	<t> spells
<i>judgement</i>	[t]	mustache	[t]	association	[sh]
<i>partial</i>	[sh]	conventional	[sh]	technical	[t]
affection	[sh]	initial	[sh]	proportion	[sh]
traffic	[t]	nonchalant	[t]	examination	[sh]
nation	[sh]	extension	[t]	reception	[sh]
impatience	[sh]	incorrect	[t]	deletion	[sh]
educated	[t]	education	[sh]	appreciation	[sh]

4 Sort the words from Item 3 into this matrix:

		Words in which <t> . . .	
		spells [sh]	does not spell [sh]
Words with the <t> at the front or the end			<i>judgement</i> <i>traffic</i> <i>nonchalant</i> <i>incorrect</i> <i>technical</i>
	Words with the <t> in the middle	<i>partial</i> <i>affection</i> <i>nation</i> <i>impatience</i> <i>conventional</i> <i>initial</i> <i>education</i>	<i>association</i> <i>appreciation</i> <i>proportion</i> <i>examination</i> <i>reception</i> <i>deletion</i>
			<i>educated</i> <i>mustache</i>

5 In the words in his matrix does the letter <t> ever spell the sound [sh] at the front or the at the end of a word? No

6 Whenever <t> spells [sh], where is it in the word? In the middle

7 The letter <t> **never** spells [sh] at the beginning or end of a word. It only spells [sh] somewhere in the middle. In fact, <t> only spells [sh] right at the boundary between the stem and a suffix, **always**.

Teaching Notes.

1. If <sh> is the "English" spelling of [sh] and <ch> is the "French" spelling, <t> is the "Latin" spelling, since nearly all, or all, of the words with [sh] = <t> come from Latin.

2. The <t> spelling of [sh], and the other spellings examined in this and the next lesson, are all due to a process called **palatalization**. The palate is the roof of the mouth. A sound is said to be palatalized when the place where it is pronounced in the mouth is pushed back so that it is pronounced against the palate.

For instance, the sound [t], which <t> normally spells, is pronounced by pressing the tongue against the back of the upper teeth or against the dental, or alveolar, ridge from which the teeth grow. If you move your tongue back so that it presses against your palate and try to pronounce [t], you make a sound that is like [t] followed by a [sh], [tsh], which is actually the [ch] sound. So the palatalized pronunciation of [t] is [tsh], or [ch]. Over the centuries the [tsh] simplified to [sh], giving us the sound we are looking at in these lessons.

Thus, the <t> spelling of [sh] is due to the movement of the sound back in the mouth, to the palate, followed by a simplification of [tsh] to [sh]. The basic trigger is the unstressed <i> following the <t>: When that unstressed <i> is followed by another unstressed vowel, it simplifies to a [y]-like glide, and the sequence [ty] pulls the tongue back onto the palate. That movement back to the palate leads ultimately to the [sh] sound.

You may have noticed that in many of the words in which <t> spells [sh], the <t> is followed by the suffix *-ion*, as in *affection* and *deletion*. Notice that *-ion* starts with an

<i> that is followed by another vowel, <o>, and that both the <i> and the <o> are unstressed. So *-ion* provides a perfect setting for palatalization and for <t> to spell [sh]. And *-ion* is a very common suffix in modern English.

AES provides more details on the palatalized spellings of [sh] (pp. 409-12), and most books on English phonetics and phonology discuss palatalization in considerable detail.

Lesson Forty-one
Where and When [sh] is Spelled <t>

1 Is [sh] ever spelled <t> at the beginning of a word? No Is [sh] ever spelled <t> at the end of a word? No

2 Here are some words in which [sh] is spelled <t>. In each word mark the two letters following the <t> that spells [sh], either 'v' or 'c' for vowel or consonant, as we have done with *ambition* :

ambition v v	partial v v	contribution v v	indignation v v
association v v	quotient v v	repetition v v	constitution v v
conventions v v	proportion v v	affectionately v v	restrictions v v
fractions v v	subtraction v v	prescription v v	quotation v v
deletion v v	impatience v v	reception v v	immigration v v

3 You should have found that in every word there was always the same pattern following the <t>. Was it CC, CV, VV, or VC? VV

4 Whenever <t> spells [sh] it is always followed by two vowels. The vowel right after the <t> is always the same one. What is it? <i>

5 Whenever [sh] is spelled <t>, the <t> is always followed by two vowels, and the first of the two vowels is always an <i>. That pattern explains why <t> spells [t] in the first word in each of the following pairs but it spells [sh] in the second word:

<t> spells [t]	<t> spells [sh]
native	nátion
receptive	recéption
parting	pártial
deleted	delétion

immigrated	immigración
fractal	fracción
affecting	afécción

6 In the words in the right column above is the <t> always followed by an <i> and another vowel? Yes In the words in the left column is the <t> ever followed by an <i> and another vowel? No

7 In the right column what sound does <t> spell? [sh] In the left column what sound does <t> spell? [t]

8 In each of the words in the right column, mark the vowel that has heavy stress, as we have done with *nation*. Does the <i> and the next vowel after the <t> that spells [sh] ever have heavy stress on it? No

When [sh] is spelled <t>, the two vowels after the <t> will never be stressed.

9 In each of the following words [sh] is spelled <t> and each one ends with the suffix *-ion*. Analyze each word into its stem and *-ion*, showing any changes that occurred when the stem and suffix combined. Most of the stems are free, but one is bound. Be sure to show any final <e> deletions:

Word	=	Stem + Suffix <i>-ion</i>
legislation	=	<i>legislaté + ion</i>
indication	=	<i>indicaté + ion</i>
calculation	=	<i>calculaté + ion</i>
restriction	=	<i>restrict + ion</i>
contribution	=	<i>contributé + ion</i>
appreciation	=	<i>appreciaté + ion</i>
precaution	=	<i>precaut + ion</i>

Teaching Notes.

As was said in the Teaching Notes to Lesson 40, the trigger here is the unstressed <i> following the <t>: When the <i> is followed by another unstressed vowel, the <i> tends to simplify to a [y]-glide. Articulating a [y]-glide tends to pull the tongue back to the palate, which leads to [tsh] and ultimately [sh]. The sequence is [ti] > [ty] > [tsh] > [sh]. There are a very few holdouts worth mentioning:

Lesson Forty-two
More Spellings of [sh]: <c>, <sc>, <ss>, and <s>

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

expression official dimension conscience
social suspicious succession missionary
consciously financial electrician possession
racial intermission apprehension specially
extension suspension sufficiently mansion

2 Sort the words into these four groups:

Words with [sh] spelled . . .

<c>	<s>	<ss>	<sc>
<i>social</i>	<i>extension</i>	<i>expression</i>	<i>consciously</i>
<i>racial</i>	<i>suspension</i>	<i>intermission</i>	<i>conscience</i>
<i>official</i>	<i>dimension</i>	<i>succession</i>	
<i>suspicious</i>	<i>apprehension</i>	<i>missionary</i>	
<i>financial</i>	<i>mansion</i>	<i>possession</i>	
<i>electrician</i>			
<i>sufficiently</i>			
<i>specially</i>			

3 Look carefully at your four groups of words and answer the following questions:

- a. When [sh] is spelled <s>, <c>, <sc>, or <ss>, are the next two letters always vowels or consonants or what? Always vowels
- b. What letter always comes right after the <s>, <c>, <sc>, or <ss>? <i>

c. Do the vowels after the <s>, <c>, <sc>, or <ss> have weak stress or heavy stress? Weak

4 There is one more spelling of [sh]. Underline the letters that spell [sh] in these words:

sugar assured insurance

fissure pressure issue

tissue censure sure

In these words (and pretty much these words only) [sh] is spelled <s> or <ss> with no <i> or second vowel following.

a. In these words what letter always comes after the <s> or <ss>? <u>

b. What letter almost always comes after that one? <r>

5 In each of the following pairs of words the <t>, <c>, <s>, <ss>, and <sc> sometimes spell [sh] and sometimes do not. Be ready to discuss why they do not spell [sh] in those words in which they do not:

social	society
prediction	predicting
finances	financial
official	office
completion	complete
conscience	science
physician	physical
recess	recession
description	descriptive
patent	patient
partial	part

6 Eight ways of spelling [sh] are <sh>, <ch>, <sch>, <t>, <c>, <s>, <sc>, and <ss>.

7 Those spellings of [sh] that are **always** followed by an unstressed <i> and another unstressed vowel are <t>, <c>, <s>, <sc>, and <ss>.

Teaching Notes.

In this lesson it is important that the students see that the setting in which <c> and <sc> spell [sh] is basically the same as the setting in which <t> spells [sh] and that the settings for <s> and <ss> are also usually the same, though <s> and <ss> also can spell [sh] before <u>. The underlying cause for these spellings is once again the palatalization described in the previous lessons.

Item 1: Notice that the <sc> spelling is pretty much restricted to words that contain the bound base *sci*, "know." *Sci* also occurs in the words *science* and *scientific*, without palatalization because the <i> is stressed.

Item 3(b): One noteworthy holdout to this stipulation is *ocean*, with [sh] spelled with a <c> that is followed with <e> rather than <i>. From its first appearance in English until the 17th century, *ocean* was often spelled <ocian,> in line with the pattern described in 3(b). But in the 17th century the spelling settled on the French spelling, with <e> rather than <i>. Two other holdouts are the suffixes *-aceous* and *-acean*, which have kept the original Latin spelling.

Item 4: Notice that we are dealing here almost exclusively with words that contain the base *sure* or the suffix *-ure* added to a stem that ends <s> or <ss>. It seems likely that earlier there was a [y]-like glide at the front of the <u> vowels in these words, as there still is in words like *fuel*. In the case of the words with a following [r] listed here, the [y]-glide triggered a palatalization similar to that triggered by the <i> in words like *dimension*.

The wildcard, of course, is *sugar*. Probably the same thing happened with it, though it is not clear why it happened just to *sugar*. There is, in fact, more than one unknown in the history of this word. For instance, we are not even sure where the [g] and <g> come from, since its earliest English forms had [k]. There is a distant relationship with *saccharin*. We adopted the word from French, and the Modern French word is *sucre*. But *sugar* has a truly complicated history. Here's the etymology given in the *AHD*: "Middle English *sugre*, from Old French *sukere*, from Medieval Latin *succārum*, from Old Italian *zucchero*, from Arabic *sukkar*, from Persian *shakar*, from Sanskrit *śarkarā*, grit, ground sugar".

5. Item 5: The discussion question asked here requires that the students know the normal conditions for the palatalized spellings of [sh]. For students who still have trouble holding all of those conditions in their minds at once, ask them to look at and listen to the words in the table and do the following things: (i) underline the letters that spell [sh], (ii) mark 'v' or 'c' the two letters following those letters, (iii) mark the heavy stress in each word. That bit of analysis should help them see the larger pattern at work.

Lesson Forty-three
Test Five

Words	Analysis
1. <i>sighted</i>	[ɪ] = <u><i></u> [t] = <u><ght></u> Verb + suffix = <u>sight + ed</u>
2. <i>conscious</i>	[sh] = <u><sc></u> Prefix + bound stem = <u>con + n + scious</u>
3. <i>exclamation</i>	[sh] = <u><t></u> Prefix + bound base + suffix = <u>ex + clam + ation</u>
4. <i>extension</i>	[sh] = <u><s></u> [ks] = <u><x></u> [t] = <u><t></u>
5. <i>fraction</i>	[sh] = <u><t></u> Bound base + suffix = <u>fract + ion</u>
6. <i>immigration</i>	[sh] = <u><t></u> Prefix + free stem + suffix = <u>im + m + migrat + ion</u>
7. <i>impatiently</i>	Prefix + bound base + suffix ¹ + suffix ² = <u>im + m + pati + ent + ly</u>
8. <i>initial</i>	[sh] = <u><t></u>
9. <i>possession</i>	[sh] = <u><ss></u> Free stem + suffix = <u>possess + ion</u>
10. <i>publisher</i>	[sh] = <u><sh></u> Free stem + suffix = <u>publish + er</u>

Lesson Forty-four Review of [k]

1 Each of the following words contains at least one [k] sound. Underline the letters that spell [k] in each word:

k <u>in</u> ship	ec <u>st</u> atic <u>ally</u>	ac <u>com</u> modation	ac <u>qu</u> ittal
co <u>n</u> sciously	an <u>ti</u> que	ac <u>qu</u> ired	tec <u>h</u> nician
o' <u>cl</u> ock	sk <u>etch</u> ily	co <u>n</u> sequence	li <u>qu</u> id
oc <u>cu</u> rr <u>ed</u>	che <u>mi</u> cal	pic <u>tu</u> res <u>qu</u> e	co <u>ll</u> ec <u>ti</u> on
ac <u>qu</u> aintance	qu <u>ic</u> kly	an <u>kl</u> e	uni <u>qu</u> e <u>ly</u>
ar <u>chi</u> tect	ca <u>lc</u> ulator	pan <u>ic</u> ked	phys <u>iq</u> ue
co <u>n</u> sequ <u>en</u> tial	don <u>key</u>	ac <u>com</u> plish <u>me</u> nt	ry <u>th</u> mical <u>ly</u>
re <u>c</u> ognized	sto <u>m</u> ach	oc <u>cu</u> pational	prov <u>ok</u> ing

2 Sort the thirty-two words into the following groups. You should have found eight different spellings of [k]. We have written one of those spellings in the table below; you are to write the seven other spellings at the top of the columns. Some words go into more than one group. When you are finished, several of the blanks will be empty:

Words with [k] spelled . . .

<k>	<c>	<ck>	<cc>
<i>kinship</i>	<i>consciously</i>	<i>o'clock</i>	<i>occurred</i>
<i>sketchily</i>	<i>o'clock</i>	<i>quickly</i>	<i>accommodation</i>
<i>donkey</i>	<i>architect</i>	<i>panicked</i>	<i>accomplishment</i>
<i>ankle</i>	<i>consequential</i>		<i>occupational</i>
<i>provoking</i>	<i>recognized</i>		
	<i>ecstatically</i>		
	<i>chemical</i>		

<k>	<c>	<ck>	<cc>
	<i>calculator</i>		
	<i>consequence</i>		
	<i>picturesque</i>		
	<i>collection</i>		
	<i>rhythmically</i>		

Words with [k] spelled . . .

<cq>	<ch>	<q>	<qu>
<i>acquaintance</i>	<i>architect</i>	<i>consequential</i>	<i>antique</i>
<i>acquired</i>	<i>chemical</i>	<i>quickly</i>	<i>picturesque</i>
<i>acquittal</i>	<i>stomach</i>	<i>consequence</i>	<i>uniquely</i>
	<i>technician</i>	<i>liquid</i>	<i>physique</i>

3 Analyze the following words to show the reason for the spelling of [k] in each:

Word	=	Analysis
occurred	=	<i>ob</i> + <i>c</i> + <i>curred</i>
acquired	=	<i>aɔ</i> + <i>c</i> + <i>quired</i>
panicked	=	<i>panic</i> + <i>k</i> + <i>ed</i>
accommodation	=	<i>aɔ</i> + <i>c</i> + <i>commodation</i>
picnicking	=	<i>picnic</i> + <i>k</i> + <i>ing</i>
acquittal	=	<i>aɔ</i> + <i>c</i> + <i>quittal</i>

4 What sounds does <x> spell in each of the following words?

Word	<x> spells
expression	<i>[ks]</i>
complexity	<i>[ks]</i>

Word	<x> spells
sixteen	<i>[ks]</i>
excitement	<i>[ks]</i>
exceeding	<i>[ks]</i>

Lesson Forty-five Review of Suffixes

1 A suffix is a bound element that is added to the end of stems

2 Each of the following words contains one or more suffixes. Sort them into the groups. Some words will go into more than one group:

provokingly	consequently	expression	sketchily
occurrence	usual	rhythmically	profession
collection	acquaintance	racial	recognizance
chemical	fictional	eventual	ecstatically
acquittal	consequence	defiance	two-dimensional

Words with the suffix . . .

-al	-ance	-ence	-ial
<i>chemical</i>	<i>acquaintance</i>	<i>occurrence</i>	<i>racial</i>
<i>acquittal</i>	<i>defiance</i>	<i>consequence</i>	
<i>fictional</i>	<i>recognizance</i>		
<i>rhythmically</i>			
<i>ecstatically</i>			
<i>two-dimensional</i>			

Words with the suffix . . .

-ic	-ion	-ly	-ual
<i>chemical</i>	<i>collection</i>	<i>provokingly</i>	<i>usual</i>
<i>rhythmically</i>	<i>fictional</i>	<i>consequently</i>	<i>eventual</i>
<i>ecstatically</i>	<i>expression</i>	<i>rhythmically</i>	
	<i>profession</i>	<i>sketchily</i>	
	<i>two-dimensional</i>	<i>ecstatically</i>	

3 Analyze the following words into stem plus suffixes. Remember that some have more than one suffix. Be sure you show all of suffixes in your analyses, and show any changes that occur when elements are added together:

Word	=	Stem	+ Suffix or suffixes
provokingly	=	<i>provoké</i>	+ <i>ing + ly</i>
occurrence	=	<i>occur + r</i>	+ <i>ence</i>
collection	=	<i>collect</i>	+ <i>ion</i>
rhythmically	=	<i>rhythm</i>	+ <i>ic + al + ly</i>
acquittal	=	<i>acquit + t</i>	+ <i>al</i>
consequential	=	<i>consequ</i>	+ <i>ent + ial</i>
usual	=	<i>usé</i>	+ <i>ual</i>
defiance	=	<i>defy + i</i>	+ <i>ance</i>
sketchily	=	<i>sketch</i>	+ <i>y + i + ly</i>
racial	=	<i>racé</i>	+ <i>ial</i>
eventual	=	<i>event</i>	+ <i>ual</i>
recognizance	=	<i>recognizé</i>	+ <i>ance</i>

Lesson Forty-six Review of [sh]

1 Underline the letters that spell [sh] in each of the following words:

kin <u>sh</u> ip	a <u>ss</u> ured	ph <u>ys</u> ician	two-dim <u>en</u> sional
non <u>ch</u> alantly	<u>sch</u> wa	exp <u>re</u> sion	techni <u>ci</u> an
accommodat <u>ions</u>	accompl <u>ish</u> ment	<u>sch</u> lemiel	prof <u>ess</u> ional
consequ <u>en</u> tial	ma <u>ch</u> ine	<u>sh</u> oulder	dist <u>ingu</u> ish
ins <u>ur</u> ance	occupat <u>ion</u> al	musta <u>ch</u> e	quotat <u>ion</u>
uncon <u>sci</u> ously	demonstrat <u>ion</u>	noru <u>ish</u>	collect <u>ions</u>
decorat <u>ion</u>	extens <u>ion</u>	constitut <u>ion</u>	rac <u>ial</u>

2 You should have found eight different spellings of [sh], one of them being <t>. Label each of the columns below with one of the spellings, as we have done with the column labeled <t>. Then sort the words into the groups. Some words go into more than one group. Again, when you finish, several blanks will still be empty:

Words with [sh] spelled . . .

<t>	<ch>	<sh>	<s>
<i>accommodations</i>	<i>nonchalantly</i>	<i>kinship</i>	<i>insurance</i>
<i>consequential</i>	<i>machine</i>	<i>accomplishment</i>	<i>extension</i>
<i>decoration</i>	<i>mustache</i>	<i>shoulder</i>	<i>two-dimensional</i>
<i>occupational</i>		<i>nourish</i>	
<i>demonstration</i>		<i>distinguish</i>	
<i>constitution</i>			
<i>quotation</i>			
<i>collections</i>			

Words with [sh] spelled . . .

<sc>	<ss>	<sch>	<c>
<i>unconsciously</i>	<i>assured</i>	<i>schwa</i>	<i>physician</i>
	<i>expression</i>	<i>schlemiel</i>	<i>technician</i>
	<i>professional</i>		<i>racial</i>

3 How is [sh] spelled in the word *complexion*?

_____ *<x>, as part of the combination [ksh]*

4 Where does the <sh> spelling of [sh] usually come in elements? At the beginning or the end

5 Where does the <t> spelling of [sh] come in words? In the middle, between the stem and a suffix

Lesson Forty-seven More Homophones

1 **Principle, principal.** The noun *principle* means “a general law, rule, or truth.” The adjective *principal* means “main, most important”; the noun *principal* means “a chief or head, the director of a school; a sum of money.” The base *princip* in each word carries the root meaning “prince” and comes from two earlier elements meaning “first taker.” The <le> in *principle* comes from Old French.

Principal analyzes to *princip+al*, the *-al* being the suffix that forms adjectives from nouns and bound stems, as in *universal* and *liberal*. It may help sort these two out to remember the sentence, “Our **principal** is my **pal**.”

Cross out the incorrect form:

- a. The (principal, ~~principle~~) of our school is over six feet tall.
- b. Drinking and dancing are against her personal (~~principals~~, principles).
- c. The (principal, ~~principle~~) partner in their law firm is a man of high (~~principals~~, principles).

2 **Capital, capitol.** The adjective *capital* means much the same as the adjective *principal*, “main, most important.” It also refers to money and financing. The noun *capital* refers to the city in which a state or national government is located. It also refers to money and financing and to uppercase letters. *Capital* analyzes to *capit+al*; *capitol* analyzes to *capit+ol*. In each case, the base *capit* means “head, money”, as in *decapitate*, “to remove one’s head.” and *capitalist* “one who invests capital in business.”

Capitol is not used as an adjective, and as a capitalized noun it refers to the building in Washington D.C. where Congress meets. It also is used in lowercase to refer to similar buildings in state capitals. Remember that *capital* is a city, *capitol* is a building. It may help to sort these two out to remember the sentence, “There is a dome on the capitol, and there’s an <o> in *dome* and *capitol*.”

- a. The (capital, ~~capitol~~) of Washington state is Olympia.
- b. The (~~Capital~~, Capitol) of the United States is in Washington D.C., which is the nation’s (capital, ~~capitol~~).
- c. He invested his (capital, ~~capitol~~) in stocks and bonds.

3 **Desert (v.), desert (n.), dessert (n.)** The verb *desert* “to abandon” and the noun *dessert* “the final course of a meal” are homophones. The verb *desert* and the noun *desert* “a barren place” are homographs. Their pronunciations differ only in which vowel has stress: As usual, the noun has stress on the first vowel, the verb has stress on the second. Both *desert*’s analyze to the prefix *de-* “removal, separation” plus the base *sert* “attach, join, discuss.” The base *sert* also occurs in *insert* and *exert*.

Dessert analyzes to the French prefix *des-* “removal” and a different *sert*, this one

meaning “serve. Desserts are called desserts because they were the last course, marking the removal of the meal service. Some people keep *dessert* distinct from *desert* with the saying, “We had **s**trawberry **s**hortcake for **de**SSERT”: two <s>’s in “strawberry shortcake,” two <s>’s in *dessert*.

- a. He was afraid they were going to (desert, ~~dessert~~) him.
- b. They had ice cream for (~~desert~~, dessert).
- c. The (desert, ~~dessert~~) of Arizona is very hot during the day but it can be quite chilly at night.

4 Council, counsel. The noun *council* means “meeting, assembly.” The noun *counsel* means “advice, consultation”; it also is used to refer to one’s lawyer in a trial. As a verb *counsel* means “to offer advice, to consult with.” *Council* analyzes to the French prefix *coun-*, which is a form of our prefix *com-* “with, together,” plus the base *cil* “call.” *Cil* is a form of the base *cile* in *reconcile*.

Counsel has that same prefix *coun-* with the base *sel*, which comes from a Latin word that meant “to consult.” In fact, the *sult* in *consult* and the *sel* in *counsel* are closely related. Remembering that <s> in *consult* should help you remember the <s> in *counsel*.

- a. The Student (Council, ~~Counsel~~) deals with certain discipline problems.
- b. Her (~~council~~, counsel) and advice are usually very good.
- c. At his trial his (~~council~~, counsel) told him to keep his mouth shut.

5 Compliment, complement. The noun *compliment* means “a statement of praise or regard”; the noun *complement* means “something that completes, makes better.” Both can be used as verbs. *Compliment* analyzes to *com+pli+ment*. The bound base *pli* is a form of the base in *comply*.

Complement analyzes to *com+ple+ment*, and its base *ple* carries the root meaning “fill.” The base *ple* is related to the base in *complete*, both with <e>’s.

- a. She was obviously pleased with the nice (~~complement~~, compliment).
- b. The new couch (complements, ~~compliments~~) their other living room furniture.
- c. He had two (~~complementary~~, complimentary) tickets to the ball game.

Lesson Forty-eight
Test Six

Words	Analysis
1. <i>accommodations</i>	[k] = <u><cc></u> [sh] = <u><t></u> Prefix ¹ + prefix ² + freebase + suffix ¹ + suffix ² + suffix ³ = <u>ad+c+com+mode+ate+ion+s</u>
2. <i>acquittal</i>	[k] = <u><cq></u> Verb + suffix = <u>acquit+t+al</u>
3. <i>stomach</i>	[k] = <u><ch></u>
4. <i>collections</i>	Prefix + bound base + suffix ¹ + suffix ² = <u>coll+lect+ion+s</u>
5. <i>ecstatically</i>	Prefix + free base + suffix ¹ + suffix ² + suffix ³ = <u>ex+c+state+ic+al+ly</u>
6. <i>expression</i>	[ks] = <u><x></u> Prefix + free base + suffix = <u>ex+press+ion</u>
7. <i>racially</i>	[sh] = <u><c></u> Free base + suffix ¹ + suffix ² = <u>race+ial+ly</u>
8. <i>recognize</i>	[k] = <u><c></u> Prefix + bound base + suffix = <u>re+cogn+ize</u>
9. <i>rhythmic</i>	[r] = <u><rh></u> Free stem + suffix = <u>rhythm+ic</u>
10. <i>usually</i>	[l] = <u><ll></u> Free stem + suffix ¹ + suffix ² = <u>use+ual+ly</u>