

Background Information and Tip Sheet

Refer to **Morphology Background Information Sheets** for more in-depth information about morphology and key definitions.

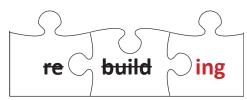
As English is a morphophonemic language (incorporates both morphological and phonemic information), children must be taught early that "sounding out" is not sufficient for accurate spelling and word recognition. This becomes evident when we look at words such as, the and jumped. Written and spoken words in English are formed by combining structural units called morphemes. Morphemes are the smallest meaningful units of language.

Every word has a base or is a base. A **base** is a structural element that holds the meaning and does not contain any prefixes or suffixes.

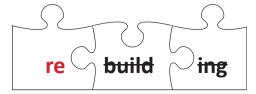
For example, the word cats has two elements: the base (meaning) <cat>, and the suffix <-s> which tells us that there is more than one *cat* (plural).

Let us examine morphemes by guiding students through an exploration of the word *rebuilding*. We want students to understand that affixes (prefixes and suffixes) have a job, but without a base, there is no specific meaning.

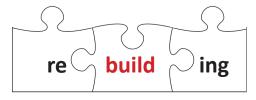
Ask students to think about <-ing> as being the only morpheme in the word. Students would then understand that <-ing> holds meaning but only when attached to the base.



Ask students to think about <re-> as being the only morpheme in the word. Students would then understand that <re-> holds meaning but only when attached to the base.



Think about if <build> was the only morpheme in the word:



- Students will understand that <build> IS a word as they can understand that <build> has meaning on its own.
- Although <re-> and <-ing> are MEANINGFUL (as they may shift/intensify/alter grammatical structure) they do not hold meaning on their own.
- The BASE <build> can hold meaning on its own.
- All three (<re->, <build> and <-ing>) are morphemes as they have a meaningful influence on rebuilding.



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Accessing Students' Prior Knowledge

Most preschool children's vocabulary includes words with suffixes (e.g., playing, bigger, looked, cats). Children can learn to identify morphemes in their vocabulary right away.

Think about the child who says, "I runnded to the store," or, "I sleeped at Grandma's."

They **understand** that English uses morphemes to shift meaning. They have noted that <-ed> is used in other words (e.g., *looked*, *jumped*), and are generalizing these morphemes onto <run> and <sleep>.

Verbs, where the spelling of the base changes to form the past tense (instead of attaching a suffix), are called strong verbs. The fact that children often make errors with strong verbs is evidence that they use morphemes in their oral language.

As children generally use suffixes as soon as they speak in sentences, they are ready to identify and understand them in Kindergarten. The ability to work with affixes (both prefixes and suffixes) is a powerful way to build vocabulary and correct grammar.

Just as it is beneficial to segment and blend phonemes orally (phonemic awareness) to support reading and spelling, it is beneficial to orally work with morphemes before children are able to read them. If children have a deep understanding of morphemes as a construct, when they come across them in written form, they will have an easier time reading and spelling them.

<u>Tips</u>

- When you see <>, say the grapheme (letter name), and when you see //, pronounce the phoneme (sound).
- Use free bases when first introducing the concept of morphemes. A free base is defined as a base that functions independently/forms a complete English word on its own (e.g., pack, the, and fort).
- Using gestures supports understanding. Represent the base with a fist, and the suffix with two fingers pointing downwards to the left of the fist, to ensure the base precedes the suffix when facing students.





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Tips Continued

Example:

• Teacher says *nap* while holding up fist, and then says /s/ while pointing two fingers downwards to signal the suffix. Teacher says, "What's the base?" (children respond "nap"). Teacher says, "What's the suffix?"

(children respond "<s>").



• Teacher says *jump* while holding up fist and then says /t/ while pointing two fingers downwards to signal the suffix. Teacher says, "What's the base?" (children respond "jump"). Teacher says, "What's the suffix?" (children respond "<-ed>"). Ensure students say each letter name, rather than pronouncing the sound of the suffix)



It is helpful to say the letter names separately but quickly: for suffix <-ed> in *jumped* you would say <-ed> quickly rather than saying /t/.

Follow this procedure whenever you are emphasizing a base. Because this work is done orally, it is possible to expose students to examples beyond what they can read or write. Use literature (e.g., picture books, novel studies, etc.) to highlight rich vocabulary (e.g., looking, peaceful, excitement).

When teaching suffixes, we want children to understand that pronunciation may change, but spelling will always be consistent. (e.g., the three sounds of -ed: /d/, /t/, /ad/)

sailed /d/ jump<mark>ed</mark> /t/

landed /əd/ (ə - schwa)



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Activities for Developing Oral Morphological Understanding

- Be aware that some students may use different oral grammatical structures in the language they are loved in, so ensure you do not say, "This is right, that is wrong."
- It is still beneficial for all students to understand formal grammatical structures.

The goal is for students to think about the new meaning the affix would give the new word. Students will come to notice and identify how each affix is influencing the base. Because this is oral, any base (regardless of spelling) can be used.

<u>Suffixes</u>

(* sourced from etymonline.com)

When creating suffix cards, represent suffixes in red to help students differentiate suffixes from bases (either print in red text, print in black text on red paper, or print in black text and underline with a red marker).

Suffix <-s> as Plural

- Give students a popsicle stick with an <-s> attached.
- Have them walk around the classroom with their "suffix <-s>" finding objects in the room that have 2 or more (e.g., stack of chairs, bin of pencils, markers, etc.), put "suffix <-s>" beside them, and orally name them (e.g., "pencils!").
- Ask students what job suffix <-s> is doing.
- Support students in reaching the understanding that one of the jobs of suffix <-s> is to signify more than one (plural).



e.g., "crayons"



e.g., "animals"



Background Information and Tip Sheet

Suffixes Continued

(* sourced from etymonline.com)

Suffix <-s> as 3rd Person Singular

- Teacher explains that suffix <-s> has another job.
- Teacher jumps and says, "I jump."
- Teacher asks one student to jump, and then says, "Sanjay_____." Students respond, "jumps."
- Provide each pair of students with a suffix <-s> card. Have one partner do an action (e.g., *look*) and call out, "I look." The other will say, "Sanjay looks," while holding up the suffix <-s> card.

Suffix <-s> as Possessive

- Provide Student A with various items (e.g., manipulatives, toys, etc.) and their name card.
- Provide Student B with different items (e.g., manipulatives, toys, etc.) and their name card.
- Teacher points to one of the items and asks, "Whose is this?"
- Students answer, "It's ______'s!"
- Provide students with a suffix <-'s> card.
- Students put their suffix <-'s> card beside their name to consolidate their understanding.

Through discovery, students will come to understand the <'s> is "somebody's something".



e.g., "Tyron's apple"

Suffix <-ed> (indicates past tense)

Although suffix <-ed> can be pronounced three ways (e.g., jumped \rightarrow /t/, yelled \rightarrow /d/, landed \rightarrow /əd/) it is important to focus on the <u>concep</u>t of suffix <-ed> (how it changes the meaning), rather than focusing on the three sounds that <-ed> can represent.

- Ask students to jump.
- Teacher asks, "What are we doing?" Students answer, "Jumping."
- Teacher asks them to stop and says, "What did we just do?" Students answer, "We jumped." Demonstrate hand gestures to represent the base and the suffix. Teacher says jump while holding up fist, and then says /t/ while pointing two fingers downwards to signal the suffix.
- In the large group, repeat with *yelled* and *landed*.
- Provide students with a suffix <-ed> card. Have one partner do an action (e.g., *look*) and call out the base (e.g., *look*), and the other will hold up the <-ed> and say the new word (e.g., *looked*).

Emphasize that although pronunciation changes, spelling stays consistent because the morpheme <-ed>'s meaning is the same: these actions happened in the past. Students may come up with words such as *felled* and *runned*. Simply correct them, as these "strong verbs" are not necessary to teach at this time.



Background Information and Tip Sheet

Suffixes Continued

(* sourced from etymonline.com)

Suffix <-ing>

Suffix <-ing> forms the present tense of "verbs and the adjectives derived from them". * (e.g., "Look at the flying bird!" - flying is an adjective).

- Ask a student what they may do to a ball on a soccer field. → "kick it"
- Teacher asks, "Can you show that action now?" (child acts out kicking, jumping, running, sitting)
- Teacher asks, "What are you doing?"
- Students reply, "kicking", etc.
- Support students in reaching the understanding that we can use suffix <-ing> to show an action that is happening "right now".
- Provide students with a suffix <-ing> card. Have one partner tell the other to show an action (e.g., look, run, laugh) and call out the base (e.g., look) and the other will hold up the suffix <-ing> card and say the new word (e.g., looking).





→ "kicking"

Suffix <-es>

Suffix <-es> forms plural and 3rd person singular. When <-es> is added as a suffix, it forms another syllable. For example, <fox> + <-es> \rightarrow foxes, which has 2 syllables.

- Ask students to say the base fox.
- Ask them to say fox again with their lips closed and notice how many "hums" happen.

Remind students that every syllable requires a vowel grapheme.

Note: there are many ways in which teachers ask students to identify syllables (e.g., clapping, chin drops). Students are most accurate when saying the word with closed lips, which forces a "hum" with every vowel phoneme.

- Ask them to now say *foxes* with their lips closed and then identify how many "hums" there are, and therefore how many vowels they should expect.
- Write "foxs" on the board and ask them to count the number of vowel graphemes there are.
- Ask them what type of grapheme is needed to create another "hum." The desired response is, "a vowel grapheme" (every syllable requires a vowel or a vowel phoneme).
- Show them suffix <-es> and explain that the <e> in <-es> gives another "hum" (syllable).
- Give students a suffix <-s> card and a suffix <-es> card, and ask them to hold up the correct suffix when attaching them to the following bases: box, can, kiss, glass, mask, cube, watch.

Note: suffix <-es> is also attached to bases that end in <o>, such as: do, go, echo, potato, etc. This is a more complex spelling convention that can be taught at a later date.



Background Information and Tip Sheet

Suffixes Continued

(* sourced from etymonline.com)

Suffix <-er>

Suffix <-er> can indicate "a person/object who does"*. It can also be a comparative suffix (e.g., bigger). See https://www.etymonline.com/ for more complex uses of suffix <-er>.

- Teacher asks, "What does a singer do?" Through discussion, lead the students to say, "A singer sings."
- Teacher can help students discover that "a singer is someone who sings". Use enthusiasm to acknowledge that you are excited about them making a discovery. Discovery is a more powerful teaching method than simply telling students the answer.
- Repeat the question, "What does a ______ do?" (with <dancer>, <teacher>, etc.).
- Next, teacher says <helper> and asks students what they think the base could be. Through discussion, lead
 them to say <help>. Demonstrate hand gestures to represent the base and the suffix. Teacher says help
 while holding up fist and then says /er/ while pointing two fingers downwards to signal the suffix.
- Provide students with a suffix <-er> card (use red to differentiate from the base).
- Teacher says a base (such as *teach*), either written on the board or presented orally.
- Students repeat *teach*, hold up suffix <-er> card, and say the new word *teacher*.



A "timer" is something that "times".

As this is done orally and spelling is not addressed, suffixing changes do not need to be addressed. If teachers are writing "timer" the teacher should mention that you replace the <e> but do not need to explicitly teach the reason. Teachers should focus on the base and suffix as teaching suffixing conventions is not part of this lesson.

The goal is to understand suffix <-er> as a meaningful unit, not as something to sound out.

Ways to bring morphology into other subjects

Identifying affixes (prefixes and suffixes) can be done anytime the teacher is writing with students (e.g., morning message, recording students' observations and questions during science or math lessons, recording a procedure, etc.).

The teacher can pause and "think" aloud, inviting the students' input. For example, the teacher can write, <John is the special _____>, then say, "Helper... hmm... How will I spell that? What do you think the base is?" Students will reply, help. The teacher can then ask, "What is the suffix?". The students will reply, "<e><r>" (saying the letter names together quickly). The teacher can then write the base and the suffix. Then, together, say help while holding up fist, and then say /er/ while pointing two fingers downwards to signal the suffix.

Extension: Teacher asks, "What would we call more than one helper?" Lead students to reply, "helpers". Teacher leads students to notice that there can be more than one suffix.

Note: At first, you may have to guide the students to identify the base and suffix, but they will quickly become proficient, particularly with words that are already part of their vocabulary. The focus is mainly on recognizing the base. It will take a lot of repetition before students will be able to spell affixes. As this is predominantly an oral activity, you do not need to be concerned about suffixing conventions (the teacher is responsible for the writing, not the students).



Background Information and Tip Sheet

Prefixes

(* sourced from etymonline.com)

When creating affix cards, represent prefixes in green to help students differentiate prefixes from bases (either print in green text, print in black text on green paper, or print in black text and underline with a green marker).

Prefixes can "intensify or shift or nudge" ** a base's meaning (**Sue Hegland's, Beneath the Surface of Words).

Note: a particular prefix can have more than one "sense", so ensure that you avoid absolute language such as, "<re-> only means again."

Prefix <re->

The prefix <re-> can give a sense of "back from, again, undoing" * (to name a few).

- Provide students with a suffix prefix <re-> card.
- Teacher chooses a base, such as use.
- Ask students why they do not throw their (metal) water bottles away. Students respond, "Because I'm going to reuse it." Use guiding questions to get them to reuse.
- Students repeat *use*, hold up prefix <re-> card, and say the new word *reuse*.

Ensure you are demonstrating correct directionality when facing students.

While facing students, teacher says, "re" while pointing two fingers downwards to signal the prefix, teacher will say use while holding up fist. If you were to add a suffix to make the word reusing you would then say, "/ing/" while pointing two fingers downwards to the left of the base to signal the suffix.



Students are responsible for attaching the prefix <re-> to the base, not independently decoding the base, therefore words with spelling patterns that have not yet been taught can be used in this activity (e.g., teacher can use <re-> with *reheat* or *rebound*). The goal is to understand prefix <re-> as a meaningful unit, not as something to sound out.

Suggested bases to use with <re->:

• use, do, read, write, try, appear, build, act, heat, play, load, start, fill, call, claim, think, move, count, fresh, fuel, name, cycle, arrange, wire, word, view



Background Information and Tip Sheet

Prefixes Continued

(* sourced from etymonline.com)

Prefix <un->

<un-> can give a sense of "reversal, removal or deprivation" *

- Ask a student to tie their shoe and ask what they just did: "I tied my shoe."
- Ask students what we would say if (s)he took their laces apart.
- Guide students to untie.
- Ask students to hold up their <un-> card and say, "untie".

Suggested bases: zip, kind, sure, aware, load, fair, safe

Consolidation Games and Activities

The Affix Game

- Students work in groups of 4.
- Provide each group with affix cards (e.g., <-s>, <-ed>, <re-> increasing difficulty as needed)
 Note: they do not require individual cards as they are working in a group
- Teacher says, "If I was reading a book but wanted to read it again, what affix would I attach?"
- Student #1 holds up <re-> and everyone says new word: reread
- Provide students with other opportunities to attach prefixes and suffixes (e.g., "If I was jumping yesterday, I would say, yesterday I ... " and Student #2 would hold up their group's <-ed> card. Everyone says the new word: jumped.
- Give each student in the group a chance to hold up an affix card.





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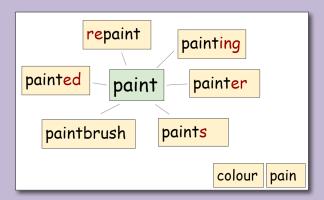
Consolidation Games and Activities Continued

Word Family Bags/Word Webs:

We learned about this activity from Rebecca Loveless in her SWI for Early Learners Workshop (see resource section for links). In this activity, the teacher prepares a selection of words that share a common base. An example that you might do with kindergarten students would be the free base <paint>. Words in the selection might include paints, painting, painted, painter, paintbrush, fingerpaint, etc. Depending on the age and ability of the students, you might also add some words that are similar (either in meaning or in sound), but do not share the same base structure, for instance, pain and colour.

Start by telling your students which base you will be exploring. Write your base on chart paper/whiteboard. Have the students spell out the base. The next step is to define the base - work together to come up with a definition. The students then choose a word (you can have them in a bag, or face down in the middle of a circle, etc.). The students should spell the word they pull from the bag (e.g., , <ai>, <n>, <t>, <er>). Children do not need to be able to read the word - it can be read by the teacher and still be an effective way to study morphology. Students then need to determine if the word shares the same structure as the base (e.g., do *paint* and *painter* share the same base?). An analytic word sum could be created to demonstrate if students need support with this.

A discussion can then be had about whether both words are related in meaning (remember they will not have the same definition but should share the same "sense" or "essence"). If the answer is yes to both structure and meaning, the word belongs in the same family. A board may look like this when finished:



To see this in action, check out this amazing video: https://rebeccaloveless.com/video-the-rain-family/



Background Information and Tip Sheet

Consolidation Games and Activities Continued

Writing the Room

Choose a base related to an activity or centre in your classroom (e.g., on a door you can have: *open, opens, opening*, etc.). Start with a base (e.g., *open*) and with student input, orally generate new words by adding affixes (suffixes or prefixes). When your students are familiar with this activity, you can provide them with other bases, and they can attach their own affixes (be aware of suffixing conventions and support as needed). Boxing the base and underlining the affixes (green for prefix and red for suffix) makes the morphemes (prefix vs base vs suffix) stand out.







Whereas the above example is very powerful for younger students, older students can also benefit from word webs and word family activities. Consider some of the following ideas:

- choose a base where suffixing conventions apply, and explore any spelling and pronunciation changes that may occur to the base when suffixes are attached (e.g., "hope" or "cry")
- use math and science terminology in word studies to give students a deeper understanding of the terms they are using in subject areas



Background Information and Tip Sheet

References and a Final Note

These sheets are being offered as a free download because the more we understand our language, the more powerful decodable books can be for our students. Each tip sheet provides Key Concepts to Understand and Tips and Activities for Grapheme/Phoneme Correspondence, Orthographic Conventions/Patterns and Generalisations, Morphology, and Phonetically Irregular Words. It is essential to pre-teach the concepts using this tip sheet prior to reading the book. There is nothing inherently decodable about a book. Decodability is a relationship between the student and the book. If the concepts in a book have been taught, the book is decodable.

The information for these sheets has been compiled from a wide variety of sources. Many thanks to those in the field who have researched, practised, and shared their knowledge with educators. Please note - these sheets are based on our current understanding, both from our studies and from our personal experience. As we continue to learn, our understanding will evolve. If we reach a point where we feel these sheets need to be adjusted, we will do so and provide updated versions for free download.

Here is a list of the resources we have used and courses/workshops we have completed.

Source	Details
https://funlearning.ca/ O-G Fundamentals O-G Associate Practitioner O-G Practicum SWI Workshop Grammar Workshops	Liisa Freure is an OG Fellow and teacher trainer based in Toronto. We highly recommend her courses, and cannot thank her enough for getting us started on this journey! Liisa provides OG training with supervised practicums, as well as a range of linguistic workshops.
https://rebeccaloveless.com/ • Teaching Real Script • SWI for Early Readers • Beyond the Intro • The High Frequency Word Project -Rebecca Loveless & Fiona Hamilton	Rebecca Loveless is a Structured Word Inquiry Coach based in California. Her courses are practical, informative, and inspirational - a great way to see how morphology can be explored with young learners!
Beneath the Surface of Words - Sue Hegland https://learningaboutspelling.com/	Sue Hegland is the author of "Beneath the Surface of Words", which is a fantastic resource that has significantly broadened our understanding of morphology.
Real Spelling Toolbox - Real Spelling and Pascal Mira https://www.tbox2.com/	This book is our go-to reference for Orthographic Phonology, Orthography and Morphology. We would highly recommend getting a lifetime subscription!
Etymonline https://www.etymonline.com/ By Doug Harper	This is a free Online Etymology Dictionary that gives explanations of the history of words.
https://www.wordworkskingston.com/WordWorks/ Home.html Peter Bowers	Pete Bowers is a Structured Word Inquiry Coach extraordinaire. His courses are practical, informative, and inspirational - a great way to see how morphology can be explored with young learners! He offers free drop in sessions on Mondays at 5:00pm.