



# Recycling and Remixing: Multiple Meanings and Uses of Words

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Example 1: My problems started when I learned that Mrs. Reno would be my fourth grade teacher. She had a lizard in her classroom, and lizards were on my list of terrifying things. (*Lizard problems*, Adams, 2009)

Example 2: Wilbur looked at his friend. She looked rather swollen and she seemed listless. "I'm awfully sorry to hear that you're feeling poorly, Charlotte," he said. "Perhaps if you spin a web and catch a couple of flies you'll feel better." (*Charlotte's Web*, Chapter 8, White, 1952)

For good readers, reading is an active process. No, they're not throwing a basket into a hoop or jumping up and down as they might during a sporting event, but active readers are continuously thinking about what they are reading. Amy (the narrator in *Lizard Problems*) may have an unusual list—things of which she's terrified—but most students will be familiar with the concept of a *list* as “a number of connected items presented consecutively, typically one below the other” (dictionary.com) when they encounter that word in Example 1. The meaning of the word *list* as a tabulation dominates in student texts, making the word *listless* in Example 2 potentially confusing. Active readers who do not understand the meaning of this word will review the previous paragraph where Charlotte described herself as tired and not having energy. Further, Wilbur's description that Charlotte is “feeling poorly” leads to the conclusion that *listless* must have something to do with low energy and nothing at all to do with Charlotte's lack of a list similar to Amy's in Example 1.

Active readers monitor their understanding as they read, revisiting parts of text to clarify meaning. Monitoring is built on a capacity to be flexible as a reader. Flexible readers approach texts with the expectation that words can take on different meanings in different contexts. Flexibility when encountering familiar and unfamiliar words is especially critical with the words in the core vocabulary. The lead words that represent the 2,500 morphological families have, on average, seven

different meanings, according to WordNet (Miller, 1995). Some of these meanings are subtle; others are dramatic, reflecting different origins to a word with the same pronunciation. There are two fundamental ways in which the meanings of words change: processes called recycling and remixing in this book. Recycling is when the same word can take on different meanings. Remixing, the second way in which new word meanings arise, is combining words.

Contemporary students understand the concept of objects being reused or recycled. Just like objects can be reused, words also get reused or recycled. The word *list* illustrates the process of recycling. In the Anglo-Saxon era, English had a word *list* that meant “to be pleased, desire.” Several centuries later a French word, *liste*, which meant “band, row, group,” came into English vocabulary. As this new meaning of *list* became prominent, the use of *list* to refer to pleasure or enjoyment became obsolete. However, the adjective *listless*—meaning to be without pleasure or enjoyment—remained. Giving new meanings to existing words is not only a process that occurred far in the past. Recycling of word meanings is rampant in the age of the internet. For example, a *footprint* can now refer to actions that leave a trace or the shape on the ground of a building, not simply a track or mark left by a foot or shoe.

Students may also know about remixing—where songs are mixed together to create a unique song. At the very least, students will know about mixing ingredients, as

when eggs and milk are combined to make French toast or when eggs, peanut butter, and sugar result in tasty cookies. Remixing of words, similarly, involves combining words in compound words or phrases to convey a new meaning. For example, new words that were added to dictionaries in 2019 (Merriam-Webster, April 23, 2019) include bingeable (multiple episodes or parts of a show to watch in rapid succession) and permalink (permanent static hyperlink). Words are also combined in new ways to create expressions such as *to table*, which refers to postponing a discussion or event.

## THE EVIDENCE

Both recycling and remixing have a number of forms that can be useful for teachers to keep in mind when creating lessons and holding discussions.

### How Words Get Different Meanings: Recycling

The meanings of a word can shift with a change in the part of speech. The meanings associated with words can also change, sometimes gradually and other times quickly. Homonyms are another example of different meanings associated with the same word form. The use of some words and word meanings can also diminish over time, dropping out of contemporary use.

### Parts of Speech Change, Word Meanings Change

The meanings of many words vary in meaning as different parts of speech, even without the

addition of endings. The word *lap* has distinctive meanings in the following sentences that come from decodable texts for beginning readers.

1. The cat sat in Pam's lap.
2. Cats lap up milk.
3. The waves lap onto the rocks.

The meaning of *lap* as a noun and a verb varies considerably. Young children likely understand the idea of a cat or child sitting in someone's lap but the use of the word *lap* to refer to drinking with quick movements or the actions of waves may not be familiar to some young children.

Nouns can also become verbs by adding *-ing*, as when *rain* becomes *raining*. Often, the use of a noun as a verb happens first in conversations and popular media such as *emailing*, *texting*, *messaging*, and *blogging*. Saying that "I'm blogging" is shorter and snappier than saying "I am writing a blog." Over time, the use of a noun as a verb becomes an accepted form.

Another way words change is when verbs become nouns. For example, *adapt* becomes *adaptation* or *reveal* becomes *revelation*. The process of changing a verb into a noun removes the action, making already abstract words even more abstract. Further, the addition of syllables as a verb becomes a noun can make pronunciation challenging for some students, while shifts in spelling (e.g., *reveal/revelation*) can make it difficult for students to link the meanings of the words.

## Word Meanings Morph

The word *morph* in this subheading illustrates the ways in which meanings of words change. Originally, *meta* (change) and *morpheus* (shape, form) were combined to form *metamorphosis*, meaning a transformation. This word moved from use in biology (insects or amphibians moving from an immature to adult form) to use in computer animation. Now the word is used in other contexts, such as when a person or thing changes.

Unless the word meanings have different origins, connections across different meanings can usually be understood with a quick study. That is certainly the case with

many of the words that have been given new meanings in the digital era. The word *viral*, which describes information circulated rapidly on the Internet, connects to virus, an infection that spreads rapidly. Or *tweet*, which refers to a short post on a social media site, connects to its original meaning of the tweet, a short (and often repeated) sound of a bird.

## Homonyms and Homographs

Three types of words that are often lumped together in the curriculum are summarized in Table 1. Of these three types of words, only homonyms have the same spelling and sound.

**Table 1**  
**Distinctions Between Homonyms, Homographs, and Homophones**

Type of Word	Definition	Examples	Challenge for Students
Homonym (homo: same or equal; nym: word)	Same spelling and same sound but different meaning, because of different origins	<ul style="list-style-type: none"> <li>• bat (long wooden stick used for hitting ball in baseball;</li> <li>• a small nocturnal animal with wings)</li> </ul>	Confusing in both reading and listening; Challenging because many frequent words are of this type.
Homophones (homo: same or equal; phone: sound)	Same sound but different spelling and meaning	<ul style="list-style-type: none"> <li>• new/knew</li> <li>• night/knight</li> </ul>	Easy to distinguish in reading because of different spellings but not in listening. Good news: One member of a set is usually less frequent than the other(s)
Homographs (homo: same or equal; graph: something written)	Same spelling but different in meaning and sound	<ul style="list-style-type: none"> <li>• tear (a rip)</li> <li>• tear (something falling out of eye)</li> </ul>	Not many words of this type; in reading, context alerts reader to unique meaning/pronunciation; in listening, unique pronunciation signals different meaning

## Archaic Words

The discussion of recycling of word meanings is not complete without addressing words in the dictionary landfill—words that dictionary writers describe as archaic and that are no longer used in conversations and texts. Words such as *cackle*, *hayfield*, and *fib* were among the known and important words for middle graders in the Dale-Chall (1948) readability formula. These words may have been prominent in the late 1940s when Dale and Chall identified the words for their list, but contemporary students typically do not hear or use these words.

A problem with archaic words can be their presence on summative assessments because of test-makers' use of public domain texts that are royalty-free. These public domain texts, all published in 1923 or earlier, are rife with archaic language. To become proficient at reading such texts requires an awareness of the language used in older texts and some experience with these texts. It's impossible to introduce students to all possible variations of texts with archaic language, but even a handful of examples can support students' awareness and expectations of language in texts from bygone eras. The following excerpts from Kipling's *The Jungle Book* and from Lofting's *Doctor Dolittle* illustrate the vocabulary of older texts (e.g., *thou*, *hast*, *ye*, *lest*, *pshaw*).

“Out!” snapped Father Wolf. “... Thou hast done harm enough for one night.”

“I go,” said Tabaqui quietly. “Ye

can hear Shere Khan below in the thickets. I might have saved myself the message.” (Kipling, 1894)

“He has taken care not to blubber or sniffle, lest we should find out that he is crying. ...” Pshaw!—Such ignorance!” sniffed Too-Too. (Lofting, 1920).

## Remixing Meanings

When words are mixed together, the resulting word or phrase does not necessarily retain the meanings of the individual words. Phrases where words are remixed are of three types: (a) complex phrases that are prominent in content areas, (b) figurative language, including idioms, and (c) collocations, words commonly used together.

## Complex Phrases

Linguists may define *climate change*, *water cycle*, or *House of Representatives* as open compound words, meaning that they are neither hyphenated nor combined but convey a unique meaning as a set of words. Open compound words in everyday contexts, such as in the phrases a *water cooler* or *cold water*, are fairly straightforward in their meaning (although a picture may be useful for water cooler for some students). In content areas, however, open compounds such as *water cycle* and *water table* are quite precise and involve concepts that go considerably beyond the typical words in a compound word. For example, *water cycle* means more than *water* (a liquid) and *cycle* (a series of events); it refers to

the circulation of water on Earth, involving an extended series of events that include precipitation, evaporation, and transpiration.

Because of the complexity of many compound words in content areas, I have suggested that compound words in content areas are better treated as complex phrases than simply compound words (Hiebert & Bravo, 2010). If students see the phrase *water cycle* and respond to each word separately, they will not bring the requisite meaning associated with this phrase—the level in the ground below which the soil is saturated with water. Examples of compound words that function as complex phrases in content areas are given in Table 2 to demonstrate why many compound words in content areas deserve treatment as complex phrases.

## Figurative Language

In figurative language, the meanings of the words that have been remixed is neither precise (as in complex phrases) nor is it literal. Poetry provides the quintessential examples of figurative language. A stanza from Emily Dickinson's poem “The Railway Train” (1891) illustrates the way in which words are mixed together to create images.

I like to see it lap the miles,

And lick the valleys up,

And stop to feed itself at tanks;

And then, prodigious, step

Every word in this poem except for *prodigious* is in the core vocabulary. But verbs such as *lap*, *lick*, *feed*, and

**Table 2**  
**Examples of Compound Words that Function as Complex Phrases in**  
**Content Areas (Fourth-Grade)**

Content Area	Examples of Complex Phrase	Meaning
Mathematics	<ul style="list-style-type: none"> <li>• Place value</li> <li>• Proper fraction</li> </ul>	<ul style="list-style-type: none"> <li>• Value represented by a digit in a number on the basis of its position in the number</li> <li>• The numerator is less than the denominator</li> </ul>
Social Studies	<ul style="list-style-type: none"> <li>• Capital resources</li> <li>• Human resources</li> </ul>	<ul style="list-style-type: none"> <li>• Goods made by people and used to produce other goods and services</li> <li>• People who do physical or mental work to produce goods or services</li> </ul>
Science	<ul style="list-style-type: none"> <li>• Change of state</li> <li>• Food chain</li> </ul>	<ul style="list-style-type: none"> <li>• A physical change that occurs when matter changes to another state (i.e., liquid, gas, or solid)</li> <li>• Transfer of energy through various stages as a result of feeding patterns of a series of organisms</li> </ul>

*step* require the reader to imagine an inanimate object taking on actions associated with humans or animals.

Narrative texts are usually not as dense with figurative language as poetry. But some authors use figurative language frequently. Further, some picture books are a visual expression of figurative language. Such is the case with *Quick as a Cricket* (Wood, 1982), where a young child's capabilities (*loud as a lion, tough as a rhino, etc.*) are presented as similes. Students can enjoy listening to the examples from Wood's book and then creating and sharing their own. These student inventions can be the focus of a collection of words—one of the 4Cs of small changes.

### Idioms

Idioms are a form of figurative language that is often used in conversations but that can also appear in dialogue in narrative

texts and, in some cases, may be the source of a picture book. Idioms have meanings that cannot be established by the literal definition of the individual words in a phrase. For example, the expression *It cost an arm and a leg* is not meant to be interpreted literally. Because idioms occur as part of informal or casual communication of conversations, words in idioms are usually from the core vocabulary. Consequently, these words will be counted as easy in current text complexity schemes but that does not make these expressions easy for young readers or non-native English speakers. Teachers who are native English speakers need to be aware that the meanings of idioms that they take for granted may not be evident for all students. One cultural dimension that affects students' understanding of idioms is the degree of individualism versus collectivism. In an individualist culture, a high value is

placed on independence and self-reliance, hence the use of idioms such as *pull yourself up by the bootstraps* and *stand on your own two feet*. But these idioms may not make sense to students from more collectivist cultures that emphasize interdependence and collaboration (Hammond, 2015).

Another way teachers can support their non-native English speakers with idioms is to highlight the universality of idioms. All languages have idioms but rarely are the same idioms used across languages. For example, English idioms for being in good health are *fit as a fiddle* or *healthy as a horse*, while a Spanish equivalent is *estar más sano que una pera* or, literally to be healthier than a pear. The explanation behind this expression—that pears are viewed to have more nutritional value than apples—shows that most idioms (including English ones) depend on shared knowledge within a culture.

### Collocations

As teachers work with students on using context to make meaning of words and text, knowing about collocations can be useful. The term *collocation* refers to words that often occur together. The word *chocolate* is often followed by *bar, cake, or chip*. If *chocolate* appears in a phrase with *cookie*, the likely word to follow *chocolate* is *chip*. Collocations differ from complex phrases because the words in the group are not fixed but will vary, depending on the context. Another difference is that the collocations formed by two or three words do not have a formal definition, in contrast

to complex phrases, such as *climate change* or *water cycle*. Developing ease with collocations such as *freezing cold* or *bitter cold*, however, can be highly supportive in reading smoothly and meaningfully.

The number of collocations in language is far too large for comprehensive coverage (Nesselhauf, 2005). Unlike instruction with complex phrases, where students need to associate a group of words as having a specific meaning, instruction on collocations encourages students to use the context of sentences to anticipate and predict what is likely to come after a word such as *chocolate*.

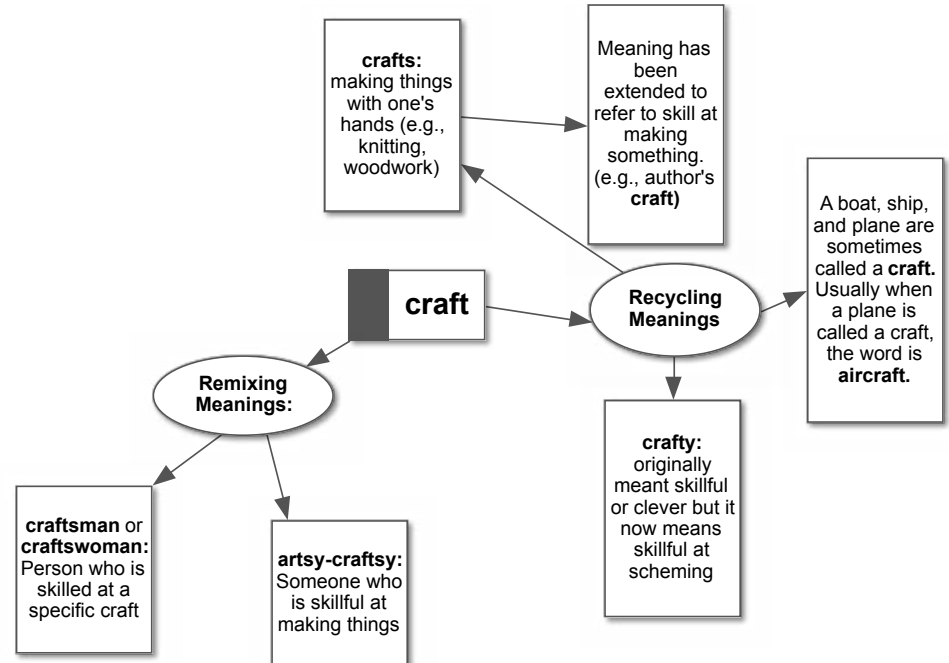
## SMALL CHANGES = BIG RESULTS

Instruction about recycling and remixing words is essential in every grade and every subject area, but this facet of word knowledge becomes increasingly vital as students move to the upper elementary grades where texts are longer and have more complicated themes. A visit to the fourth-grade classroom of Francine illustrates small changes related to word recycling and remixing that can be integrated into daily teaching routines.

### Core Reading

Francine conducts a mini-lesson about multiple-meaning words early in the school year as part of her core reading instruction. She creates a semantic map of a word that she knows will arise across the school year in her classroom: *craft*. Francine chose this word because

**Figure 1**  
Examples of Multiple Meanings Associated with the Word “Craft”



**Figure 2**  
Word Reminders to Review and Remember

### WORD REMINDERS

**Word Networks:** Words are part of families or networks. When you learn the members of word families or networks, your vocabulary grows.

**Synonyms:** Often, the meanings of words are connected to the meanings of other words. Many new words in books have meanings that are close to those of words you already know.

**Morphology:** Many words belong to families of words that have the same root words and meanings.

**Multiple Meanings:** Often, the same word has different meanings and uses. In different contexts, the meaning of a word can change.

**Phrases:** When a word is part of a compound word or a phrase, its meaning can change.

**Word Origins:** Many words in English come from French, which has a close connection to Spanish. The French/Spanish connection often gives clues about an English word's meaning.

**Table 3**  
Examples of Multiple-Meaning Words

Multiple Meaning Words with Common Meanings	Multiple-Meaning Words with Both Common and Specialized Meanings
bark, nails, jam, pool, mine, draft, squash, bolt, buckle, harbor, racket, hatch	force, compound, light, model, property, root, pole, light, current, plane, season, charge

**Table 4**  
**Books That Illustrate the Recycling and Remixing Process**

Category	Example of title or series
Stories where a character is confused by multiple meanings of words or by homonyms/homophones.	<ul style="list-style-type: none"> <li>• <i>Amelia Bedelia</i> series (Parish &amp; Parish, 1963)</li> </ul>
Many jokes for children derive from either multiple meanings or noun-verb changes.	<ul style="list-style-type: none"> <li>• <i>Laugh-out Loud Jokes for Kids</i> series (Elliott, 2010)</li> </ul>
Word play with homonyms and homophones, although, at times, word play uses other features such as multiple-meanings	<ul style="list-style-type: none"> <li>• <i>Eight Ate</i> (Terban, 2007a)</li> <li>• <i>Dear Deer</i> (Baretta, 2010)</li> <li>• <i>If you were a homonym or a homophone</i> (Loewen, 2007)</li> </ul>
Word play that often uses a number of word changes, including homophones, multiple-meaning words, and noun-verb shifts	<ul style="list-style-type: none"> <li>• Five books by Gwynne (2006) (titles include <i>The King who Rained</i> and <i>A Chocolate Moose for Dinner</i>).</li> <li>• <i>How Much Can a Bare Bear Bear?</i> (Cleary, 2014)</li> <li>• <i>See the Yak Yak</i> (Ghigna, 1999)</li> </ul>
Word play that focuses on a single feature such as multiple meanings, compound words, noun-verb changes, and homographs	<ul style="list-style-type: none"> <li>• <i>What's the point? (A book about multiple meaning words)</i> (Fowler, 2010):</li> <li>• <i>Word Play</i> (Brunetti, 2017)</li> <li>• <i>Yaks Yak</i> (Park, 2016)</li> </ul>
Idioms	<ul style="list-style-type: none"> <li>• <i>Ve lo que dices/See what you say</i> (Tabor, 2000)</li> </ul>

the term *author's craft* is prominent in her state's ELA standards and is therefore likely to appear on the end-of-the-year assessment. She also knows that *craft* shows up in many children's books, as in *Exploring the Titanic* (Ballard, 1988), where *craft* is used to describe a boat, and that a derivative of this word—*crafty*—appears in *James and the Giant Peach* (Dahl, 1961) in quite a unique way to mean sly, tricky, or devious.

## Conversations

At the end of the first mini-lesson on multiple-meaning words, Francine and her students discuss

how best to summarize what they have learned. Francine adds a word reminder to a chart she displays prominently in her classroom. Over the course of the school year, more word reminders are added to a chart such as Figure 2 as more word patterns are studied.

In addition to the classroom chart, Francine has given her students 3 x 5 cards for noting their own versions of word reminders. She encourages students to keep the card visible on their desks or to use it as a bookmark. In whole class and group lessons, Francine consistently asks students to review the word reminders when an

unknown word is encountered in text.

## Collections of Words

Beginning with the first mini-lesson on multiple meanings of words, Francine keeps another classroom chart where she writes a running list of words with particularly prolific sets of meanings. The chart distinguishes between multiple-meaning words that are used primarily in conversations and narratives and those that also have specialized meanings in content areas. Some of the words that appeared on the chart in Francine's classroom appear in Table 3.


## Choice Reading

Francine has collected a number of engaging books on the theme of multiple meanings. Some of the books in Table 4, such as the Fred Gwynne books graphically depict potential

confusions of different forms of words with multiple meanings or spellings. These books are sufficiently witty to keep her fourth graders engaged. A group of students were motivated to extend Gwynne's efforts and create illustrations of their own.

Another group of students were inspired by Tabor's (2000) book with English idioms and their Spanish equivalents. Since several language groups are represented in Francine's classroom, these students collected the idioms in various languages for familiar idioms such as easy as ABC and have second thoughts.

## Last Word

Mastering multiple-meanings of words does not occur from filling out numerous worksheets. Developing flexibility with words comes from reading, writing, and discussions. An astoundingly large number of vocabulary games and worksheets are available on Pinterest, on educational websites, and in educational products. Unfortunately, worksheets do not adequately explore how words take on unique meanings in the context of sentences. When learners are asked to distinguish between minimally different words (e.g., to, too, two; buy, by, bye), they can become confused and even make erroneous substitutions. A flexible use of vocabulary comes both from extensive reading and from conversations focused on the influences of different uses of words on the meaning of a text. 

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