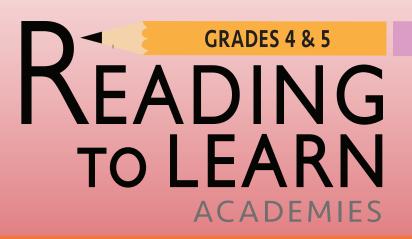
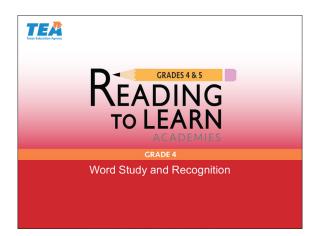


Word Study and Recognition

Participant Notes



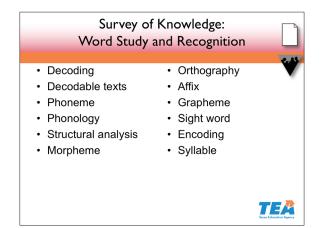
GRADE 4

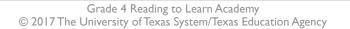


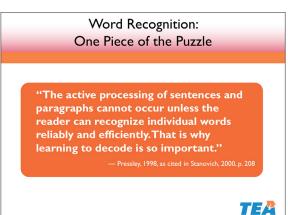


This section will enhance your knowledge of the following:

- The importance of explicitly teaching decoding and spelling
- Rules and generalizations of the English sound system and spelling patterns
- Effective instructional practices for teaching word study and word recognition
- Activities that provide multiple opportunities for students to practice word study skills







Word Study (Spelling): Another Piece of the Puzzle

"The correlation between spelling and reading comprehension is high because both depend on a common denominator: proficiency with language. The more deeply and thoroughly a student knows a word, the more likely he or she is to recognize it, spell it, define it, and use it appropriately in speech and writing."

— Joshi, Treiman, Carreker, & Moats, 2008-2009,

Toxas Education Agency

What We Know From Research

"Language is a human instinct, but written language is not...Children are wired for sound, but print is an optional accessory that must be painstakingly bolted on.This basic fact about human nature should be the starting point for any discussion of how to teach our children to read and write."

ker in McGuiness, 1997, p. is

TEA

What We Know From Research: Orthographic Mapping

- Students must learn to map sounds to print through the systematic study of orthographic patterns and word parts.
- Such instruction and practice allows students to orthographically map words, which leads to those words becoming sight words.

Texas Education Agency

What We Know From Research: Explicit and Systematic Instruction

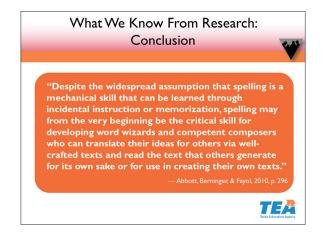
- Explicit, systematic decoding and spelling instruction is significantly more effective than unsystematic instruction or no word-level instruction.
- Systematic instruction and practice improves all students' word recognition and spelling skills.

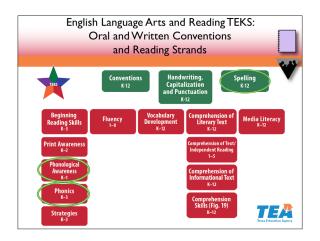
Texas Education Agency

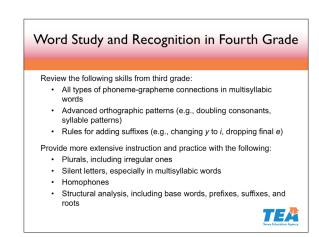
What We Know From Research: Encoding and Decoding

- Integrating encoding (spelling) instruction with decoding (reading) instruction improves students' reading abilities beyond decoding instruction alone.
- Some research demonstrates a relationship between spelling ability and fluent word reading.
- Effective word-study instruction improves both writing and reading.









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Principles of Word Study and Recognition

- Phonemes can be represented by a single letter or combination of letters.
- Some letters can represent more than one sound.
- Different letters can represent the same sound.
- Where a phoneme or grapheme occurs in a word is often important.
- Different word-reading strategies can be used to read unknown words.
- Orthographic patterns and rules help students to determine pronunciation and spelling.
- Structural analysis based on meaningful word parts can help in reading and spelling words.

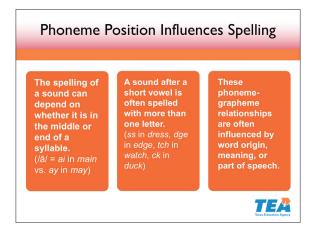
Foundational Knowledge: Phonology

- Knowledge of English phonology, or sound system, is crucial to any literacy teacher.
- Understanding the relationships between our sound and print systems lays the foundation for effective word reading and spelling.
- Many students with reading difficulties, including those with dyslexia, have phonological deficits.
- Gaps in phonological development lead to problems with decoding, orthographic mapping, fluency, and comprehension.
- These gaps also lead to problems with spelling and written composition.

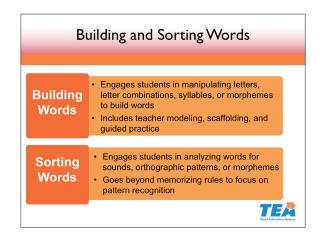
Grapheme-Phoneme Knowledge

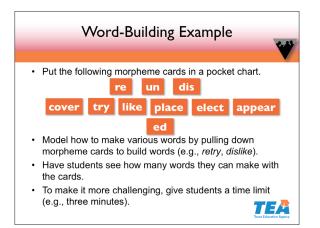
- Grapheme-phoneme knowledge involves learning the common sounds of letters and letter combinations.
- Common graphemes include the following:
 - Single letters (t, b, l, f, s, e)
 - Doublets (mm, tt, ff, ll, ss, zz)
 - Consonant digraphs and trigraphs (*th*, *sh*, *ch*, *tch*, *dge*)
 - Silent-letter combinations (wr, kn)
 - Vowel digraphs (ee, ai, ou, oi, oo)
- Consonant blends are also common, but each letter represents an individual sound.



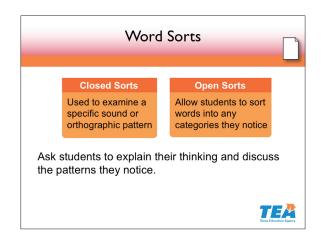


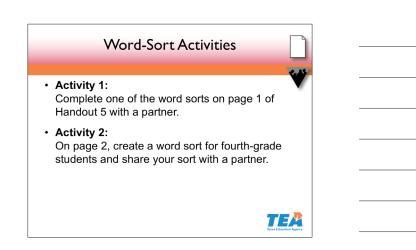
	Influences P	ronunciation	
Graphemes influence the pronunciation of adjacent graphemes. (c before a, o, or u vs. c before e, i, or y)	Graphemes in multisyllabic words represent different sounds from those in single-syllable words. (y in daddy vs. y in fly)	Graphemes represent voiced or unvoiced sounds depending on whether they are followed by an e. (<i>leeth</i> vs. <i>teethe</i>)	These grapheme- phoneme relationships are often influenced by word origin, meaning, or part of speech.

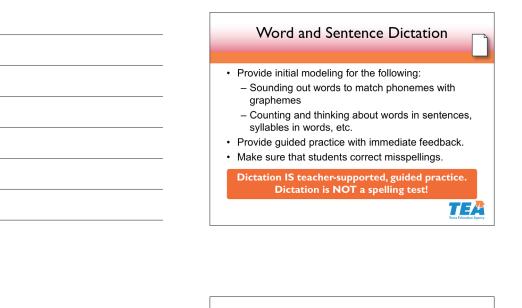












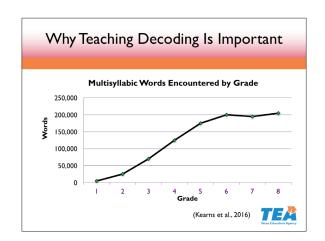


• Recognize and use common spelling patterns, including syllable patterns.

Word-Reading Strategies

- Use structural analysis.
- Use knowledge of context and syntax to check pronunciation and confirm word meaning.

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Orthographic Conventions and Patterns

Orthographic conventions

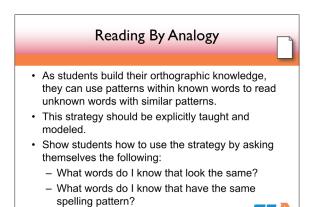
- Rules govern what we can and cannot do when making words in English.
- Word sorts and word-building activities help students analyze words for patterns based on these conventions.
- Teachers need knowledge of conventions to help students see patterns and to explain the English spelling system.

Orthographic patterns

- Students can learn to read by analogy by using patterns in known words to help read unknown words.
- Students can also apply knowledge of the six syllable types.

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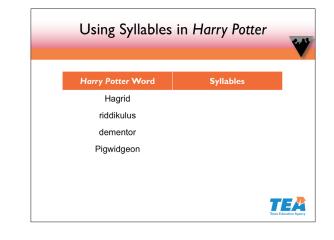
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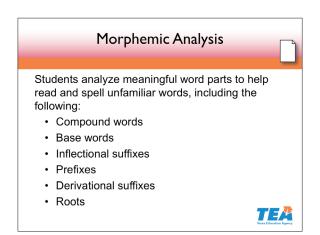






Common Syllable Patterns					
unkn • Teac using	 The six syllable types help students read and spell unknown words, including multisyllabic words. Teach the syllable types explicitly and systematically using word sorts and word-building activities to teach students to look for patterns. 				
Closed	Open	Vowel- Consonant-e	Vowel Digraphs and Diphthongs	Vowel-r	Final Stable
					TEXAS Education Agency





Using Morphem	es in Harry Potte	r V
Harry Potter Word	Morphemes	
merpeople		
quietus		
animagi		
hippogriff		
seeker		
	1	┎╡┸



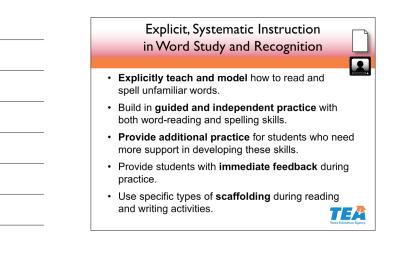
Using Context and Syntax

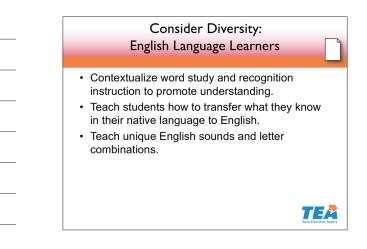
- After sounding out an unfamiliar word, teach students to use context and syntax to check word pronunciation and confirm word meaning.
- After sounding out and reading an unfamiliar word, prompt students to ask the following:
 - "Does that sound right?"
 - "Does that make sense?"

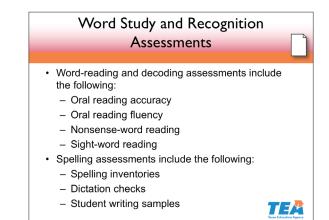
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Practicing Word-Reading Strategies

- Students need to practice word-reading strategies both in and out of context.
- Students also need to practice these strategies across grouping formats, including the following:
 - Whole group
 - Mixed-ability groups
 - Independent
 - Small groups
- During small-group instruction, model and scaffold word-reading strategies.

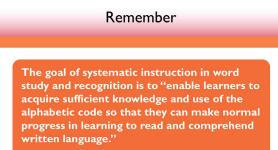






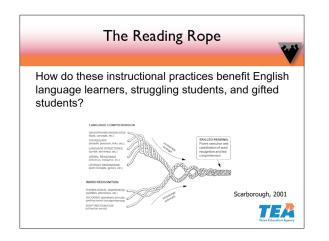
Taking a Closer Look

- Number off one to five at your tables.
- Using Handout 20, examine page 1 and then:
 - Ones: Examine pages 2–6.
 - Twos: Examine pages 6–10.Threes: Examine pages 10–13.
 - Fours: Examine pages 14-16.
 - Fives: Examine pages 17-21.
- Work with your tablemates to complete Handout 21.



- National Reading Panel, 2000, p. 299





 My Synthesis	s and Summary
Three to four example activities and lessons you want to use	Three to four workstation ideas
	study and gnition
 Two to three ideas you want to use with struggling learners	At least one scaffold you will provide to English language learners who need it



Word Study and Recognition Handouts



GRADE 4

Survey of Knowledge: Word Study and Recognition

Match the key concept to its definition by writing the letter in the correct blank.

1 decoding	A. Study of affixes, base words, and roots
2 decodable text	B. Smallest unit of speech sound
3 phoneme	C. Process of converting printed words into their spoken forms by using knowledge of letter-sound correspondences and word structure
4 phonology	D. Smallest meaningful unit of a language
5 structural analysis	E. Writing system for representing language
6 morpheme	F. Letter or letter combination that spells a phoneme
7 orthography	G. A word part or chunk organized around a vowel sound
8 affix	H. Process of producing written symbols for spoken language; also, spelling by sounding out
9 grapheme	I. A language's sound system and the rules that govern it
10 sight word	J. Controlled text in which most of the words are in an accumulating sequence of letter-sound correspondences that students have learned and are learning
11 encoding	K. Morpheme that comes before or after a root or base word to modify its meaning (e.g., prefix, suffix)
12 syllable	L. Word that is recognized automatically when seen

Grapheme-Phoneme Knowledge

A letter combination is a group of consecutive letters that represent sounds in words. The most common combinations are usually taught first.

For example, the letter combination *ph* appears in a large number of words, but many of these words do not frequently appear in primary texts. On the other hand, *th* appears in many words found in primary texts. Thus, we teach the sound of *th* before we teach the sound of *ph*.

A consonant doublet represents one sound.

These doublets almost always follow short vowels. Examples include the ss in *less*, *tt* in *hitting*, and *ll* in *doll*.

One set of doublets follows what is called the FLOSS rule. This rule states that at the end of a syllable with a short vowel followed by the /f/, /l/, /s/, or /z/ sound, the *f*, *l*, *s*, or *z* is doubled. Examples include the *ff* in *stuff*, *ll* in *still*, *ss* in *moss*, and *zz* in *buzz*.

A consonant digraph represents a unique sound unlike the sounds of its individual letters.

An example of a consonant digraph is the *sh* in the word *shop*.

When you sound out consonant blends and digraphs, just as with single consonants, do not add an extra schwa sound, such as saying /shuh/ instead of /sh/.

Examples of consonant digraphs in Spanish are the *ch* in *chica*, *ll* in *llegar*, and *rr* in *carro*.

A vowel digraph, or vowel team, is a set of adjacent vowels in the same syllable that represent a single speech sound, including diphthongs (/oi/, /ow/).

Examples of vowel digraphs are the *ea* in *meat*, *oy* in *boy*, and *ow* in *how*.

As with consonants, the sound made by a vowel digraph may vary. For example, the vowel digraph *ou* makes different sounds in *soup*, *could*, and *shout*.

Examples of vowel digraphs in Spanish are the ue in juego and uo in cuota.

A consonant blend (also called a consonant cluster) represents the combined sounds of two or three consonants.

For example, the *bl* in *blue*, *spl* in *splat*, *ft* in *left*, and *nt* in *ant* are consonant blends.

Each letter retains its common sound.

Students learn how to blend the sounds, rather than learning one new sound. Begin with initial blends before moving to final blends and medial blends.

For many students, blending two consonants is easy, but some students require intensive instruction and more opportunities to blend consonants.

In Spanish, consonant blends are called grupos consonánticos. The *fl* in *flecha*, *bl* in *blusa*, *tr* in *trompeta*, and *gr* in *grillo* are grupos consonánticos.

Examples of Letter Combinations

Consonant Doublets	Consonant Digraphs	Vowel Digraphs	Consonant Blends
cliff	sh ip	s ai l	stop
will	ca sh	play	scare
fu ss	ch air	v ei n	sm ile
fizz	mu ch	eat	sw ing
ru bb ing	thimble	feet	sled
no dd ed	bo th	c ei ling	blue
be gg ar	mo th er	chief	clam
mu mm y	ph one	monk ey	flower
tu nn el	gra ph	tie	gl ue
a pp le	lau gh	r oa d	play
e rr or	whistle	toe	broom
li tt le	chef	blow	cry
		too	dr um
		soup	free
		f eu d	tree
		few	gr ay
		b oo k	de sk
		saw	wa sp
		August	act
		head	gold
		COW	wolf
		out	mi lk
		b oi l	ju mp
		toy	string
			scream

Ejemplos de combinaciones de letras en español

Diagrafías (ch, ll, rr)	Diptongos y triptongos	Grupos consonánticos
ch ango	b ai le	bl—bl usa, bl anco, bl oque
ch ica	p au sa, c au sa	fl—flor, flaco, flema
chorro	p ei ne	cl—clave, clavo
pon ch o	d eu da	gl—gl obo, gl adiador
callado	soy	pl—pl aya, pl uma, pl omo
llegar	d ia rio	cr—cr ema, cr omo, cr isis, cr udo
lluvia	g ua po	br—br oma, br usco, br isa, ca br a
ca rr o	f ie sta	tr—tren, trineo, trompo, traje
co rr er	fue	gr—gr is, gr acias, gr ueso, gr osero
fe rr oca rr il	d io sa	fr—fresa, frito, frambuesa
	c uo ta	pr—premio, primo, promesa
	c iu dad	dr—dr agón, dr enaje, cua dr o
	c ui dado	tl—Tlatelolco, Mazatlán
	caer	
	l ee r, cr ee r	
	Urug uay , Parag uay	

Adapted from Azurdía, 1998; Carreker, 2005a; Chall & Popp, 1996; Chard & Osborn, 1999; Gunning, 2002.

Word Study and Recognition Information

General Information Based on Word Origin

The following table lists the spellings by frequency of use.

	General Information Based on Word Origin				
Sound	Spelling(s)	Examples	Information and Rules		
Long- and short- vowel sounds	Short, one- syllable words	sky, sun, hen, do, his, are	Anglo-Saxon in origin Simple, common words originate from Old English, which was viewed as the language of the common person, and Middle English, which was a mixture of Old English and French; pronunciations changed over time, but spellings often did not.		
Long- and short- vowel sounds	Vowel teams, including vowel digraphs	r <u>ea</u> d, n <u>igh</u> t, k <u>ey</u> , h <u>aw</u> k, t <u>oe</u> , br <u>ea</u> d	Anglo-Saxon in origin Pronunciations changed over time, but spellings often did not.		
One sound	Digraphs (ch, sh, th, wh, ck, ng, gh)	su <u>ch</u> , wi <u>th, sh</u> all, <u>wh</u> en, ba <u>ck</u> , si <u>ng</u>	Most Anglo-Saxon in origin The digraph <i>ph</i> (to spell the /f/ sound) and <i>ch</i> (to spell the /k/ sound) are Greek in origin.		
/oi/, /ou/	oi, oy, ow, ou	t <u>oy,</u> s <u>oi</u> l, c <u>ow,</u> l <u>ou</u> d	Diphthongs are Anglo-Saxon in origin.		
	Silent letters	<u>k</u> ni <u>gh</u> t, min <u>e,</u> gnat, <u>gu</u> ess	Anglo-Saxon in origin Many of these letters used to be pronounced. They often do specific jobs. For example, the <i>e</i> in <i>mine</i> marks the <i>i</i> to be long, and the <i>u</i> in <i>guess</i> allows <i>g</i> to be pronounced /g/ when it precedes a vowel (<i>e</i> , <i>i</i> , or <i>y</i>) that would otherwise make it a /j/.		
	Irregular spellings	was, of, love, one	Anglo-Saxon in origin		

	General Information Based on Word Origin				
Sound	Spelling(s)	Examples	Information and Rules		
/er/, /ar/, /or/	Vowel-r (er, ur, ir, ar, or, ear, oar, our)	c <u>ar</u> d, h <u>er</u> d, l <u>or</u> d, f <u>ur</u> , h <u>ear</u> d, p <u>our</u>	Anglo-Saxon in origin		
	Six syllable types	Open, closed, VCe, Vr, VV, Cle	Anglo-Saxon in origin		
	Compound words	doghouse, mailman	Anglo-Saxon in origin		
/ū/	ои	s <u>ou</u> p, c <u>ou</u> pon	Norman French in origin		
			Many of our words for food, fashion, relationships, and social ideas derive from Norman French.		
/s/, /j/	ce, ci, cy, ge, gi, gy	pea <u>ce</u> , hu <u>g</u> e, s <u>ci</u> ence	Norman French in origin		
	Special endings (-ette, -elle, -ique, -ine, -ice)	bout <u>ique,</u> bagu <u>ette</u> , nov <u>ice,</u> cuis <u>ine</u>	Norman French in origin		
	Multisyllabic words with roots, prefixes, suffixes	instruction, refer, paternal, reject, designate, aquarium	Latin in origin These are the most predictable spellings and pronunciations; they include many words found in the social sciences, physical sciences, and literature.		
/f/	ph	agora <u>ph</u> obia	Greek in origin		
/k/	ch	<u>ch</u> lorophyll	Greek in origin		
/ĭ/	у	g <u>y</u> mnasium	Greek in origin		
	Words using combining forms	hypnosis, biology, geography, decathlon	Greek in origin These word parts are all considered roots, or combining forms; these terms are used in philosophy, mathematics, science, and medicine.		

Phoneme-Grapheme Connections: Vowel Sounds The following table lists the vowel sound spellings by frequency of use.

Phoneme-Grapheme Connections: Vowel Sounds			
Sound	Spelling(s)	Examples	Information and Rules
/ă/	а	h <u>a</u> t	Most often spelled just with a in closed syllable
/ā/	a, a_e, ai, ay, eigh, ei, ey, ea	b <u>a</u> by, m <u>a</u> d <u>e,</u> m <u>ai</u> d, m <u>ay,</u> w <u>eigh,</u> v <u>ei</u> n, pr <u>ey</u> , st <u>ea</u> k	Most often spelled with <i>a</i> at the end of an open syllable (as in <i>baby</i>) Spelled in the middle of a syllable with <i>a_e</i> or <i>ai</i> Spelled at the end of a syllable with <i>a</i> or <i>ay</i> Spellings <i>eigh</i> , <i>ey</i> , and <i>ea</i> less common
/ĕ/	e, ea	b <u>e</u> d, br <u>ea</u> th	Most often spelled just with <i>e</i> in closed syllable Can be spelled with <i>ea</i> —for example, in the <i>ead</i> family (e.g., <i>bread, head, lead</i>)
/ē/	y, e, ee, ea, ei, ie, ey, e_e	prett <u>y,</u> f <u>e</u> ver, m <u>ee</u> t, b <u>ea</u> d, r <u>ecei</u> ve, p <u>ie</u> ce, k <u>ey</u> , m <u>ete</u>	Most often spelled with <i>y</i> at the end of a multisyllabic word (like in <i>funny</i>) Also, often spelled with just <i>e</i> at the end of an open syllable (like in <i>me</i> or <i>he</i>) Spelled in the middle of a syllable with <i>ee</i> or <i>ea</i> Spellings <i>ei</i> , <i>ie</i> , <i>ey</i> , and <i>e_e</i> less common
/ĭ/	i, i_e, y	s <u>i</u> t, <u>gi</u> v <u>e</u> , gym	Most often spelled just with <i>i</i> in closed syllable Much less often spelled <i>i_e</i> , as in <i>live</i> and <i>give</i> In words of Greek origin, can be spelled <i>y</i>
/ī/	i_e, i, y, igh, ie, y_e	m <u>i</u> n <u>e</u> , h <u>i</u> , fly, h <u>igh</u> , t <u>ie</u> , b <u>y</u> t <u>e</u>	Most often spelled with <i>i_e</i> in a VC <i>e</i> syllable or just <i>i</i> at the end of an open syllable Less often spelled <i>y</i> at the end of a single-syllable word Spelled in the middle of a syllable either <i>i_e</i> or <i>igh</i> Spellings <i>ie</i> and <i>y_e</i> less common Also found in a few irregular word families, such as the <i>ind</i> family (e.g., <i>find, bind</i>) and <i>ild</i> family (e.g., <i>wild, child</i>)

	Phoneme-Grapheme Connections: Vowel Sounds			
Sound	Spelling(s)	Examples	Information and Rules	
/ŏ/	o, a, ough	f <u>o</u> x, sw <u>a</u> p, th <u>ough</u> t	Most often spelled just with <i>o</i> in closed syllable Much less often spelled <i>a</i> , as in <i>swamp</i> or <i>want</i> (often this spelling occurs after <i>w</i> because the /w/ sound affects the sound of <i>a</i>) Very rarely spelled <i>ough</i> (as in <i>bought</i>)	
/ō/	o, o_e, oa, ow, oe, ough	p <u>o</u> tat <u>o,</u> h <u>ope</u> , s <u>oa</u> p, b <u>ow, oboe,</u> th <u>ough</u>	Most often spelled with <i>o</i> at the end of an open syllable (like in <i>go</i>) Spelled in the middle of a syllable with <i>o_e</i> or <i>oa</i> Spelled at the end of a syllable with <i>ow</i> (or much less often <i>oe</i> , as in <i>toe</i>) Long <i>o</i> also found in a few irregular word families such as the <i>old</i> family (e.g., <i>cold</i> , <i>bold</i>), <i>ost</i> family (e.g., <i>most</i> , <i>host</i>), and <i>ough</i> family (e.g., <i>though</i> , <i>dough</i>)	
/ŭ/	и, о	h <u>u</u> t, c <u>o</u> ver	Most often spelled just with u in closed syllable The accented short- u sound; the schwa (/ ∂ /) is the same sound, but it is found in unaccented syllables	
/ū/	00, u, 0, u_e, ou, ew, ue, ui	t <u>oo</u> , tr <u>u</u> th, wh <u>o</u> , t <u>u</u> b <u>e</u> , s <u>ou</u> p, ch <u>ew</u> , gl <u>ue</u> , s <u>ui</u> t	Very tricky to spell Most often spelled <i>oo</i> Spelled just with <i>u</i> at the end of an open syllable Spelled in the middle of a syllable <i>u_e</i> or <i>oo</i> Spelled at the end of a syllable <i>ew</i> or <i>ue</i> Spelled in a word of French origin <i>ou</i> or <i>ui</i>	
/aw/	o, al, au, aw	l <u>o</u> st, c <u>al</u> l, p <u>au</u> se, fl <u>aw</u>	Most often spelled <i>o</i> in a closed syllable Also often spelled <i>a</i> l or <i>au</i> in the middle of a syllable (as in <i>walk</i> and <i>haunt</i>), unless the syllable ends with <i>n</i> or <i>l</i> (as in <i>pawn</i> or <i>bawl</i>) Spelled <i>aw</i> at the end of a syllable	
/00/	и, оо, о	p <u>u</u> t, t <u>oo</u> k, w <u>o</u> man	Most often spelled <i>u</i> in a closed syllable Also often spelled <i>oo</i> (e.g., the <i>ook</i> family— <i>book</i> , <i>look</i> , etc.) Much less often spelled <i>o</i>	

Phoneme-Grapheme Connections: Vowel Sounds			
Sound	Spelling(s)	Examples	Information and Rules
/yū/	u, u_e, ew	<u>u</u> nite, <u>use</u> , f <u>ew</u>	Actually two sounds but often taught as one sound Different from just long- <i>u</i> sound by itself (contrast <i>chew</i> with <i>few</i> to hear the difference) Most often spelled with <i>u</i> at the end of an open syllable, as in <i>unicorn</i> Also often spelled with <i>u_e</i> in the middle of a syllable Much less often spelled <i>ew</i> at the end of a syllable
/oi/	oi, oy	<u>oi</u> l, b <u>oy</u>	Most often spelled <i>oi</i> in the middle of a syllable Also spelled <i>oy</i> at the end of a syllable
/ou/	ou, ow	l <u>ou</u> d, c <u>ow</u>	Most often spelled <i>ou</i> in the middle of a syllable (but if it precedes <i>l</i> or <i>n</i> , can be spelled <i>ow</i> , as in <i>fowl</i> or <i>town</i>) Also spelled <i>ow</i> at the end of a syllable
/er/	er, or, ar, ir, ur, ear	j <u>er</u> k, od <u>or</u> , cell <u>ar,</u> b <u>ir</u> d, b <u>ur</u> p, h <u>ear</u> d	Most often spelled <i>er</i> Less often spelled <i>or</i> or <i>ar</i> Much less often spelled <i>ir, ur, or ear</i>
/ar/	ar, are	c <u>ar</u> t, <u>are</u>	Most often spelled <i>ar</i> Much less often spelled <i>are</i>
/or/	or, ore	sp <u>or</u> t, c <u>ore</u>	Most often spelled <i>or</i> Much less often spelled <i>ore</i>
/ə/	o, u, a, i, e, ou	pers <u>o</u> n, circ <u>u</u> s, <u>a</u> bout, pan <u>i</u> c, <u>e</u> lect, fam <u>ou</u> s	Very difficult to spell—helps to know derivations to figure out spelling in multisyllabic words For example, in <i>definition</i> , the first <i>i</i> makes the /ə/ sound, so it's difficult to figure out. If you know that <i>definition</i> derives from the word <i>define</i> , in which the <i>i</i> makes the long- <i>i</i> sound, you can figure out that you should spell the /ə/ with an <i>i</i> . Spellings of /ə/ used fairly evenly across words— about 10 percent to 25 percent for each spelling

Phoneme-Grapheme Connections: Consonant Sounds The following table lists the consonant sound spellings by frequency of use.

Phoneme-Grapheme Connections: Consonant Sounds			
Sound	Spelling(s)	Examples	Information and Rules
/b/	b, bb	<u>b</u> ig, ni <u>bb</u> le	Almost always spelled just with <i>b</i> Can be spelled with a double <i>b</i> , specifically in a multisyllabic word to keep a vowel short in a closed syllable, as in <i>bubble</i> and <i>flabby</i>
/k/	c, k, ck, ch, que	<u>c</u> ar, <u>k</u> it, si <u>ck</u> , <u>ch</u> emist	Spelled <i>c</i> before <i>a</i> , <i>o</i> , or <i>u</i> Spelled <i>k</i> before <i>e</i> , <i>i</i> , or <i>y</i> Spelled <i>k</i> at the end of a syllable after a long vowel or vowel team (as in <i>seek</i> , <i>book</i> , or <i>make</i>) Spelled <i>k</i> at the end of a syllable after a consonant (as in <i>sink</i> or <i>walk</i>) Spelled <i>ck</i> at the end of a syllable after a short vowel (as in <i>lock</i> or <i>peck</i>) Spelled <i>ch</i> in words of Greek origin (as in <i>chlorophyll</i>) Spelled <i>que</i> in words of French origin (as in <i>boutique</i>) Sounds <i>/k/</i> + <i>/w/</i> and <i>/k/</i> + <i>/s/</i> have other spellings (<i>qu</i> and <i>x</i>)
/d/	d, dd, -ed	<u>d</u> og, cu <u>dd</u> le, roar <u>ed</u>	Almost always spelled just with <i>d</i> Can be spelled with a double <i>d</i> , specifically in a multisyllabic word to keep a vowel short in a closed syllable, as in <i>fiddle</i> Also spelled with inflectional ending <i>-ed</i> when the base word ends with a voiced sound, as in <i>flowed</i>

Phoneme-Grapheme Connections: Consonant Sounds			
Sound	Spelling(s)	Examples	Information and Rules
/f/	f, ph, ff	fat, <u>ph</u> one, mu <u>ff</u> le, stuff	Most often spelled with just <i>f</i> Spelled <i>ph</i> in words of Greek origin (as in <i>philosophy</i>) Can be spelled with a double <i>f</i> , specifically in a multisyllabic word to keep a vowel short in a closed syllable, as in <i>baffle</i> Also spelled <i>ff</i> in a syllable ending with the /f/ sound—follows the FLOSS rule (as in the word <i>off</i>)
/g/	g, gg	got, buggy	Most often spelled with just g Can be spelled with a double g, specifically in a multisyllabic word to keep a vowel short in a closed syllable, as in <i>goggles</i> See /g/ + /z/ for other spelling (x)
/h/	h, wh	<u>h</u> ot, <u>wh</u> o	Most often spelled with just <i>h</i> Rarely spelled with other spellings, such as <i>wh</i> (as in <i>whose</i>)
/j/	ge, j, dge, d, g(i), g(y)	ca <u>ge</u> , jet, e <u>dge</u> , sol <u>d</u> ier, <u>gi</u> st, <u>gy</u> m	Most often spelled <i>ge</i> , especially with a syllable that has a long vowel and ends in /j/ (as in <i>huge</i> and <i>page</i>) Also often spelled <i>j</i> at the beginning of a word Spelled <i>dge</i> at the end of a syllable with a short- vowel sound (as in <i>judge</i> and <i>ridge</i>) Much less often spelled <i>d</i> (usually when it precedes the /y/ sound), <i>gi</i> , or <i>gy</i> No English words end with <i>j</i>
///	1, 11	<u>l</u> id, fa <u>ll</u>	Most often spelled with just <i>l</i> Also spelled with <i>ll</i> in a syllable ending with the /l/ sound—follows the FLOSS rule (as in will)

Phoneme-Grapheme Connections: Consonant Sounds			
Sound	Spelling(s)	Examples	Information and Rules
/m/	m, mm, mb	hu <u>m,</u> cla <u>mmy,</u> cli <u>mb</u>	Most often spelled with just <i>m</i> Can be spelled with a double <i>m</i> , specifically in a multisyllabic word to keep a vowel short in a closed syllable, as in <i>humming</i> Rarely with another spelling, such as <i>mb</i> (as in <i>plumber</i>)
/n/	n, kn, nn	<u>n</u> o, <u>kn</u> ee, fu <u>nn</u> y	Most often spelled with just <i>n</i> In a few Anglo-Saxon words, spelled with <i>kn</i> Can be spelled with a double <i>n</i> , specifically in a multisyllabic word to keep a vowel short in a closed syllable, as in <i>tunnel</i>
/p/	р, рр	pot, topple	Almost always spelled just with <i>p</i> Can be spelled with a double <i>p</i> , specifically in a multisyllabic word to keep a vowel short in a closed syllable, as in <i>sappy</i>
/k/ +/w/	qu	<u>qu</u> ick	<i>qu</i> represents two sounds, /k/ and /w/ When heard together in a word, most often spelled with <i>qu</i>
/r/	r, wr	<u>r</u> un, <u>wr</u> ite	Almost always spelled just with <i>r</i> In a few Anglo-Saxon words, spelled with <i>wr</i>
/s/	s, c(e), c(i), c(y), ss	<u>s</u> eal, ri <u>ce,</u> <u>ci</u> te, <u>cy</u> st, me <u>ss</u>	Usually spelled just with <i>s</i> Can be spelled with <i>a c</i> before <i>e</i> , <i>i</i> , or <i>y</i> Also spelled with <i>ss</i> in a syllable ending with the /s/ sound—follows the FLOSS rule (as in <i>pass</i>)
/t/	t, tt, -ed	<u>t</u> op, li <u>tt</u> le, gasp <u>ed</u>	Almost always spelled just with <i>t</i> Can be spelled with a double <i>t</i> , specifically in a multisyllabic word to keep a vowel short in a closed syllable, as in <i>potty</i> Also spelled with inflectional ending <i>-ed</i> when the base word ends with an unvoiced sound, as in <i>walked</i>

Phoneme-Grapheme Connections: Consonant Sounds			
Sound	Spelling(s)	Examples	Information and Rules
/v/	v, ve	<u>v</u> ery, ha <u>ve</u>	Almost always spelled just with <i>v</i> At the end of a word ending with the /v/ sound, has a silent <i>e</i> (as in <i>love</i> , <i>leave</i> , etc.) No English words end with <i>v</i>
/w/	<i>w, u</i>	<u>w</u> ork, peng <u>ui</u> n, pers <u>ua</u> de	Almost always spelled just with <i>w</i> Spelled with <i>u</i> in <i>qu</i> (see /k/ + /w/ above) and after g (as in <i>language</i>), and s (as in <i>suede</i>)
/k/ + /s/ /g/ + /z/	x	e <u>x</u> ercise, e <u>x</u> act	<i>x</i> the only consonant that can represent two sounds in a word After an accented syllable, represents the sounds
			/k/ + /s/ (box) Before an accented syllable, represents the sounds /g/ + /z/ (exist)
/y/	i, y	on <u>i</u> on, <u>y</u> es	/y/ sound almost evenly represented by i (55 percent) and y (44 percent)
/z/	fli <u>es</u> ,	wa <u>s</u> , <u>z</u> ero, fli <u>es</u> ,	Most often spelled with s (especially in Anglo- Saxon words, such as <i>his, is, has</i>)
		<u>x</u> ylophone, bu <u>zz</u>	Spelled with inflectional ending -s when the base word ends with a voiced sound, as in <i>flows</i>
			Spelled with inflectional ending -es (as in foxes)
			Spelled <i>x</i> in words of Greek origin (as in <i>xenophobia</i>)
			Also spelled with <i>zz</i> in a syllable ending with the / <i>z</i> / sound—follows the FLOSS rule (as in the word <i>jazz</i>)
/th/	th	<u>th</u> ank	Unvoiced /th/ always spelled <i>th</i>
<u>/th</u> /	th	<u>th</u> is	Voiced / <u>th</u> / always spelled <i>th</i>

Phoneme-Grapheme Connections: Consonant Sounds			
Sound	Spelling(s)	Examples	Information and Rules
/sh/	ti, sh, ci, ss, ch	ac <u>ti</u> on, <u>sh</u> ed, spe <u>ci</u> al, pa <u>ss</u> ion, a <u>ss</u> ure, <u>ch</u> ef	More than half of /sh/ sounds spelled <i>ti</i> , as in the syllable <i>tion</i> 26 percent spelled <i>sh</i> The rest divided across several other spellings— <i>ci</i> , <i>ss</i> , <i>si</i> , <i>sc</i> , <i>s</i> , <i>ch</i> Spelled <i>ch</i> in words of French origin (as in <i>chagrin</i>)
/zh/	si, s, ge, z	vi <u>si</u> on, mea <u>s</u> ure, garag <u>e,</u> sei <u>z</u> ure	Half of /zh/ sounds spelled <i>si</i> , as in suffix <i>-sion</i> Another third spelled <i>s</i> , as in suffix <i>-sure</i> Spelled <i>ge</i> in words of French origin (as in <i>rouge</i>) Less often spelled <i>z</i> , as in suffix <i>-zure</i>
/ch/	ch, t, tch	<u>ch</u> air, adven <u>t</u> ure, wa <u>tch</u>	More than half of /ch/ sounds spelled <i>ch</i> , including at the end of a syllable following vowel team or consonant (as in <i>each</i> or <i>bench</i> ; exceptions include <i>such</i> and <i>which</i>) Another third spelled <i>t</i> , as in suffix <i>-ture</i> Spelled <i>tch</i> at the end of syllable following short vowel (as in <i>witch</i>)
/wh/	wh	<u>wh</u> ite	Unvoiced /wh/ always spelled <i>wh</i> Sound almost lost in American English due to most dialects pronouncing this spelling as /w/
/ng/	ng, n	si <u>ng,</u> mo <u>n</u> key, E <u>ng</u> lish	Spelled ng at the end of syllable Spelled n when before /k/ or /g/ (as in sink or language)

Letter Patterns and Morphemes

The following table lists complex orthographic patterns and morphemes (meaning units).

Letter Patterns and Morphemes			
Rule or Topic	Explanation and Examples		
No words end with <i>j</i> or <i>v</i> .	If a word ends in /j/, spell it with <i>ge</i> (following long vowel) or <i>dge</i> (following short vowel). If a word ends in /v/, put a silent <i>e</i> after the <i>v</i> (as in <i>dove</i> and <i>live</i>).		
Add extra letters (consonants) after short vowels.	This is why we use spellings such as <i>ck</i> , <i>dge</i> , <i>tch</i> , and <i>x</i> (which stands for two consonant sounds) after short vowels. It's also why we double consonants when adding endings (as in <i>mopping</i> and <i>rubbed</i>).		
The letter <i>e</i> has a lot of jobs.	Used to make short- <i>e</i> sound in closed syllables Used to make long- <i>e</i> sound in open syllables Used to make long- <i>e</i> sound in vowel teams such as <i>ee</i> and <i>ea</i> Used to mark long vowels in VC <i>e</i> words (as in <i>lake</i> and <i>note</i>) Used to mark the soft- <i>c</i> and soft-g sounds (as in <i>cease</i> and <i>page</i>) Keeps words from ending in <i>v</i> (as in <i>have</i> and <i>believe</i>) Keeps words from looking plural (as in <i>horse</i> , <i>house</i> , and <i>please</i>) Used to mark the voiced / <u>th</u> / in verbs (as in <i>breathe</i> and <i>teethe</i>)		
Soft <i>c</i> and soft g follow specific rules.	French in origin c makes /s/ sound when followed by e, i, or y g makes /j/ sound when followed by e, i, or y		
The letter <i>u</i> acts as interloper.	We put a silent <i>u</i> after <i>g</i> to keep it from changing to the soft sound /j/ (as in <i>guest</i> and <i>guide</i>).		
Some word families don't follow the rule of closed syllables and short vowels.	Examples: • find, bind, kind, rind, hind, mind • most, ghost, post, provost • wild, mild, child • old, cold, sold, told, mold		

Letter Patterns and Morphemes			
Rule or Topic	Explanation and Examples		
Six syllable types	Closed syllable: Vowel closed off by consonant to make it short (<i>music</i>) VCe: Silent-e makes vowel say long sound (<i>like</i>) Open syllable: Vowel not closed off by a consonant, so it is long (<i>music</i>) Vowel team: Includes those that spell long-vowel sounds (<i>meet</i>), short-vowel sounds (<i>bread</i>), and diphthongs (<i>cow</i>) Vowel-r: Includes those with one vowel (<i>car</i>) or two vowels (<i>heart</i>) Stable final syllable: Cle—final syllable with a consonant followed by <i>le</i> , such as in <i>little</i> (other examples include <i>tion</i> and <i>ture</i> , as in <i>station</i> and <i>adventure</i>)		
Syllable division, VC-CV: Two consonants between two vowels	When syllables have two adjacent consonants between them, divide between the consonants. The first syllable is closed (with short-vowel sound), as in <i>mid-dle</i> and <i>tem-per</i> .		
Syllable division, V-CV and VC-V: One consonant between two vowels	First try dividing before the consonant, which makes the first syllable open (with a long-vowel sound). This method works 66 percent to 75 percent of the time (e.g., <i>e-ven</i>).If you don't recognize the word, divide after the consonant, which makes the first syllable closed (with a short-vowel sound). This method works 25 percent to 33 percent of the time (e.g., <i>ev-er</i>).		
Syllable division: Consonant blends and digraphs	Consonant blends and digraphs stick together. Do not separate them, as in <i>crust-y</i> and <i>moth-er</i> .		
Accenting	Accent first word of an Anglo-Saxon compounds (<i>catfish</i>). Accent root word in a Latin-based words (<i>instruction</i>). Accent syllable before <i>tion</i> (<i>production</i>). Accent first syllable to make a noun and accent second syllable to make a verb (<i>present</i> vs. <i>present</i>).		

Letter Patterns and Morphemes		
Rule or Topic	Explanation and Examples	
Adding endings: Consonant doubling	When a one-syllable word with one vowel ends with one consonant, double the final consonant before adding a suffix that begins with a vowel (<i>fit, fittest</i>).Do not double if the suffix begins with a consonant (<i>ship, shipment</i>).In multisyllabic words, double the final consonant if the last syllable is accented (<i>repelled</i>). If it is not accented, do not double the consonant (<i>canceling</i>).	
Adding endings: Drop silent <i>e</i>	When a base word ends in silent <i>e</i> , drop the <i>e</i> when adding a suffix that begins with a vowel (<i>like</i> , <i>liking</i>). Keep the <i>e</i> before a suffix that begins with a consonant (<i>shame</i> , <i>shameless</i>).	
Adding endings: Change y to i	When a base word ends in <i>y</i> preceded by a consonant, change the <i>y</i> to <i>i</i> before a suffix (except <i>-ing</i>; <i>ruby</i>, <i>rubies</i>).If a base word ends in <i>y</i> preceded by a vowel (e.g., <i>ay</i>), just add the suffix (<i>pray</i>, <i>praying</i>).Note that <i>y</i> changes to <i>i</i> even if the suffix begins with a consonant (<i>busy</i>, <i>business</i>).	
Inflectional endings	Anglo-Saxon in origin and do not change a word's part of speech (e.g., -s, -es, -ed, -ing, -er, -est)	
Three sounds of <i>-ed</i>	Makes the /əd/ sound when base word ends in <i>d</i> or <i>t</i> (<i>beaded</i> or <i>panted</i>) Makes the /d/ sound when base word ends in voiced sound (<i>canned</i>) Makes the /t/ sound when base word ends in unvoiced sound (<i>fixed</i>)	
Three sounds of plural (-s or -es)	Makes the /z/ sound when base word ends in voiced sound (<i>moves</i>) Makes the /s/ sound when base word ends in unvoiced sound (<i>sticks</i>) Add -es and make the /əz/ sound when based word ends with /s/, /z/, /j/, /ch/, /sh/, or /zh/ (<i>kisses</i> , <i>buzzes</i> , <i>edges</i> , <i>witches</i> , <i>hushes</i> , <i>garages</i>)	
Derivational prefixes and suffixes	Prefix: Often Latin in origin and changes a word's meaning (benevolent, malevolent) Suffix: Often Latin in origin and can change a word's meaning (hopeful, hopeless) and/or part of speech (nature, natural, naturalize, naturalistic)	

Most Common Prefixes	Most Common Suffixes		atin and Greek Roots 00,000 multisyllabic words)
un-	-S	duct	ten
re-	-es	fic	tain
dis-	-ed	fer	tim
in-	-ing	tent	sist
mis-	-er	tend	sta
fore-	-OY	tens	stat
de-	-hood	mit	stit
pre-	-ion	miss	pon
а-	-ship	сар	pose
	-у	ceit	pound
	-ible	ceive	plic
	-able	сер	ply
		cept	graph
		cip	ology

Morphemes

Adapted from Ebbers, 2011; Henry, 2010; Moats, 2009; Venezky, 1999.

Ejemplos de reglas ortográficas para el español

This handout presents a sample of the orthographic rules for the Spanish language.

Reglas básicas para la letra B		
Reglas	Ejemplos	
Se escribe <i>b</i> después de <i>m</i>	tambor, septiembre, mambo, cambio	
Las sílabas que empiezan con <i>br</i> y <i>bl</i> se escriben con <i>b</i> :	brazo, sobre, blusa, pueblo, sombrero	
Se escriben con <i>b</i> los verbos terminados en <i>bir</i> (excepción <i>vivir, hervir, servir</i> y sus compuestos)	escribir, recibir, subir, percibir, prohibir	
Se escriben con <i>b</i> las palabras con los siguiente sufijos y prefijos <i>bio, biblio, sub,</i> <i>bilidad, bundo/a, bi, bis,</i> y <i>biz</i>	 bio: microbio, biología, biomecánico biblio: biblioteca, bibliografía sub: subterránea, subsistir bilidad: habilidad, amabilidad bundo/a: vagabundo, moribundo bi, bis, biz: bimotor, bisabuelo, bizcocho 	

Reglas básicas para la letra V		
Reglas	Ejemplos	
Se escribe v después de las letras d y n	adviento, envidia, invento	
Se escriben con v los adjetivos terminados en -ava, -avo, -eva, -eve, -evo, -iva, -ive, e -ivo	adictivo, octavo, reactiva	
Se escriben con v las palabras que empiezan con villa y vice (excepto bíceps y billar)	villano, villancico, vicepresidente	
Se escriben con v las palabras que empiezan por eva, eve, evo, y evi (excepto ebanista y ébano)	evento, evacuar, evitar, evolución	

Reglas básicas para la letra C		
Reglas	Ejemplos	
Se escriben con <i>c</i> las terminaciones <i>-cito</i> , <i>-cita</i> , <i>-cillo</i> , <i>-cilla</i> , <i>-cecillo</i>	pedacito, nochecita, manecilla, pececillo, lucecilla	
Palabras que en singular terminan con z , el plural se escribe con c	pez-peces, luz-luces, lápiz-lápices	
Se escriben con <i>c</i> los verbos que terminen en - <i>cer</i> , - <i>ceder</i> , - <i>cir</i> , - <i>cendir</i> , - <i>cibir</i> , - <i>cidir</i> (excepto <i>asir</i> y <i>coser</i>)	cocer, conceder, decir, recibir	

Reglas básicas para la letra G		
Reglas	Ejemplos	
Se escribe con g el prefijo <i>geo</i>	geografía, geometría	
Se escriben con g las conjugaciones de los verbos que terminan en ger, gir (excepto tejer y crujir)	recoger – recogí, recogieron, recogerás exagerar, emerger, proteger, dirigir	
Se escriben con g el conjunto de letras gen (excepto avejentar, berejena, ajeno)	gente, imagen, gentil, general, agente	
Se escriben con g el conjunto de letras gio, gia, gión, gía	regia, plagio, región, morfología, fonología, biología	

Reglas de acentuación en español

Las palabras en español de dos o más sílabas tienen una sílaba que es la que se pronuncia más fuerte o la que tiene una mayor intensidad al decir la palabra. Esta sílaba se llama la **sílaba tónica**. La sílaba tónica puede o no llevar un acento escrito o tilde en una de las vocales de esa sílaba, por ejemplo:

cárcel	sílaba tónica: <i>cár</i>
camiseta	sílaba tónica: se
pantalón	sílaba tónica: <i>lón</i>

Para saber cuándo poner acento escrito en una sílaba tónica de una palabra, se tiene que saber en que posición se encuentra la sílaba tónica y aplicar unas simples reglas.

La sílaba tónica puede ser la **última**, la **penúltima**, o la **antepenúltima** sílaba de una palabra. Si la sílaba tónica es la última, la palabra es **aguda**. Si la sílaba tónica es la penúltima, la palabra es **grave**. Si la sílaba tónica es la antepenúltima, la palabra es **esdrújula**.

Palabra	Sílaba tónica es la antepenúltima sílaba	Sílaba tónica es la penúltima sílaba	Sílaba tónica es la última sílaba	Тіро
azul		а	zul	aguda
camión		са	mión	aguda
maceta	та	се	ta	grave
cárcel		cár	cel	grave
cámara	CÁ	та	ra	esdrújula
hígado	hí	ga	do	esdrújula

Como se puede ver en los ejemplos, las palabras agudas y graves pueden llevar o no acento escrito. Las palabras esdrújulas siempre llevan acento escrito. Las siguientes reglas nos ayudan a saber cuando una palabra aguda o grave lleva acento escrito.

Palabras agudas

En una palabra aguda, la sílaba tónica es la última. Una palabra aguda lleva acento escrito si termina en vocal, *n* o *s*.

Sin acento escrito	Con acento escrito
pa -pel	des- pués
na- riz	co-ra- zón
re- loj	in-te- rés
ca-li -dad	ca -fé

Palabras graves

En una palabra grave, la sílaba tónica es la penúltima. Una palabra grave lleva acento escrito cuando **no** termina en vocal, n o s.

Sin acento escrito	Con acento escrito
а -та -да	cár-cel
ca-mi- se -ta	lá- piz
com-pu-ta- do -ra	án- gel
dul-ce	ca -rác -ter

Excepciones: Las palabras que terminan en diptongos *-ía* o *-ío* son palabras graves que llevan acento escrito aún cuando terminan en vocal:

-ía	-ío
mí-a	mí-o
bio-gra-fí-a	ti-o
li-bre-rí-a	ca-se-rí-o

Palabras esdrújulas

En una palabra esdrújula, la sílaba tónica es la antepenúltima. Una palabra esdrújula siempre lleva acento escrito:

Mé xico	úl timo	hí gado	rá pido
cá mara	má gico	e xá menes	lá tigo
pé talo	sím bolo	ta rán tula	más cara
cír culo	lá grima	sá bado	cá lido

Reglas de acentuación				
Sílaba tónica	Antepenúltima	Penúltima	Última	
Acento escrito cuando			Aguda La palabra termina en <i>n</i> , s, vocal. <i>camión, José, atún</i>	
Acento escrito cuando		Grave La palabra no termina en <i>n</i> , s, vocal <i>mármol, árbol</i>		
Acento escrito cuando	Esdrújula Siempre lleva acento escrito exámenes, México, lámpara			

Pasos para decidir si una palabra lleva acento o no

1. Dividir la palabra en sílabas.

La palabra es camioneta: ca – mio – ne – ta

2. Encontrar la sílaba tónica en la palabra: ¿Es la última? ¿La penúltima? ¿La antepenúltima?

La sílaba tónica es la penúltima: ca - mio - ne - ta.

3. Decidir qué tipo de palabra es: ¿La palabra es aguda, grave, o esdrújula?

La palabra *camioneta* es grave.

4. Decidir si esta palabra lleva acento escrito o no.

Una palabra grave lleva acento cuando **no** termina en vocal, *n* o s. La palabra *camioneta* termina en vocal, entonces esta palabra no lleva acento escrito.

Decidir si una palabra lleva acento o no – ejemplo			
Pasos Palabra			
1. Dividir la palabra en sílabas.	la – pi – ces		
2. Encontrar la sílaba tónica en la palabra.	antepenúltima penúltima última		
3. Decidir qué tipo de palabra es.	esdrújula grave aguda		
4. Decidir si esta palabra lleva acento escrito o no.	lápices		

Una versión en blanco para usarse en clase:

Decidir si una palabra lleva acento o no				
Pasos	Palabra			
1. Dividir la palabra en sílabas.				
2. Encontrar la sílaba tónica en la palabra.	antepenúltima penúltima última			
3. Decidir qué tipo de palabra es.	esdrújula grave aguda			
4. Decidir si esta palabra lleva acento escrito o no.				

Pautas para la instrucción

Los estudiantes deben saber cómo dividir una palabra en sílabas y cómo identificar la sílaba tónica. Los estudiantes de 3er, 4to, y 5to año deberán practicar mucho la separación de palabras en sílabas y la identificación de la sílaba tónica.

Una vez que estas dos habilidades han sido desarrolladas, los estudiantes deberán aprender y aplicar las reglas de acentuación. Apoye este aprendizaje al hacer un póster con las reglas que los estudiantes puedan ver y utilizar.

Examples of Word Sorts

Word sorts are activities that provide students opportunities to examine words and categorize them by spelling patterns and/or sounds.

Closed Sorts

Choose the categories and model the sorting procedure.

Example: Present the three categories, read the three words, and place them in the correct column. Then ask students to sort the remaining words.

spec/spect	stru/struct	sect
inspect	structure	section

Other words: spectacles, spectator, spectacle, instruction, construct, destruct, insect, intersect, sector.

You may build in the category without actually giving students a category name and let them discover the orthographic or morphological patterns.

For example, students work on open versus closed syllables. Have students notice the pattern of having a single consonant after an open syllable versus two consonants after a closed syllable by using a word sort. The words to be sorted might include *music, title, little, even, total, puzzle, simple, pattern, final,* and *pencil.*

Open Sorts

Students organize sets of words into categories based on what they notice about the words.

Open sorts are most effective after students have had many opportunities with closed sorts and understand the concept of sorting.

Observe the categories individual students create. This information may provide you with valuable information about a student's understanding of the orthography and morphology of the English language.

Word sorts can be designed to focus on a single new concept or can be used for a review with mixed concepts. For example, if students know the prefixes *in-* and *re-*, you can create a sort containing words with those prefixes plus the new suffixes *-ion* and *-able*.

As students begin to understand the complexities of syllables and morphemes, they may be asked to do two-step word sorts. First, they sort by syllables and then for morphemes.

For example, in step one, students sort by syllable.

<u>Open first syllable</u>	<u>Closed first syllable</u>
prehistoric	undone
provide	incredible
preview	contrast
reconnect	unbelievable
protect	compare
remake	incapable

In step two, students sort for meaning.

pre-	<u>re-</u>	pro-	<u>un-</u>	<u>in-</u>	<u>com-</u>
prehistoric	remake	provide	undone	incredible	compare
preview	reconnect	protect	unbelievable	incapable	contrast

Word sorts can be adjusted for students identified with or at risk for dyslexia or other reading difficulties by choosing known words, keeping the sorts focused on a single new category, and providing more modeling.

Word Hunts

These are helpful extensions to word sorts that allow students to find other words in their reading that contain the same spelling patterns and sounds.

Encourage students to identify exceptions, which may lead to understanding that exceptions may have commonalties.

For example *believe, conceive,* and *protective* are exceptions to the VC*e* pattern but have a common *v* that creates a new common spelling pattern (putting a silent *e* at the end of a word to keep it from ending with a *v*).

Adapted from Bear, Invernizzi, Templeton, & Johnston, 2012; Ganske, 2000.

Examples of Word Sorts in Spanish

Word sorts are activities that provide students opportunities to examine words and categorize them by spelling patterns and/or sounds.

Closed Sorts

Choose the categories and model the sorting procedure.

Example: Present the three categories, read the three words, and place them in the correct column. Then ask students to sort the remaining words. In Spanish, students can sort by the different combinations in which the letter g can be present.

gue	gui	ge	gi
guerra	guisante	geranio	gitano
ceguera	guitarra	general	gigante

Other words: lánguido, guerrero, gente, legislatura.

You may build the category without actually giving students a category name and let them discover the common spelling patterns or sounds. For example, write 10 words with the suffix *-ción* and let students identify the name for that category: Palabras con *-ción*.

Students can sort by prefixes or suffixes:

<u>-ísimo/a</u>	<u>trans-</u>	<u>bi-</u>	<u>-ito/a</u>
bellísimo	transporte	bimestral	cafecito
carísimo	transbordar	bisilábico	casita
hermosísimo	translúcido	bipolar	pollito

As students begin to recognize specific spelling patterns, they may be asked to do two-step word sorts.

For example, in step one, students sort for initial sound.

g suave /j/	<u>g fuerte /g/</u>
gemelo	golpe
gigante	gusano
gelatina	guerra
girasol	gansa
genio	guisante

In step two, students sort for initial syllable.

gi	ge	gui	gue
gigante	gemelo	guisante	guerra
girasol	genio		
	gelatina		

Adapted from Bear, Invernizzi, Templeton, & Johnston, 2012; Ganske, 2000.

Sample Word Sorts

Sort these words by the sound that c makes.

boycott	science	cyst
custom	graceful	incapable
century	helicopter	cinnamon
scarcity	infancy	scuba

- When does *c* make the /k/ sound?
- When does *c* make the /s/ sound?

Sort the following words by the sound(s) that -ed makes.

packed	roared	panted
crooked	handed	walked
hissed	hushed	crawled
bombed	punched	herded
moaned	pasted	grunted

- Why does *-ed* make different sounds at the end of different past-tense verbs?
- There is one exception to the rule. Identify and explain this exception.

My Word Sort

Orthographic or morphological knowledge to be taught or practiced:

Words to use:

Questions to ask students about categories:

Adapted from Bear, Invernizzi, Templeton, & Johnston, 2012; Moats, 2009b.

Sample Dictation Routine

Word Dictation

Teacher: Pencils down. Eyes on me. Please draw two lines on your paper. We will write a word on each of these lines. The first word is *student*. What word?

Students: Student.

Teacher: Think about the sounds you hear in the word *student*. Listen as I model the process for you. *Student*: $\frac{s}{t}/\frac{t}{n}/\frac{d}{e}/n/\frac{t}$. There are seven sounds in the word *student*. The first sound is /s/. We have learned that /s/ can be spelled *s*, *ce*, or *ci*. I know that in *student*, the /s/ sound comes at the beginning of the word and has a consonant right after it, so it must be spelled with an *s*.

Model writing the "s" on the first line.

Teacher: Write the letter s on the first line of your paper. The next sound is /t/. The letter that makes the /t/ sound is *t*.

Model writing the "t" next to the "s."

Teacher: Write the letter *t*. The next sound is $/\overline{u}/$. This sound has several spellings. In this word, the sound is heard at the end of the first syllable, which is an open syllable, so it is spelled with the letter *u*.

Model writing the "u."

Teacher: Write the letter *u*. The next sound is /d/. The letter that makes the /d/ sound is *d*.

Model writing the "d."

Teacher: Write the letter *d*. The next sound is /ĕ/. The letter that makes the /ĕ/ sound is *e*.

Model writing the "e."

Teacher: Write the letter *e*. The next sound is /n/. There is more than one spelling for /n/, but I know this sound is most often spelled with the letter *n*. So the letter that makes the /n/ sound in the word *student* is *n*.

Model writing the "n."

Teacher: Write the letter *n*. The next sound is /t/. The letter that makes the /t/ sound is *t*.

Model writing the "t" as the final letter of the word on the first line.

Teacher: Write the letter *t*. The second word is *support*. Think about the sounds you hear in the word *support*.

Provide three to five seconds of think time.

Teacher: Now, write the word *support* on the second line.

Allow time for students to write the word. Provide scaffolds as needed. Check the spelling of the word by identifying the spelling of each sound. Have students put a dot above each spelling they got correct. Have students circle incorrect spellings and rewrite the entire word.

Sentence Dictation

Teacher: Listen as I say the first sentence: The student asked for support from the instructor. Repeat the sentence.

Students: The student asked for support from the instructor.

Teacher: Count the number of words in the sentence. How many are there?

Students: Eight words.

Teacher: Yes, eight words. Write the first word, *the*. That's an easy one. Think about the next word, *student*.

Students may think about the syllables or phonemes in the word or may know the word as a whole, depending on their level.

Teacher: Write the word *student* on your paper. Think about the next word: *asked*. How will you spell the /t/ at the end? Remember, *asked* is past tense. The next word is a high-frequency word, *for*. Write *for*. Think about the next word, *support*. The *u* is short, so how many *p*'s will you need? The next word is *from*. Write *from*. The next word is *the*. Write *the*. The last word is *instructor*. Remember, it's Latin-based and has a prefix, root, and suffix.

Continue this procedure for the remainder of the predetermined sentences.

Allow time for students to write the sentences. Check the spelling of each word in the sentences. Have students put a dot above each spelling they got correct. Have students circle incorrect spellings and rewrite the entire word.

Guidelines for Teaching Word Study and Spelling

All students benefit from some systematic word study and spelling instruction and practice.

Students who experience difficulty in spelling need intensive instruction and practice tailored to their individual levels of word knowledge.

The following are several guidelines for spelling instruction.

I. Review previously taught material.

2. Consider students' knowledge and skills; use words that students can read.

Select words and patterns from spelling inventories, the basal reading series, and student writing.

Include words from the content area curriculum.

Determine the number of words to introduce based on students' needs.

Modify spelling lists for students who are identified with or at risk for dyslexia or who have spelling difficulties.

Introduce orthographic patterns and morphemes for spelling after they have been introduced and taught in reading.

3. Introduce frequently used and regular word patterns first.

4. Limit the number of new words or patterns in one lesson.

Expect that students may need to read words many times before they are able to spell them.

5. Provide extended practice for newly learned words or word patterns before other patterns are introduced.

Dictate words or sentences and have students write them.

Provide ample practice for students who are having difficulty with spelling to help them remember orthographic patterns and morphemes.

If handwriting is difficult, encourage students to use keyboards or grapheme tiles to spell words.

Use word banks to provide an excellent review of previously taught words for students to refer to as they write.

Consider using mnemonics that the students develop. Mnemonics may help some students recall words by providing association links, such as "there's an *ear* in *hear*."

6. Teach students to check and monitor their spelling.

Ask students to read words after they have spelled them.

Expect students to spell previously taught words correctly.

7. Provide multiple opportunities for students to make connections between words, their spellings, sounds, meanings, and syntax.

Use techniques that encourage students to focus on the phonemic elements of words. For example, students can repeat the word and then say the sounds as they write the corresponding letters.

For struggling students, enhance their discrimination and recognition of the positions of individual phonemes in words by

- segmenting the sounds in words as students spell the sounds,
- counting syllables,
- omitting syllables, or
- changing the sounds in words.

Provide opportunities for students to analyze and sort words into categories. These opportunities will help students focus on the spelling and letter patterns in words.

Encourage students to use their decoding skills as they read words during word sorts.

8. Provide immediate and appropriate feedback to reinforce correct spelling of newly learned spelling patterns.

9. Extend students' knowledge of words by encouraging them to look for more words that follow particular spelling patterns or generalizations.

After word sorts, extend students' knowledge of words by encouraging students to look for more words that follow particular spelling patterns or generalizations.

Have students work individually, in pairs, or in small groups.

Encourage students to record their words in notebooks or on word bank cards.

Adapted from Bear et al., 2012; Bear & Templeton, 1998; Carreker, 2005b; Moats, 1995; Templeton, 1996; Torgesen & Davis, 1996; Treiman, 1998.

Decoding By Analogy

As students become more proficient readers, they begin to process letters in larger chunks called spelling patterns. Spelling patterns are letter sequences that frequently occur in a certain position in words.

Spelling patterns are also known as phonograms or rimes. The initial consonant(s) of a onesyllable word is the onset. The spelling pattern that follows is the rime. For example, in the word *street* the onset is *str* and the rime is *eet*.

Students blend initial phonemes with common vowel spelling patterns to read words.

Words that contain the same spelling pattern form word families. Here are a few examples:

- beet, feet, meet, sheet, greet, sleet, street
- bay, day, hay, lay, may, pay, ray, say, way, stay, tray, gray, play, stray, spray
- boast, coast, roast, toast
- *able, cable, fable, gable, sable, table, stable*
- down, gown, town, frown, drown, clown, brown

When students decode words by using word families or spelling patterns from the words they know, they are using a strategy called decoding by analogy. Using many examples of one word family enhances students' memory for specific spelling patterns. Research has shown that students can effectively use the decoding by analogy strategy after they know some letter-sound correspondences and can decode regular words.

Students can use the analogy strategy by asking the following questions:

- "What words do I know that look or sound the same?"
- "What words do I know that end (or begin) with the same letters or sounds?"

Adapted from Gaskins, Ehri, Cress, O'Hara, & Donnelly, 1996–1997.

Six Syllable Types

Syllable Types	Exar	nples
Closed syllables end in at least one consonant; the vowel is short.	splen-did gos-sip mag-net	in-deed rab-bit mon-ster
Open syllables end in one vowel; the vowel is usually long.	no-tion se-quel ba-by	la-zy ba-con i-tem
Vowel-consonant- <i>e</i> syllables end in one vowel, one consonant, and a final e. The final <i>e</i> is silent, and the vowel is long.	dic-tate stam-pede lone-ly	in-vite pro-file wish-bone
Vowel- <i>r</i> syllables (<i>r</i> -controlled vowel syllables) have an <i>r</i> after the vowel; the vowel makes an unexpected sound. Vowels followed by <i>r</i> do not make their common short or long sounds.	bom-bard vir-tue tur-nip	per-fect cor-ner car-pool
Vowel digraphs and diphthongs have two adjacent vowels. Vowel pairs are also known as vowel combinations or teams.	sail-boat boy-hood treat-ment	six-teen oat-meal moon-struck
Final stable syllables have a consonant followed by <i>le</i> or a nonphonetic but reliable unit, such as <i>tion</i> and <i>ture</i> . Final stable syllables have unexpected but reliable pronunciations.	puz-zle can-dle sta-tion	con-trac-tion ad-ven-ture fea-ture

Adapted from University of Texas Center for Reading and Language Arts, 2003.

Six Syllable Types: Activities

In the chart below, list the six syllable types and examples of words with each syllable type. The vowel sound(s) within each syllable type are provided.

Syllable Type	Vowel Sound(s)	Examples
	Short	
	Long	
	Long	
	Long, short, and other, including diphthongs (/oi/ and /ow/)	
	/er/, /ar/, /or/	
	Usually schwa	

Use what you just learned about the syllable types to sort these words into open and closed syllables based on their **first** syllable.

paper	bottle	puzzle
funnel	river	maple
temper	even	total
wiggle	title	music

Teaching the Six Syllable Types

General Procedures

Begin with closed-syllable words.

Sequentially introduce the other five types of syllables.

Closed Syllable

Write four or five closed-syllable words on the board (use one-syllable words). Determine with students how many vowels are in each word (one).

Ask students how each word ends (with a consonant).

Read the words. Ask students how the vowels are pronounced (short-vowel sound).

Define *closed* syllable.

Use the cloze procedure: "A closed syllable ends in at least one _____. The vowel is _____."

Explain distorted vowel sounds, such as the schwa sound of vowels in unaccented closed syllables before the letters *m*, *n*, or *l*, and the nasal sounds of vowels before /m/, /n/, or /ng/.

Open Syllable

Write four or five open-syllable words on the board (use one-syllable words). Determine with students how many vowels are in each word (one).

Ask students how each word ends (with a vowel).

Compare words to previously taught closed syllables and discuss differences.

Read the words. Ask students how the vowels are pronounced (long-vowel sound).

Define *open* syllable.

Use the cloze procedure.

Vowel-Consonant-e

Write four or five vowel-consonant-*e* words on the board. Determine with students how many vowels are in each word (two).

Ask students how each word ends (with an *e*).

Ask what comes between the vowel and the final *e* (one consonant).

Read the words. Ask students what happens to the final *e* (silent).

Ask students how the vowels are pronounced (long sound).

Define vowel-consonant-e syllable.

Use the cloze procedure.

Vowel-r (r-Controlled) Syllable

Write four or five one-syllable vowel-*r* words on the board. Determine with students how many vowels are in each word (one).

Ask students how each word ends (with at least one consonant).

Review the closed syllable.

Read the words and explain that these words do not have a short sound.

Explain that vowels do not make their common long or short sound when they are followed by *r*.

Define *vowel-r* syllable.

Use the cloze procedure.

Vowel-Team Syllable (Vowel Digraph/Diphthong)

Write four or five one-syllable vowel-team words on the board. Determine with students how many vowels are in each word (two).

Ask students how each word ends (with at least one consonant).

Compare vowel-team syllables to closed and open syllables and discuss differences.

Read the words. Explicitly teach each sound.

Define *vowel-team* syllable.

Use the cloze procedure.

Final Stable Syllable

Write four or five two-syllable consonant-*le* words on the board. Ask students what is the same in all the words (all end in a consonant followed by *le*).

Ask students to feel or hear how many syllables are in each word as they say it (two syllables).

Read each word and have students echo or repeat.

Explain that the pronunciations of consonant-le syllables are fairly stable.

Define final stable syllable.

Use the cloze procedure.

Adapted from Carreker, 2005a.

Common Prefixes

PREFIX	% of All Prefixed Words	MEANING	EXAMPLES	
Un-	26	Not, opposite of unaware, unbelievable, unsure		
Re-	14	Again redo, replay		
Im-, in-, il-, ir-	11	Not	impossible, incapable, illogical, irregular	
Dis-	7	Not, opposite of	dishonest, disgraceful, discover	
En-, em-	4	Cause to	enable, emblaze	
Non-	4	Not	nonstick, nonfiction, nonexistent	
In-, im-	3	In, into	inject	
Over-	3	Too much	overtime, overeat	
Mis-	3	Wrongly	misunderstand, misuse	
Sub-	3	Under	subsurface, subway	
Pre-	3	Before	prepay, preschool	
Inter-	3	Between	international, interact	
Fore-	3	Before	forethought	
De-	2	Opposite of	decaffeinated, dehydrate	
Trans-	2	Across	transatlantic	
Super-	1	Above	superhero, supermodel	
Semi-	1	Half	semiannual, semicolon	
Anti-	1	Against	antiwar, antisocial	
Mid-	1	Middle	midyear, midnight	
Under-	1	Too little	underweight, underpaid	
All others	3			

Top 20 prefixes from Carroll, J. B., Davies, P., & Richman, B. (1971). The American heritage world frequency book. Boston: Houghten Mifflin; as cited in White, Sowell, & Yanagihara, 1989.

Reprinted with permission from Denton, C., Bryan, D., Wexler, J., Reed, D., & Vaughn, S. (2007). *Effective instruction for middle school students with reading difficulties: The reading teacher's sourcebook*. Austin, TX: Vaughn Gross Center for Reading and Language Arts at The University of Texas at Austin.

Common Suffixes

SUFFIX	% OF ALL SUFFIXED WORDS	PART OF SPEECH	EXAMPLES
-s, -es	31	Plural of noun	cats, boxes
-ed	20	Past tense of verb	sailed
-ing	14	Progressive tense of verb	jumping, racing
-ly	7	Usually an adverb; sometimes an adjective	slowly, lovely
-er, -or (agent)	4	Noun (agent)	runner, professor
-ion, -tion, -ation, -ition	4	Noun	action, transition, vacation
-able, -ible	2	Adjective	lovable, incredible
-al, -ial	1	Adjective	global, logical, partial
-у	1	Adjective	funny
-ness	1	Abstract noun	kindness
-ity, -ty	1	Noun	activity
-ment	1	Noun	merriment
-ic	1	Adjective	historic
-ous, -eous, -ious	1	Adjective	hideous, spacious
-en	1	Verb	quicken, thicken
-er (comparative)	1	Adjective	bigger
-ive, -ative, -tive	1	Adjective	alternative, pensive
-ful	1	Adjective	wonderful
-less	1	Adjective	effortless
-est	1	Adjective	strongest
All others	7		

Top 20 suffixes from Carroll, J. B., Davies, P., & Richman, B. (1971). The American heritage world frequency book. Boston: Houghten Mifflin; as cited in White, Sowell, & Yanagihara, 1989.

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ROOT ORIGIN MEANING **EXAMPLES** aud Latin Hear auditorium, audition, audience, audible, audiovisual Greek Star astronaut, astronomy, asterisk, asteroid, astrology astro bio Greek Life biology, biography, biochemistry Latin Take intercept, accept, reception cept dict Latin Speak or tell dictation, dictate, predict, contradict, dictator duct Latin Lead conduct, induct Earth Greek geography, geology, geometry, geophysics geo Greek Write autograph, biography, photograph graph Latin Throw eject, reject, projectile, inject ject Greek Measure thermometer, barometer, centimeter, diameter meter Latin Little or small miniature, minimum, minimal min mit or mis Latin Send mission, transmit, missile, dismiss, submit Latin Foot pedal, pedestal, pedestrian ped Greek phon Sound telephone, symphony, microphone, phonics, phoneme, phonograph Latin Carry transport, portable, import, export, porter port Latin Break disrupt, erupt, rupture, interrupt, bankrupt rupt scrib or script Latin Write scribble, scribe, inscribe, describe, prescribe See Latin inspect, suspect, respect, spectacle, spectator spect Build or form Latin construct, destruct, instruct, structure struct Greek From afar tele telephone, telegraph, teleport Pull tract Latin traction, tractor, attract, subtract, extract Latin Turn reverse, inverse vers

Common Greek and Latin Roots

Diamond, L., & Gutlohn, L. (2006). Vocabulary handbook. Berkeley, CA: Consortium on Reading Excellence; Ebbers, S. (2005). Language links to Latin, Greek, and Anglo-Saxon: Increasing spelling, word recognition, fluency, vocabulary, and comprehension through roots and affixes. Presented at The University of Texas, Austin, TX; and Stahl, S., & Kapinus, B. (2001). Word power: What every educator needs to know about teaching vocabulary. Washington, DC: National Education Association.

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Practicing Word Reading During Supported Reading Instruction

Supported reading instruction generally occurs in small groups that are designed to address specific reading needs of students.

Before Reading

Select the text that the group will read.

Select the text based on the instructional level of the students and the concepts that have been taught, such as specific orthographic patterns or morphemes.

Introduce the text to prepare students for what they will read.

Set the purpose for reading, relate the story to students' personal experiences, introduce recurring language and challenging vocabulary, and provide a brief overview of the story.

Have students predict what they think the text will be about.

Review previously taught orthographic patterns, high-frequency words, and/or irregular words by reading words or sentences that contain the concepts.

Introduce any new irregular high-frequency words, concepts, or patterns and have students practice reading words individually and in sentences.

Review word-reading strategies that have been taught and encourage students to use the strategies as they read.

During Reading

Listen to students as they read.

Use different methods for reading the text. For example, have all students "whisper-read" at the same time but at each student's own pace.

As students whisper-read (either to themselves or into a whisper phone), ask each student to read aloud a part of the text so you can listen and assess their word-reading skills and strategy use.

Have students read the text more than once. Reading a text more than once enhances fluency and comprehension, especially for students with dyslexia or other reading difficulties.

When students struggle to read words independently, prompt them to apply word-reading strategies.

Regularly monitor students' progress as they read by noting errors and reading behavior.

After Reading

Discuss texts, help students make connections, and provide prompts to enhance comprehension after everyone finishes reading.

Review effective word-reading strategies students used while reading.

Provide specific feedback that reinforces appropriate reading strategies, such as "You looked for syllables, used them to sound out the word, and then blended them to read that word!"

Follow up with literacy activities to reinforce concepts.

For example, have students generate lists of words with specific orthographic patterns or morphemes from the text.

Encourage students to use these words in activities such as word building, sorting, or writing sentences about the text.

Encourage students to reread the text several times to practice and promote fluency.

Adapted from Carreker, 2005a; Gunning, 2002.

Explicit, Systematic Instruction in Word Study and Recognition

HINTS: Strategy for Reading Multisyllabic Words (based on morphology)

 ${f H}$ ighlight the prefix and/or suffix.

Identify the consonant and vowel sounds in the base word.

 \mathbf{N} ame the base word.

T ie the parts together fast.

Say the word.

SPLIT: Strategy for Reading Multisyllabic Words (based on the six syllable types)

See the syllable patterns.

 \mathbf{P} lace a line between the syllables.

Look at each syllable.

Identify the syllable sounds.

Try to say the word.

Knowing both strategies allows readers to be flexible in how they attack longer words. Remind students of this need for flexibility.

Two Final Steps

- Try putting the stress on different syllables (remember the tricky schwa).
- Check the context by rereading the sentence to make sure your word makes sense.

St	Date:	Comments				
gnition Checkli	a:	Observed Time Amount(s)				
Explicit, Systematic Instruction: Word Study and Recognition Checklist	Observer: Content Area:	Instructional Methods and Strategies Instructional Methods and Strategies Check All Observed) Whole group Mixed-ability small groups Teacher-led small groups (e.g., workstations) Independent work Partners	 Mixed-ability small groups (e.g., workstations) Partners 	 Instruction paced appropriately Guided practice Checking for understanding Multiple response opportunities Extended practice opportunities Immediate feedback (corrective when needed) 	 Orthographic pattern instruction or practice Analogizing (e.g., word family instruction and practice) Syllable-level instruction and practice Morpheme-level instruction and practice Word-reading strategies applied in text reading 	 Word cards Decodable text Instructional-level text Other text type: Other material:
Explicit, Systemat	Obse		-	 Objective identified Background knowledge activated Modeling (e.g., thinking aloud) Consistent language Scaffolding when needed Examples and nonexamples (as appropriate) 	 Advanced phonemic awareness activities Word building Word sorts Word or sentence dictation Decoding words 	 Grapheme tiles or cards Sound-spelling cards Word wall Sound wall Word list(s)
	Teacher:	Category	Grouping Formats	Explicit Instruction Components	Word Study and Recognition Activities and Lessons	Materials Used

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Reading Big Words: Instructional Practices to Promote Multisyllabic Word Reading Fluency

Jessica R. Toste, PhD^{1,2}, Kelly J. Williams, EdS^{1,2}, and Philip Capin, MA^{1,2}

Abstract

Poorly developed word recognition skills are the most pervasive and debilitating source of reading challenges for students with learning disabilities (LD). With a notable decrease in word reading instruction in the upper elementary grades, struggling readers receive fewer instructional opportunities to develop proficient word reading skills, yet these students face greater amounts of texts with more complex words. Poor decoders, even those who can fluently read monosyllabic words, often have difficulty with multisyllabic words, yet the average number of syllables in words that students read increases steadily throughout their school years. As such, it is necessary to identify instructional practices that will support the continued reading development of students into the upper elementary years. This article discusses the difficulty involved in multisyllabic word reading and describes five research-based instructional practices that promote the multisyllabic word reading fluency of struggling readers, particularly those with LD.

Keywords

word reading, instruction, multisyllabic words, upper elementary

Proficient readers are simultaneously able to decode letters and sounds in words while making sense of the text that they read. The ability to decode words fluently and the ability to comprehend are mutually important to the process of reading (National Reading Panel, 2000; Pressley & Allington, 2014; Snow, Burns, & Griffin, 1998). For students with disabilities, particularly learning disabilities (LD) in the area of reading, these are often skills that come with much difficulty. Therefore, these students require explicit instruction from their teachers, partnered with continued guided practice.

According to the most recent report by the National Assessment of Educational Progress (2015), only 36% of fourth grade students were performing at or above the proficient level in reading. Deficits in phonological processing that affect decoding skills are the primary challenge for students who struggle with reading in the elementary grades (Blachman, 2013; Leach, Scarborough, & Rescorla, 2003; Shankweiler, 1999; Vellutino, Fletcher, Snowling, & Scanlon, 2004; Yuill & Oakhill, 1991). In the upper elementary grades, the instructional focus shifts from word reading (i.e., teaching students how to read, or decode, individual words) to reading for understanding. With this decrease in word reading instruction, struggling decoders receive fewer instructional opportunities to develop proficient reading skills, yet these students face greater amounts of texts with more complex words. It is no surprise that research shows struggling readers in upper elementary grades continue to struggle in later grades and become at risk for serious academic challenges (Brasseur-Hock, Hock, Kieffer, Biancarosa, & Deshler, 2011; Francis, Shaywitz, Stuebing, Shaywitz, & Fletcher, 1996; Moats, 1999; Partanen & Siegel, 2014; Vaughn et. al., 2003). As such, it is necessary to identify instructional practices that support the continued reading development of students in the upper elementary years. This article addresses the difficulty involved in multisyllabic word reading and describes five research-based instructional practices to promote the multisyllabic word reading fluency of struggling readers. While struggling readers benefit from this type of instruction, these practices are

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Challenges and Successes of Early American Settlements

The Roanake colony's failure did not cause England to give up hope. Many people were still committed to establishing settlements, or small communities, in North America. In the early 1600s, England was far behind Spain and France in power. The English could not establish colonies just anywhere they wished. Spain already claimed South America, the West Indes, the Southwest region, and Florida. France claimed the areas around many important waterways like the Great Lakes and the Mississippi River. Much of the unclaimed land was harsh, rugged, and dangerous. The forests were thick, and natives often made it difficult for Anglo settlers to establish colonies.

Figure 1. Fifth Grade *Studies Weekly* Passage. Source: Reproduced with permission from Studies Weekly (2016).

particularly effective for students with LD who have more persistent and severe reading difficulties that require targeted, intensive instruction.

The Difficulty With Big Words

As students move into upper elementary grades, there is a notable difference in the type of words they are being asked to read (Hiebert, Martin, & Menon, 2005). A student with LD who has learned the necessary skills to decode words such as *cat*, *dog*, *bench*, and *church* is now faced with words such as competitiveness, advertisement, transportation, and measurement. Poor decoders, even those who can read monosyllabic words fluently, often have difficulty with reading multisyllabic words (Duncan & Seymour, 2003; Just & Carpenter, 1987; Perfetti, 1986). These words are more complex, and struggling readers often do not have the skills necessary to read these big words. For example, Shefelbine and Calhoun (1991) found that advanced readers utilize morphological knowledge and accurate letter-sound associations to read unfamiliar multisyllabic words, but poor readers focus on letter units and partial syllables. Similarly, others have reported that adept readers see words in morphological parts whereas struggling readers rely on contextual clues and pictures to identify unknown words (Archer, Gleason, & Vachon, 2003; Bhattacharya & Ehri, 2004).

Difficulty with word reading is an issue for older readers as much as for beginning readers, and their chances of success are greatly affected when instruction does not address these skills. Not only does this difficulty affect their reading fluency, but it also interferes with their ability to comprehend text. Decoding instruction often ends after second grade, but the average number of syllables in words that students read increases steadily throughout their school years. The average fourth grader encounters 10,000 new words each year, and most of these words have two or more syllables (Kearns et al., 2015; Nagy & Anderson, 1984). More importantly, often these words carry the meaning of a text (Carnine & Carnine, 2004). Consider the multisyllabic words that might be difficult for struggling readers in Figure 1. Students often skip over or unsuccessfully decode multisyllabic words such as *colony, settlements*, or *unclaimed*. However, without the words *colony* and *settlements*, the meaning of this passage is impossible to decipher. The word *unclaimed* provides an important detail about colonized regions. Even with additional comprehension instruction focused on strategies such as self-monitoring or inferencing, the meaning of the passage would still lack clarity. When students allocate too much attention to decoding these multisyllabic words, they may not attend enough to the meaning of the text (LaBerge & Samuels, 1974; Perfetti, 1985; Stanovich, 1980).

Multisyllabic Word Reading

Multisyllabic word reading instruction is effective in improving the word reading skills of struggling readers (Bhattacharya & Ehri, 2004; Diliberto, Beattie, Flowers, & Algozzine, 2008; Lenz & Hughes, 1990; Shefelbine, 1990). Despite promising findings in these studies, recent research reveals new directions for multisyllabic word reading instruction. For example, students' knowledge of phonics-based rules does not necessarily predict their multisyllabic word reading skills, and no relationship appears to exist between knowledge of syllabication rules and successful reading (Kearns, 2015). Additionally, many struggling readers have deficits in phonological memory (Shankweiler, Crain, Brady, & Macaruso, 1992; Wagner & Torgesen, 1987), which may make it difficult for them to simultaneously process morphologically complex words and recall appropriate strategies. Ultimately, successful reading comprehension relies on students' exerting less attention when processing and reading words so they can dedicate more attention to understanding texts. This suggests that less cognitively demanding approaches to teaching multisyllabic word reading might enhance reading comprehension.

One approach for teaching multisyllabic word reading is to focus on the development of automaticity by providing multiple opportunities for students to manipulate and read words rather than focusing on rule-based instruction. This helps students acquire word representations through repeated exposures to words and word parts within the context of their larger word units (Cunningham & Stanovich, 1991; Perfetti, 1992; Stanovich, 1996). Specifically, instruction moves from part to whole, introducing morphemes

- first in isolation,
- then in words, and
- finally in connected text.

The following instructional practices align with this progression.

Practices for Multisyllabic Word Reading

In this section, five research-based instructional practices to support students' multisyllabic word reading development are presented. When students with LD receive supplemental reading instruction, many require continued focus on word study. This need not (and should not) be the sole focus of their supplemental instruction, but it is valuable for students to receive explicit, targeted instruction and opportunities for practice. These multisyllabic word reading practices are best used with students who are proficient decoders of most vowel patterns in monosyllabic words. If students are not proficient in monosyllabic word reading, instruction should first target vowel patterns that students do not know. This ensures they have the necessary decoding skills to begin working with more complex words.

Rather than provide rules-based instruction, these five practices focus on promoting automaticity. These practices are supported by previous research and have been recently investigated as part of a reading intervention developed and tested by our team (Toste, Capin, Vaughn, Roberts, & Kearns, 2016; Toste, Capin, Williams, Cho, & Vaughn, 2016). Across two studies, a total of 175 struggling readers in third through fifth grades were randomly assigned to receive a multisyllabic word reading intervention or business-asusual reading instruction provided by the school. The intervention was delivered in small groups of 3 to 5 students by a trained tutor. Students who received this reading intervention experienced significant growth on word identification, decoding, and spelling compared to those who received standard reading instruction. Each intervention session included five instructional principles.

- Affix Learning | 2 to 3 min
- "Peel Off" Reading | 5 to 10 min
- Word-Building Games | 5 to 10 min
- Word Reading Fluency | 5 min
- Connected Text Reading | 10 min

Affix Learning

The first instructional practice to support multisyllabic word reading is learning affixes. Teachers introduce an activity called Affix Bank in which students are explicitly taught high-frequency prefixes (e.g., *pre-, dis-, un-)* and suffixes (e.g., *-ing, -ly, -tive*). White, Sowell, and Yanagihara (1989) published a list of the most commonly used prefixes and suffixes in third to ninth grades. Learning these affixes supports greater efficiency when reading multisyllabic words. During Affix Bank, teachers introduce approximately three new affixes each day using the following instructional sequence:

- Name it. Teacher introduces a new affix by reading it aloud, writing it on a white board, and having students chorally read the affix. If an affix corresponds to more than one sound (e.g., *-ed* can be pronounced as /ed/, /d/, or /t/), then the teacher provides additional explicit instruction, and students practice all pronunciations. A more detailed example of this is provided in the next section.
- **Provide sample word.** Teacher provides a sample word that uses the affix and writes it on the whiteboard.
- **Define it.** Teacher provides a student-friendly definition of the affix. Define affixes only if meaning will be of high utility for students or it appears in highly transparent words (i.e., meaning of the word can be inferred from its parts). For example, the prefix *pre*means before and helps students understand the meaning of common words such as prepay, precaution, or preview.
- Students generate sample words. The teacher asks students if they can think of other words that use the target affix.
- Write it. Students write each new affix taught on their Affix Bank chart. Organizing affixes by "pre-fix" and "suffix" creates a resource for students (see Figure 2). It can also be helpful for students to write a sample word on their charts.
- **Review it.** Students regularly review previously learned affixes with their Affix Bank chart or flash-cards. This can be done in pairs, or the group can chorally read all of the affixes.

What might this instruction sound like? A teacher leading students in Affix Bank might use the following routine: "This is the prefix *de-*." The teacher writes the affix on the whiteboard. "One word I know that begins with *de-* is defrost." Teacher writes the word on the board. "This affix means remove. Because we know that this affix means remove, then we know the word *defrost* means to remove frost from something. Can you think of any other words that

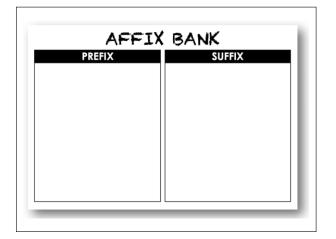


Figure 2. Student Chart for Logging Affixes Learned.

begin with the prefix *de-?*" The teacher encourages students to share their responses. "Now, let's add *de-* to our Affix Bank." Students copy *de-* in the prefix column of their chart. "Great! Let's practice reading aloud all of our prefixes and suffixes." Teacher uses flashcards for students to chorally read affixes.

Teaching Affixes That Make More than One Sound

Some affixes correspond to more than one sound. For example, students are taught to say -ed as /ed/ like in the words shouted, needed, or planted. However, it can also made the sounds /t/ (e.g., brushed, kicked, washed) or /d/ (e.g., rained, filled, hugged). It is important to explicitly teach these sounds to students. The following script provides a guideline for this instruction: "The suffix -ed can make different sounds when we see it at the end of a word. There are three different sounds -ed might make. Let's look at some examples." To help students understand and recall, the teacher uses a poster or chart that has the three sounds and example words for each. "The first sound that -ed can make is /ed/. Look at the word I wrote on the board. This says 'shout.' When we add -ed to the end, it becomes 'shouted.' What sound did -ed say in 'shouted'?" Students repeat the sound. The teacher follows this routine for additional affix sounds. When students are reading words with -ed, they are reminded to flex the sounds (e.g., try each sound for -ed if they are not sure).

Peel Off Reading

Another instructional strategy that supports students' practice and fluency in reading multisyllabic word reading is breaking apart or segmenting words into their parts. This is often called a *peel off* strategy, wherein students are asked to read the smaller words or word parts that they already

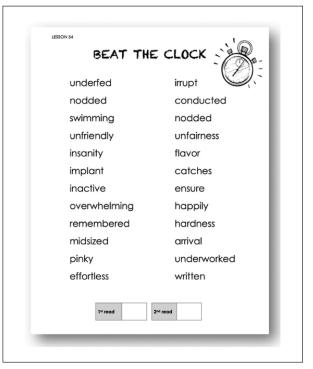


Figure 3. Sample Word List Used for "Peel Off" Reading.

know or can easily decode. The focus is on accurate and fluent word reading, not the meaning of the words or word parts. Teachers can use an activity called Beat the Clock to do this. Students are given a new list with approximately 40 multisyllabic words each day (see Figure 3), and teachers use the following instructional routine:

- Underline affixes. The teacher guides students in underlining affixes in each word. Lists vary in difficulty, beginning with only prefixes (e.g., <u>unclear</u>, <u>rewrite</u>) or only suffixes (e.g., <u>friendly</u>, <u>challenging</u>), progressing to lists both prefixes and suffixes (e.g., <u>invalid</u>, <u>guilty</u>), and finally lists where individual words have both prefixes and suffixes (e.g., <u>unfaithful</u>, <u>improbable</u>).
- Choral read affixes in isolation. Students chorally read underlined affixes. The teacher provides corrective feedback as necessary, ensuring all students pronounce affixes accurately.
- **Choral read words.** Next, the teacher and students read whole words aloud together. The teacher continues to provide corrective feedback as necessary.
- **Timed reading of words.** Following the practice, all students are given two opportunities to read the list of words. The teacher times each student while reading the entire list aloud, focusing on reading accurately during the first read. While one student is

Game	Materials	Description			
Quick Search	Base word cardsAffix cards	Students read all affix and base word cards and place them face up on a table. Students take turns choosing one affix and one base word card. They read the parts separately and then read them together to make a word.			
Build-a-Word	 Base word cards Affix cards Small white boards Dry-erase markers 	The teacher reads a base word card aloud, defines it, and uses it in a sample sentence. Then, the teacher adds an affix card to the base word. Students read the parts and then blend them together to make a real word. Then, students define the word using the affix and word definition.			
Word Train	 Base word cards Affix cards Engine and caboose cards Pocket chart 	Students read aloud all affix cards and sort them into two piles: prefixes (engines) or suffixes (cabooses). Then, they read the base word cards and place each one in the center of the pocket chart. Students choose an affix card, place it before or after the base word card, read the parts, and then read the whole word aloud. Students then move the affix down the pocket chart and read with each base word card.			
Elevator Words	Base word cardsAffix cardsPocket chart	Students read aloud affix cards and place prefixes on the left side of the pocket chart and suffixes on the right side. Then, students read aloud the first base word card, place it in the top row of the chart, combine the parts, and then read the new word. Then, students move the base word card down the pocket chart to read with each of the affixes.			
Spinner Words	Plastic spinners (2)Dry-erase markers	The teacher writes the five base words on one spinner and affixes on the second spinner. Students read aloud the affixes and base words and then take turns spinning the spinners. Students combine the parts on the spinners and read each word aloud.			

Table I. Word-Building Game Descriptions.

reading, the other students follow along with their fingers on their own lists. The teacher has students record their time in seconds for their first read in the box at the bottom of their Beat the Clock word list. The teacher provides each student the opportunity to read the list independently twice and record his or her times. During the second reading, students focus on maintaining accuracy while trying to beat the clock (i.e., improving on their initial time).

Word-Building Games

During the instructional practice, students do the opposite of peel off reading; the focus here is on assembling or blending word parts together. To make this practice more engaging, a variety of word-building games that emphasize automaticity of the reading process can be used. Before introducing the game, the teacher first selects a number of base words (e.g., judge, extend, thought, visible, strong). After introducing base words, students then play a game that provides them with multiple opportunities to practice building and reading big words. Students build both real and pseudo (nonsense) words; this ensures that they are able to work on the skills necessary for quick and accurate decoding of unknown words. Table 1 provides descriptions of five different word-building games: Ouick Search, Builda-Word, Word Train, Elevator Words, and Spinner Words. Although these games differ slightly, they follow a similar instructional format:

- Choral read base words. Students are introduced to a set of base words that they will be using to build longer words; teacher holds up an index card with the word and reads it aloud, and students repeat each word.
- **Review affixes (as necessary).** If the students have not completed Affix Bank or a similar activity in this lesson, the teacher reviews all of the affixes previously taught. This can be done in pairs, or the group can chorally read all of the affixes.
- Attach a prefix and/or suffix to base word. Students build words by placing a base word beside a prefix and/or suffix. The teacher models this first.
- **Read all word parts.** The students read each word part by pointing and saying (e.g., "un-" / "faith" / "-ful"). Do not discuss the meaning of the affixes. The focus is blending word parts to read accurately and fluently.
- Say it fluently! The student blends the word parts together and pronounces the whole word (e.g., "unfaithful"). Students repeat Steps 3 to 5 for continued practice; they can take turns in a small group or work with partners to do this.

How might you differentiate instruction? Teachers can use several variations when playing the games, as described in Table 1. To simplify, the teacher may choose to play any of these games using only prefixes or only suffixes. Limiting the game to only prefixes or suffixes makes the task easier

	SPEEDY	REA	D #14
1.	active	21.	suggestive
2.	explosive	22.	supportive
3.	detective	23.	cursive
4.	positive	24.	decisive
5.	expensive	25.	inactive
6.	tentative	26.	ineffective
7.	reflective	27.	intensive
8.	talkative	28.	permissive
9.	sensitive	29.	inventive
10.	pensive	30.	receptive
11.	creative	31.	directive
12.	impulsive	32.	cognitive
13.	negative	33.	inceptive
14.	native	34.	abusive
15.	effective	35.	furtive
16.	impressive	36.	pensive
17.	massive	37.	emissive
18.	directives	38.	relative
19.	explosives	39.	sedative
20.	attentive	40.	abrasive

Figure 4. Sample Word List Used for Word Reading Fluency Practice.

for students as they do not have to identify the type of affix used in the word. To make it more challenging, students create words using both prefixes and suffixes. In this case, students blend words that have at least three syllables. Finally, a teacher could ask students to build only real words. The teacher could also have students write all of the real words they build on the board or in their notebooks.

Word Reading Fluency

Researchers have shown that an excellent predictor of student reading fluency is the amount of time students spend reading. For struggling readers, this reading practice should be targeted, for example, words with the same patterns (e.g., phonograms) or multisyllabic words. Student practice should also include immediate, corrective feedback from the teacher. For example, if students do not know the medial sound in the word *boil*, the teacher might provide a correction by noting which sound was incorrect: "This vowel team says /oi/. What sound? So this word is boil. What word?" If the student reads a word incorrectly or pauses for more than 2 s, the teacher provides the word and asks the student to repeat the word: "This word is colony. What word?" The teacher may also choose to wait until the end of a timed reading to provide corrections, so as not to interfere with the students' pacing.

One effective instructional practice focused on word reading fluency is the use of timed reading of targeted word lists, which supports students in their reading accuracy and rate. Teachers can implement an activity called Speedy Read, which is simple but highly structured:

- **Teacher-led choral reading.** Students are first given a word list that has similar phonetic patterns and asked to chorally read the list aloud with the teacher. An example of a Speedy Read word list can be found in Figure 4.
- **Timed reading.** Then, each student is given an opportunity to read for 30 seconds while the teacher tracks the accuracy of responses. The teacher provides corrective feedback by having students reread incorrectly pronounced words. After reading, students record the number of words read on a chart to help monitor their progress.
- Listen and follow. While a student is completing his or her 30-second timed reading, the other students in the group follow along with the list. For students who have more difficulty with this task, the teacher can provide additional supports by having them read after a peer who has provided a model of fluent reading.

What might this instruction sound like? "It's time for Speedy Read." Distribute copies of today's word list to students. "Let's do our choral read first. As we read each word, I want you to follow along with your finger. Let's go!" Read the words chorally as a group.

"Now it's your turn to read the words independently. Let's see how many words you can each read in 30 seconds! ______ will go first. Is everyone pointing? Great. Ready? Go." Start the timer. After 30 seconds have elapsed, say, "OK, good work! On your Speedy Read chart, write how many words you read correctly in 30 seconds."

Connected Text Reading

The final instructional practice, while not directly targeting multisyllabic words, moves students' fluency practice from the word level to the text level. It is important for students to practice their reading with connected text (e.g., sentences and passages). Teachers should be purposeful in selecting text for them to read. For students with LD, who are struggling with reading, gradual integration of multisyllabic words supports skill development. Rather than begin reading long passages immediately, prepare sentences that target multisyllabic word reading skills that students have been practicing. For example, students can read:

• maze sentences that require them to select the correct affix for the base word, checking that it makes sense;

Sentence Type	Examples		
Maze sentences	The teacher guided OR guiding the students through the reading lesson.		
	When he saw Kathy's expressed OR expression, he knew that she was upset.		
	In the United States, we import OR report most of our bananas from Central and South America		
Cloze sentences	Wednesday is in the middle of the week. We say that it is week.		
	Mr. Mort had the children sit on the rug in a circle to listen to the story.		
	My little brother knocked down my Lego building when he got mad at me. I had to construct it.		
Whole sentences	Carter's substitute teacher would not let him display his artwork on the board.		
	The pain in my ankle would not subside. Finally, it went away when I applied ice to it.		
	I was an inactive member of the soccer team because I was injured.		

- cloze sentences that require them to insert the missing affix to complete the word; or
- whole sentences with the same multisyllabic words.

Table 2 provides examples of these sentence reading tasks.

Passage reading focuses on expository text that includes many multisyllabic words. Teachers can use the following routine. Following this format increases the students' opportunities to practice reading text aloud repeatedly while also providing corrective feedback.

- Key words. The teacher introduces and defines key words. These are words that are central to the meaning of the story; introducing them supports students' fluency and comprehension.
- **Repeated reading practice.** The teacher leads students in a repeated text reading. Students read the text aloud at least two times using various oral reading practices: choral read, whisper read, or echo read.
- Note useful words. The teacher calls students' attention to irregular words or multisyllabic words. Noting multisyllabic words helps students make the connection from word-level and text-level practices.
- Check for understanding. When students have completed their reading of the passage, the teacher asks comprehension questions to check for understanding. Depending on the focus of the overall lessons with each group of students, the teacher might choose to ask more in-depth, higher order questions.

Summary

The set of routines described in this article provides teachers with a series of research-based instructional practices that promote multisyllabic word reading fluency. These practices can be easily integrated into small-group instruction and intervention, either in the general education classroom or resource room setting. They can easily be incorporated into reading goals for students' individualized education programs. Some sample individualized education program goals might be the following:

- Given a list of the 20 most common prefixes and suffixes, the student will read aloud each prefix or suffix accurately within 25 seconds.
- Given a list of 20 two- and three-syllable words, the student will read the words automatically (within 1 second) with 95% accuracy.

All five practices are appropriate within daily intervention programs for students with LD; however, teachers may choose to use any combination of these practices based on the needs of their students. One of the fourth graders who participated in an intervention development study (Toste et al., 2016) noted,

A good reader focuses on the words, looking at them and chunking them. You have to know a lot of big words because you're gonna see a lot of big words when you read. It can be a very important thing. If you don't know what they say, then you miss them and you won't know what the story means.

Students understand the challenges that come along with being unable to read words accurately and fluently. Increased skill in decoding multisyllabic words promotes students' continued development as proficient readers, as well as supporting their achievement into the upper elementary grades and beyond.

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English consonant sounds present in Spanish	/n/, /p/, /k/, /f/, /y/, /b/, /g/, /s/, /ch/, /t/, /m/, /w/, /l/, /h/
English consonant blends present in Spanish	pl, pr, bl, br, tr, dr, cl, cr, gl, gr, fl, fr
English consonant sounds that are difficult for English language learners	/d/ (can be pronounced as /th/), /j/, /r/, /v/, /z/, /sh/, /zh/, /th/
English consonant blends not present in Spanish	st, sp, sk, sc, sm, sl, sn, sw, tw, qu, scr, spr, str, squ
English vowel sounds not present in Spanish	m <u>a</u> n, p <u>e</u> n, t <u>i</u> p, <u>u</u> p r-controlled vowels schwa sound c <u>aug</u> ht, c <u>ou</u> ld, <u>u</u> se
Challenging final English sounds	rd, st, ng, sk, ng, z, oil, mp, dg

English and Spanish Sounds

Adapted from Helman, 2004.

Monitoring Students' Progress: Word Study and Recognition

Questions to ask when listening to a student read aloud

Can the student read some words in context that he or she missed in isolation? Does the student miss words in context that he or she read correctly in isolation? Does the student sound out the word, sound by sound? Does the student try to read the word in chunks (e.g., /bl//åk/,/fǎb//yū//lǚs/)? In Spanish, does the student read the word in syllables (e.g., /bo/ /ta/)? Does the student guess the word without trying to sound it out? Does the student rely on picture cues? Does the student use context after decoding an unfamiliar word to check that it makes sense? Does the student self-correct some errors? Does the student read slowly with frequent hesitations and repetitions? As the year progresses, are more and more words becoming sight words for the student? Does the student automatically recognize many multisyllabic words in addition to single-syllable words?

Questions to ask as you analyze spelling errors

Does the student confuse voiced and unvoiced consonant sounds (e.g., /p/ vs. /b/)?

Does the student confuse consonants produced similarly (e.g., /m/ vs. /b/, /f/ vs. /th/)?

Does the student confuse stop sounds with continuant sounds (e.g., /ch/ vs. /sh/)?

Does the student misspell initial blends or final blends in words?

Does the student lose nasal sounds (e.g., /m/, /n/, /ng/)?

Does the student confuse short-vowel sounds, long-vowel sounds, or both?

Does the student confuse vowel teams (e.g., ee vs. ea)?

Does the student break orthographic conventions (e.g., -*ck* for /k/ after a short vowel)?

How does the student's multisyllabic-word spelling compare to his or her single-syllable spelling?

Does the student use knowledge of morphemes (e.g., prefixes, roots) to spell multisyllabic words correctly?

ADDING SUFFIXES THAT Change Base Words' Final y to i Lesson 17

OBJECTIVES

- Students will read words in which the final **y** of the base is changed to **i** when a suffix is added.
- Students will spell words in which the final **y** of the base is changed to **i** when a suffix is added.
- Students will identify when to change the final **y** of a base to **i** when a suffix is added.

MATERIALS

- Word cards
- Base word cards
- Flip cards
- Suffix math worksheet
- Word web templates
- Board and markers or chalk for teacher
- Personal whiteboards and dry-erase markers for students
- Notebook paper

TIPS

- Refer to the Appendix for list of words in which the **y** of the base changes to **i** when a suffix is added.
- The final **y** rule: If a base word ends in consonant-**y**, change the **y** to **i** before adding the suffix.
- The *i* usually retains the sound of the *y* in the base word. For example, in *marry* and *married*, both the *y* and *i* make the /ē/ sound; in *cry* and *cries*, both the *y* and *i* make the /ī/ sound. There are a few exceptions, however, such as *happily*, *plentiful*, and *easily*.
- The suffix *es* is added to a base word ending in consonant-*y*, rather than the suffix *s* (e.g., *cry*, *cries*; *puppy*, *puppies*).
- The final *y* does not change when the suffix begins with *i* (e.g., *ing, ish*) because doing so would create an awkward spelling (e.g., *study* becomes *studying*, not *studiing*). Teach this exception after students have mastered the final *y* rule. An example teacher model is provided in the Generalizations section of this lesson.
- Do not include examples with /ing/ or /ish/ suffixes.
- Provide direct feedback to students.

DAILY REVIEW =

DOUBLING RULE AND SILENT E RULE

Write the following words on the board: *sliding*, *risky*, *ripper*, *fluffy*, *riper*, *madly*, *moped*, *crabby*, *hopeful*, and *hopping*. Review the doubling rule and the silent-*e* rule for adding suffixes to base words. Have students read the words and determine whether the base word changed when the suffix was added.

Teacher:We have learned two rules about base words that change when a suffix is added.
One rule is the doubling rule, in which the final consonant of a base word is
doubled. What are the three questions to answer when deciding whether a
consonant is doubled?

Emma: Is there only one vowel in the base word?

Teacher:	Good, that's one question. What's another question to ask yourself?
Yvonne:	Does the suffix begin with a vowel?
Teacher:	Yes, the suffix must begin with a vowel. What is the final question?
Emma:	Is there only one consonant after the vowel in the base word?
Teacher:	Yes, those are the three questions. Look at the words on the board and tell me a word that follows the doubling ruleRaymond?
Raymond:	ripper
Teacher:	What is the base word in <i>ripper</i> ?
Raymond:	rip
Teacher:	Correct. <i>Rip</i> has just one vowel, followed by just one consonant. The suffix, <i>er</i> , starts with a vowel, so the <i>p</i> was doubled.
	Let's review the silent $m{e}$ rule. What is the rule for dropping the $m{e}$ in a base word?
Emma:	When the suffix starts with a vowel, drop the silent <i>e</i> .
Teacher:	What word on the board has a silent e that has been dropped?
Terrence:	riper
Teacher:	What is the base word?
Terrence:	ripe
Teacher:	Excellent. Please read each of the words on the board as I point to it. Say the base word, and then say the whole word. If the base word changed, show me a thumbs-up.
	[Point to sliding.]
Students:	slide, sliding
	[Students show a thumbs-up.]

Have students continue reading words as you point to them.

OPENING =

[Write happy, est, and happiest on the board.]

Teacher: Today, we will learn another rule about base words that change when adding a suffix. It is called the final *y* rule. *Happiest* is an example of this new rule. The final *y* in the base word, *happy*, changes to *i* before the suffix, *est*, is added.

MODEL AND TEACH: ACTIVITY 1 =

INTRODUCE THE FINAL Y RULE

Write the words *lucky*, *silly*, *study*, *baby*, *party*, and *play* on the board. Write the suffixes *er*, *s*, *ing*, *est*, and *ed* on the board. Teach the final *y* rule: When the final *y* of a base word is preceded by a consonant, the *y* changes to *i* when a suffix is added, regardless of whether the suffix begins with a vowel or consonant. Demonstrate the rule on a variety of base words ending in consonant-*y*. Demonstrate that a base word ending in vowel-*y* does not change when adding a suffix.

[Point to lucky.]

Teacher:	Please read this word.			
Students:	lucky			
Teacher:	I want to add the suffix <i>est</i> to form the word <i>luckiest.</i> The final y rule helps me determine whether the final y changes to i before adding the suffix. The final y changes to i if the answer to the following question is "yes":			
	Is the final $m{y}$ in the base word preceded by a consonant?			
	[Point to k .]			
Teacher:	Yes, it is. Because the answer is "yes," the final $m y$ in the base word is changed to i_{\cdots}			
	[Change the y in lucky to i .]			
Teacher:	and the suffix is added.			
	[Add est to form luckiest.]			

Teacher:	<i>Lucky</i> , <i>luckiest</i> : Repeat, please.		
Students:	lucky, luckiest		
Teacher:	Terrence, what is the next word?		
Terrence:	silly		
Teacher:	I want to add ness to form silliness. Let's figure out whether the final y should change to i . Is the final y in the base word, silly , preceded by a consonant?		
Students:	Yes.		
Teacher:	So the final y changes to i before the suffix is added.		
	[Replace the y in silly with i . Add ness to form silliness .]		
Teacher:	<i>Silly, silliness</i> : Repeat, please.		
Students:	silly, silliness		
Teacher:	Please read the next word.		
Students:	party		
Teacher:	I want to form the word <i>parties</i> . Is the final y in <i>party</i> preceded by a consonant?		
Students:	Yes.		
Teacher:	So y is changed to i .		
	[Replace the y in party with i .]		
Teacher:	When the suffix is s , you add es , instead of s .		
	[Complete parties by adding es.]		
Teacher:	Party, parties: Repeat, please.		
Students:	party, parties		
Teacher:	Please read the next word.		

Students:	play
Teacher:	I want to change play to playful. Let's see whether the final y rule causes me to change the final y to i . Is the final y in play preceded by a consonant?
Students:	No.
Teacher:	So the final y does not change— ful is simply added to the base word.
	[Add ful to play.]
Teacher:	Read the base word and whole word, please.
Students:	play, playful

MODEL AND TEACH: ACTIVITY 2 =

READING WORDS THAT FOLLOW THE FINAL Y RULE DECODING

Write 10 to 15 words on the board that follow the final **y** rule (e.g., *funnier*, *soggiest*, *families*, *happiness*, *carried*, *monkeys*). Teach students to look for the base word and suffix. Think aloud to demonstrate the process of determining the base word. Then, put the base word and suffix together to form the whole word.

Teacher:It is important to identify the base word and suffix in words. When reading a word
with a suffix, if the letter preceding the suffix is *i*, that's a clue that the final *y* in the
base word probably changed to *i*. For example, if you see this word...

[Point to **funnier**.]

Teacher: ... you recognize the suffix *er*.

[Circle **er**.]

Teacher: The word part in front of it...

[Underline funni.]

Teacher: ...isn't a word. But you know the final **y** rule means a final **y** was changed to **i**. We can change the **i** back to **y**.

[Write funny.]

- **Teacher:** *Funny* is a word you know. I can put the base word and suffix together to read the word: *funny, er, funnier*. Repeat, please.
- **Students:** *funny, er, funnier*
- **Teacher:** Take a look at the next word.

[Point to **soggiest**.]

Teacher: I see the suffix *est*.

[Circle est.]

Teacher: The word part in front is spelled *s-o-g-g-i*. I'll try using a *y* instead of the *i*.

[Write soggy.]

- **Teacher:** Soggy, est, soggiest: Please repeat.
- **Students:** *soggy, est, soggiest*
- **Teacher:**Here's an example sentence: *My cereal is soggy when I pour too much milk on it.*Who can give me another example of something that is soggy?

Emma: My shoes got soggy when I walked in a puddle.

Teacher: Great! Let's read the rest of the words.

Continue reading the rest of the words, gradually reducing your scaffolding.

TIPS

Heavily scaffold this activity initially. As students gain proficiency, they will not need to be led through each step.

MODEL AND TEACH: ACTIVITY 3 =

SPELL WORDS, USING THE FINAL Y RULE ENCODING

Dictate words in which the silent *e* is dropped when a suffix is added. Model by using the following steps:

- 1. Say the word.
- 2. Say the base word and suffix.
- 3. Determine whether the final **y** rule causes the final **y** of the base word to change to **i**.
- 4. Spell the word.
- 5. Check your spelling by reading the word you wrote.
- **Teacher:** Listen as I model how to use the final **y** rule when spelling a word.

First, say the whole word, *happiness*.

Then, say the base word and suffix: The base word is *happy*, and the suffix is *ness*.

Determine whether the final y rule causes the base word's final y to change to i. Is the base word's final y preceded by a consonant? Yes, p precedes y.

Because the answer is "yes," I change the final **y** to **i** and add the suffix.

[Write the word as you say the letters.]

Teacher: Spell the base word, changing the final **y** to **i**: **h**-**a**-**p**-**p**-**i**, and then add the suffix: **n**-**e**-**s**-**s**.

[Complete happiness.]

Teacher: Read the word: *happiness*.

Now, we'll all follow the steps together to spell *carried*. Here's the word in a sentence: *I carried the groceries inside*. Say the word.

- Students: carried
- **Teacher:** Say the base word and suffix.

Students:	carry, /d/
Teacher:	Determine whether the final y rule applies. Is the base word's final y preceded by a consonant?
Students:	Yes.
Teacher:	So change the y to i and add the suffix.
	[Write the word as you say the letters.]
Teacher:	Spell the base word, changing the final y to i : c - a - r - r - i .
	When we hear a word that means something is past, and it ends with the /d/ sound, how is /d/ spelled?
Students:	ed
	[Add the suffix to the word to make carried .]
Teacher:	Then, I read the word: <i>carried</i> .
	Let's spell another word: <i>families</i> . Here's the word in the sentence: <i>Our families are having dinner together</i> . Say the word.
Students:	families
Teacher:	Say the base word and suffix.
Students:	family, /z/
Teacher:	Apply the final y rule. Is the base word's final y preceded by a consonant?
Students:	Yes.
Teacher:	So, will I change the y to i and add the suffix?
Students:	Yes.
Teacher:	Correct. What suffix says /z/?
Students:	S

Teacher: Remember, when you're adding the suffix *s*, you change *y* to *i* and add *es*. Now I will spell the word.

[Write the word as you say the letters.]

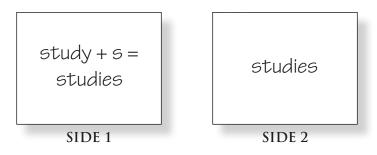
Teacher: *F-a-m-i-l-i-e-s*: Please read the word.

Students: families

GUIDED PRACTICE: ACTIVITY 1 =

FLIP CARDS Decoding

Gather the flip cards, which have a base word, suffix, and whole word on Side 1 and only the whole word on Side 2 (see the following graphic). The cards include a variety of learned words with suffixes; most consist of base words with a final **y**. Have students go through the cards, reading Side 1 first, saying only the base word and whole word. After students have read Side 1 of all the cards, they read Side 2.



Teacher: We will read cards with two sides. We'll start with Side 1, which gives you practice for when you will read Side 2. Side 1 has the base word, suffix, and whole word laid out like an equation, which is something you have seen before. You will say the base word and the whole word.

[Show the copy + er = copier card.]

Teacher: For example, this card would be read *copy*, *copier*. Repeat, please.

Students: *copy, copier*

Teacher: Raise your hand to tell me whether the base word changed...Raymond?

Raymond:	<i>Copier</i> has <i>i</i> instead of <i>y</i> .			
Teacher:	Very good. The final y changed to i . Yvonne, can you tell me why it changed?			
Yvonne:	Because <i>copy</i> ends with <i>p-y</i> .			
Teacher:	Wow, that's impressive knowledge of the final $oldsymbol{y}$ rule. Here is the next card.			
	[Show the decay + s = decays card.]			
Teacher:	On my cue, everyone, say the base word and whole word.			
	[Gesture.]			
Students:	decay, decays			
Teacher:	Good reading! Did the base word change, Emma?			
Emma:	No, it stayed the same.			
Teacher:	You're right. Why didn't the final y in <i>decay</i> change when suffix s was added?			
Emma:	Because <i>decay</i> has <i>a-y</i> at the end. If there's a vowel and then <i>y</i> , it doesn't change.			
Teacher:	Correct. When the base word ends with vowel- y , the y doesn't change. Here's th word in a sentence: My dentist says I must brush my teeth or they will decay . What do you think decay means?			
Terrence:	I think it means when something rots and gets bad. If you don't brush your teeth, they rot.			
Teacher:	That's right. <i>Decay</i> means "to rot or decompose."			

Continue reading Side 1 of the cards. When finished, have students read the words on Side 2.

ADAPTATIONS

- Use a spinner to determine the number of cards each student will read.
- When students are reading Side 2, have them say the base word and whole word.

GUIDED PRACTICE: ACTIVITY 2 \equiv

PICK A SUFFIX DECODING AND ENCODING

Compile a stack of base word cards, most of them ending in a *y*. Write the following suffixes on the board: *ed*, *er*, *est*, *ness*, *s*, *es*, *ly*. Display one word card at a time. Have students choose a suffix to add to the base word and write the newly formed word on their whiteboards. Then have students read the words. Because students choose which suffix to add, different students will form different words. This is fine, as long as the words are real words.

Teacher: I will show you a base word, and you will add one of the suffixes on the board to form a new word. You will need to figure out whether the base word changes when the suffix is added. You might not all choose the same suffix; that's OK, as long as you form a real word. Write your word on your whiteboard. You'll take turns coming to the board to write your word.

I'll demonstrate with the first word.

[Show hurry.]

- **Teacher:** What is the word?
- **Students:** hurry
- Teacher:Now, I choose a suffix to add. Hmm, I think I will add ed to form the word hurried.Emma, how do I figure out whether the base word changes?
- **Emma:** Look at the end of the word. It ends with *r* and then *y*, so you have to change the *y* to *i* before you add the suffix.
- **Teacher:** Very nice job. I would like everyone to write *hurried* on their whiteboards. Hold them up when you are done.

[Students write the word and show their whiteboards.]

Teacher: I see that everyone changed **y** to **i** before adding the suffix. I'm impressed! Say the base word and whole word, everyone.

Students: *hurry, hurried*

Teacher: Here is the next base word.

[Show easy.]

Teacher: Choose a suffix to add that will form a real word.

[Students choose suffixes and write their words on their whiteboards.]

- Teacher:This is very interesting because I see two different words that were formed by
adding two different suffixes. And each of the words is a real word! Great job.
Terrence, please read your word.
- Terrence: easier
- **Teacher:** Yvonne, you formed the same word. What suffix did you add?
- **Yvonne:** *er*
- **Teacher:** Everyone, say the base word and the whole word.
- **Students:** *easy, easier*
- **Teacher:** Emma, read your word.
- **Emma:** easiest
- **Teacher:** Raymond, what suffix did you and Emma add?
- Raymond: est
- **Teacher:** Everyone, say the base word and the whole word.
- **Students:** *easy, easiest*
- **Teacher:** Raymond, please explain why the base word changed.
- **Raymond:** Because *easy* ends with *s*-*y*, so *y* changed to *i*.

GUIDED PRACTICE: ACTIVITY 3 \equiv

SUFFIX MATH **ENCODING**

Distribute the worksheet, which depicts forming words as an equation (see the following graphic). Dictate words that follow suffix rules that students have learned, mostly words in which the final y changes to *i* when a suffix is added. Have students spell the words by completing an equation for each word.

	Base Word	Ŧ	Suffix	=	Whole Word
1		÷		II	
2		+		=	

Teacher: I'll dictate words for you to spell. For each word, you'll complete an equation on your worksheet by filling in the base word, suffix, and whole word. Identifying the base word and suffix is important because it helps us know which spelling rules to follow.

> We'll begin by completing some equations together. The first word is *spied*. Here's the word in a sentence: *I spied on the club so I could learn their secrets*. What's the word?

Students:	spied		
Teacher:	Say the base word and suffix.		
Students:	<i>spy</i> , /d/		
Teacher:	Write <i>spy</i> on the base word part of the first equation on your worksheet.		
	[Students write.]		
Teacher:	How do you spell <i>spy</i> , Terrence?		
Terrence:	s-p-y		

Teacher: Correct. I'll write the equation on the board, so you can follow along.

[Write **spy** on the board.]

Teacher: What is the suffix?

- Students: /d/
- **Teacher:** How do you spell the suffix /d/?
- **Yvonne:** *e*-*d*
- **Teacher:** That's right. Write that in the suffix column.

[Students write.]

- **Teacher:** The equation says that the base word plus the suffix equals the whole word. So far, we have *spy* plus *ed*. We must determine whether the final *y* rule will cause the base word to change. Then we can write the whole word. What question do you ask to determine whether the base word changes?
- **Yvonne:** Does the base word end with consonant-*y*?
- Teacher: Does it?
- **Yvonne:** Yes, *spy* has *p*-*y* at the end.
- **Teacher:** Because the answer is "yes," what does the final **y** rule say to do?
- **Students:** Change the *y* to *i* and then add the suffix.
- **Teacher:** Excellent. Please write the whole word on your worksheet.

[Students write.]

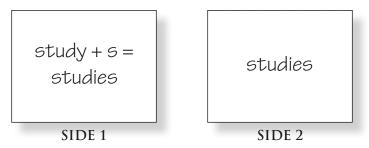
- **Teacher:** Raymond, please say the word and then spell it.
- **Raymond:** *spied*, *s*-*p*-*i*-*e*-*d*
- **Teacher:** Nice job, everyone! The next word is *copies*. Repeat, please.
- **Students:** copies

Teacher:	Say the base word and suffix.
Students:	copy , /z/
Teacher:	Write the base word and suffix on your worksheet.
	[Students write.]
Teacher:	Emma, how did you spell the base word?
Emma:	с-о-р-у
	[Write copy on the board.]
Teacher:	How is the suffix spelled, Raymond?
Raymond:	5
Teacher:	That is correct. I'm pleased you remembered that even though the suffix says /z/, it is formed by the letter s .
	[Write s on the board.]
Teacher:	What is the extra rule about the suffix $m{s}$ when you are applying the final $m{y}$ rule?
Emma:	If you change the y to i , add es .
Teacher:	Excellent! Now you're ready to spell the whole word. Complete the rest of the equation for <i>copies</i> .
	[Students fill in answers.]
Teacher:	Yvonne, how did you spell <i>copies</i> ?
Yvonne:	c-o-p-i-e-s
Teacher:	Yes! Great job, everyone!

INDEPENDENT PRACTICE: ACTIVITY 1 :

PARTNER FLIP CARDS Decoding

Use the same flip cards as in Guided Practice Activity 1 (see the following graphic for an example). Have students work in pairs, and give each student a stack of cards. Have Student A show Side 2 of a card to Student B. Then, have Student B say the base word and whole word. Have Student A use Side 1 to check the accuracy of Student B's answer. Then, reverse the roles and move on to another card.



Teacher:This activity uses the flip cards that we used earlier, but this time, you will read only
Side 2, which has the whole word on it. Side 1 will be used to check answers. You
will work in pairs.

For example, pretend that Emma and Yvonne are a pair. Emma shows Side 2 of a card to Yvonne. Yvonne says the base word and the whole word, even though Side 2 shows only the whole word. Emma checks Yvonne's answer by looking at Side 1. Then, Emma and Yvonne switch roles with the next card.

INDEPENDENT PRACTICE: ACTIVITY 2 \equiv

POINT AND READ Decoding

Place 15 to 20 word cards faceup on a table. Include a variety of words, so that students apply the final **y** rule as well as discriminate among other rules they have learned about adding suffixes to base words. Point to a word and call on a student to read the word. Use a quick pace. Occasionally question students to assess their understanding.

Teacher:When I point to a word and say your name, read the word aloud. Everyone else,
read silently. I will go quickly, so pay attention.

[Point to earliest.]

Teacher: Yvonne?

Yvonne: earliest

[Point to enjoyable.]

Teacher: Terrence?

Terrence: enjoyable

Teacher: Great job. Now let's speed it up!

Continue until all the words have been read.

ADAPTATION

- Have students keep the cards they read correctly.
- Turn facedown cards that have been read correctly.

INDEPENDENT PRACTICE: ACTIVITY 3 :

WORD WEBS Encoding

Have students complete word webs (templates are provided on the CD) for base words ending in y. Dictate a whole word (e.g., *supplier*). Have students write the base word in the middle bubble (*supply*) and the whole word in one of the outer bubbles. Dictate other words that use the same base word (e.g., *supplies*, *supplied*). Have students write these words in the outer bubbles. Draw a sample web on the board and demonstrate as you give directions.

Teacher:You will complete a word web for base words ending in y. First, I'll dictate a whole
word: *sillier*. Write the base word in the middle bubble.

[Write **silly** in the middle bubble.]

Teacher: Then write *sillier* in one of the outer bubbles.

[Demonstrate.]

Teacher: I'll dictate other words with the same base word. Write those words in other outer bubbles. When the web is complete, the middle bubble will show the base word, and the outer bubbles will show words formed when suffixes are added to that base word.

TIP

Choose base words that form at least two whole words.

ADAPTATION

Dictate only the base word and have students think of suffixes to add to form whole words.

MONITOR LEARNING =

Check whether students accurately identify base words and suffixes.

GENERALIZATION =

After students have mastered the final **y** rule, teach this exception to the rule: When the suffix begins with letter **i**, the base word's final **y** does not change.

TEACHER MODEL DECODING

Teacher: When the suffix begins with the letter *i*, the final *y* is not changed to *i*. Let's look at an example.

[Write **study** on the board.]

Teacher: Read the word, please.

Students: study

Teacher: I want to change it to *studying*. When the suffix begins with *i*, the base word's final *y* doesn't change. Since /ing/ begins with *i*, /ing/ is simply added to the base word.

[Write studying.]

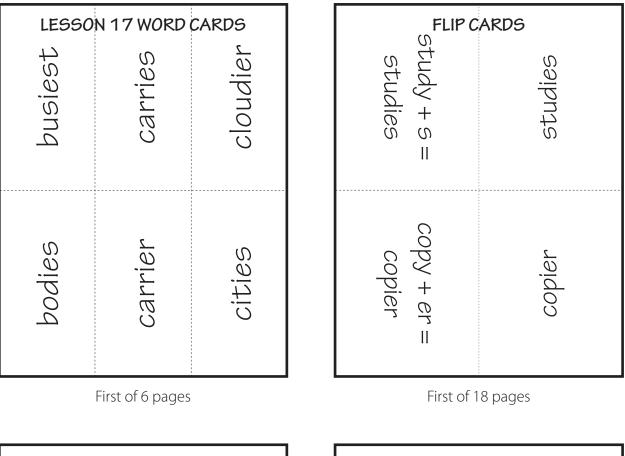
Teacher:	If we changed y to i before adding /ing/
	[Write studiing.]
Teacher:	it would create a double vowel and would be confusing.
	[Erase studiing.]
Teacher:	Study, studying: Please repeat.
Students:	study, studying
	[Write baby on the board.]
Teacher:	Terrence, what is this word?
Terrence:	baby
Teacher:	Let's change it to <i>babyish</i> . Here's the word in a sentence: <i>Sylvia thought the bow in her hair was too babyish</i> .
	Is the final y in the base word preceded by a consonant?
Students:	Yes.
Teacher:	The suffix begins with <i>i</i> , however, so y does not change to <i>i</i> . I simply add the suffix to <i>baby</i> .
	[Write babyish.]
Teacher:	Baby, babyish: Repeat, please.
Students:	baby, babyish

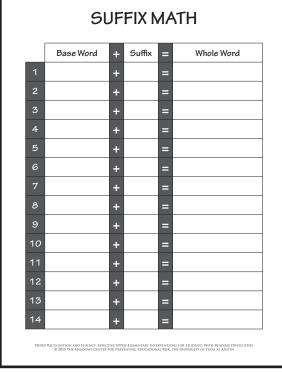
TEACHER MODEL ENCODING

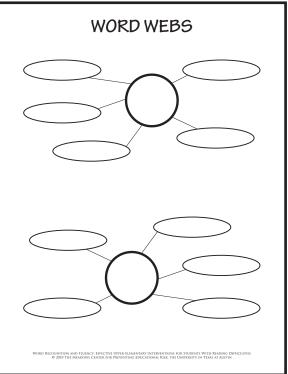
Model, using the following steps:

- 1. Say the word.
- 2. Say the base word and suffix.
- 3. Determine whether the final **y** rule causes the final **y** of the base word to change to **i**.
- 4. Spell the word.
- 5. Check your spelling by reading the word you wrote.

Teacher:	Listen to the word: <i>trying</i> . Say the word.
Students:	trying
Teacher:	Say the base word and suffix.
Students:	try, ing
Teacher:	Apply the final y rule. Is the base word's final y preceded by a consonant?
Students:	Yes.
Teacher:	But the suffix - <i>ing</i> begins with <i>i</i> . So, does the final y change to <i>i</i> ?
Students:	No.
Teacher:	Very good! When the suffix begins with <i>i</i> , the base word does not change. Just add the suffix: <i>t-r-y-i-n-g</i> . Please read the word.
Students:	trying







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Taking a Closer Look

Skill: Adding suffixes that change base words' final y to i

Examine the lesson and complete the chart. Specifically state how the lesson addresses each element.

Explicit, Systematic Instruction
Modeling
Scaffolded Practice
Progress Monitoring

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