



The Alphabetic Code

the interface between oral and print language



Slides Available for Download at:

<https://www.theliteracybug.com/s/Mastering-the-Code.pdf>



Objectives

- To illustrate why learners must develop an understanding of patterns in their own speech (e.g. phonemic awareness) in order to reliably recognise sound-letter patterns and understand how words work;
- To outline key elements of “the code”, such as phonemic *awareness*, phonemic *knowledge*, letter-sound correspondence, orthographic patterns, morphological patterns and automatic word recognition and construction skills;
- To emphasise the ultimate goal: for learners to execute the code and word recognition with sufficient automaticity so as to facilitate more complex acts of comprehension and composition; and
- To understand that language skills, such as vocabulary and syntactic competence, become stronger predictors of reading comprehension as word reading skills are consolidated.



Contents - Mastering the Code

1. Introduction

2. Adam's Model of the Reading System (1990)

3. Dorsal-Ventral Shift Hypothesis (2017)

4. Elements of the Code

5. Conclusion



Please Note (before we begin):

This presentation does NOT explore *recommended teaching activities* in any detail. Those topics/issues will be covered in other presentations. Instead, *this* presentation places code-based skills within the context of language and literacy development.

Please explore and enjoy!



INTRODUCTION





The alphabetic code is the interface between oral language and print language ... and so ...

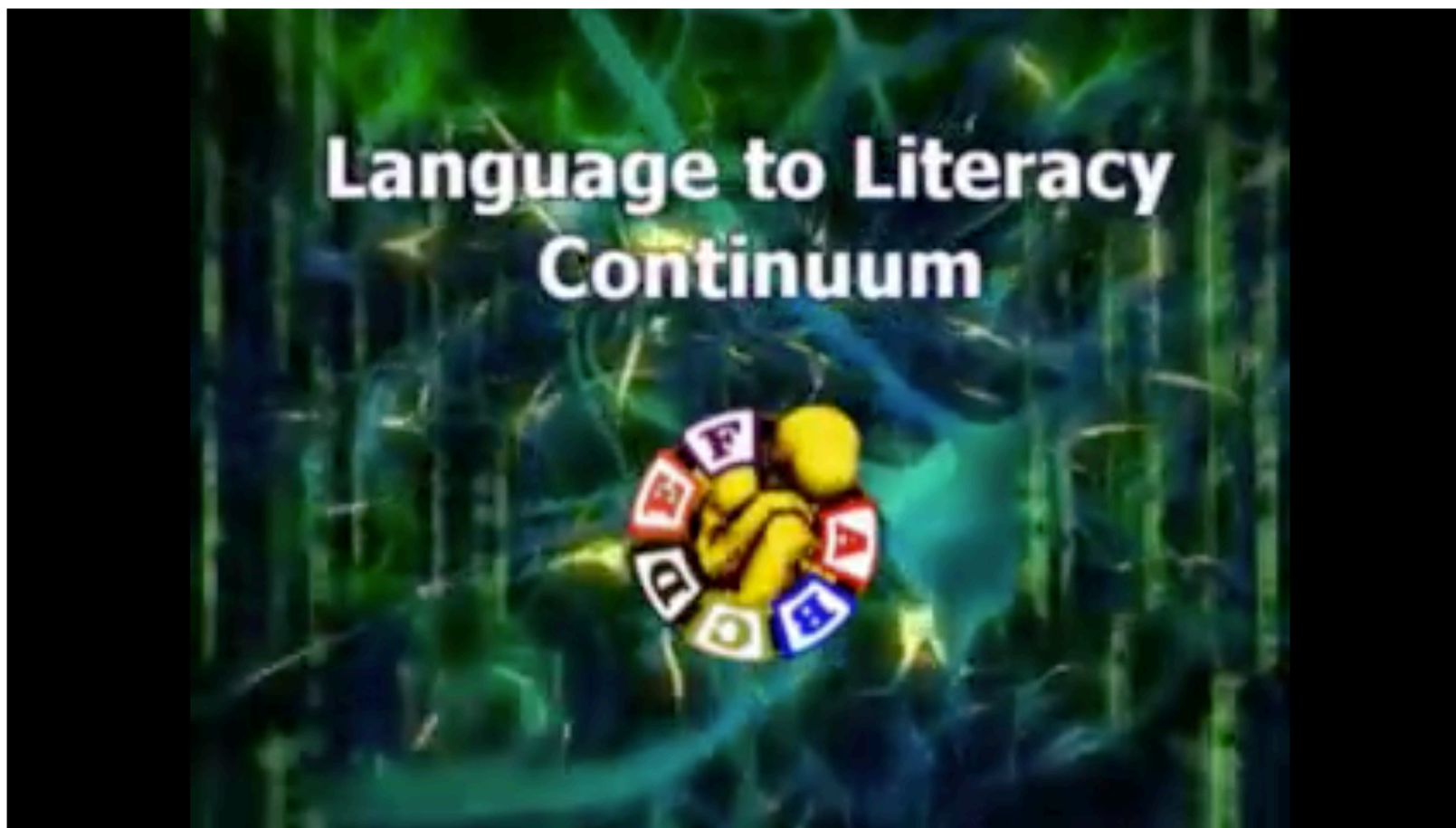
“The beginning reader’s initial task is to learn how the **spoken language** they know relates to the **written code** they are learning.” (Seidenberg, 2017, p 22)

Bringing print and speech into alignment makes reading feasible. (Seidenberg, 2017, p. 40)

Seidenberg, M. (2017). Language at the speed of sight: how we read, why so many can’t, and what can be done about it. New York: Basic Books.



The Language to Literacy Continuum



<https://youtu.be/jj2rBxKRZSc>



The Language to Literacy Continuum



KEY POINTS:

1. Developing **language** skills is key, including **vocabulary, syntactic competence and discourse development**.
2. Of equal importance is the development of **phonemic awareness**, which is the ability to detect sounds with words, such /b/ + /a/ + /t/. It is significant because (a) the skill isn't necessarily acquired as part of language development and (b) the skill is essential for acquiring code-based knowledge.
3. One requires sufficient practice to become proficient with reading and writing words. Matching **sound-letter patterns** is only one aspect to form words. A learner must also navigate and remember the patterns, rules and exceptions in **English orthography**.
4. Rapid **automatic word recognition** is a key to **fluency**, and - consequently - to **comprehension**.

<https://youtu.be/jj2rBxKRZSc>



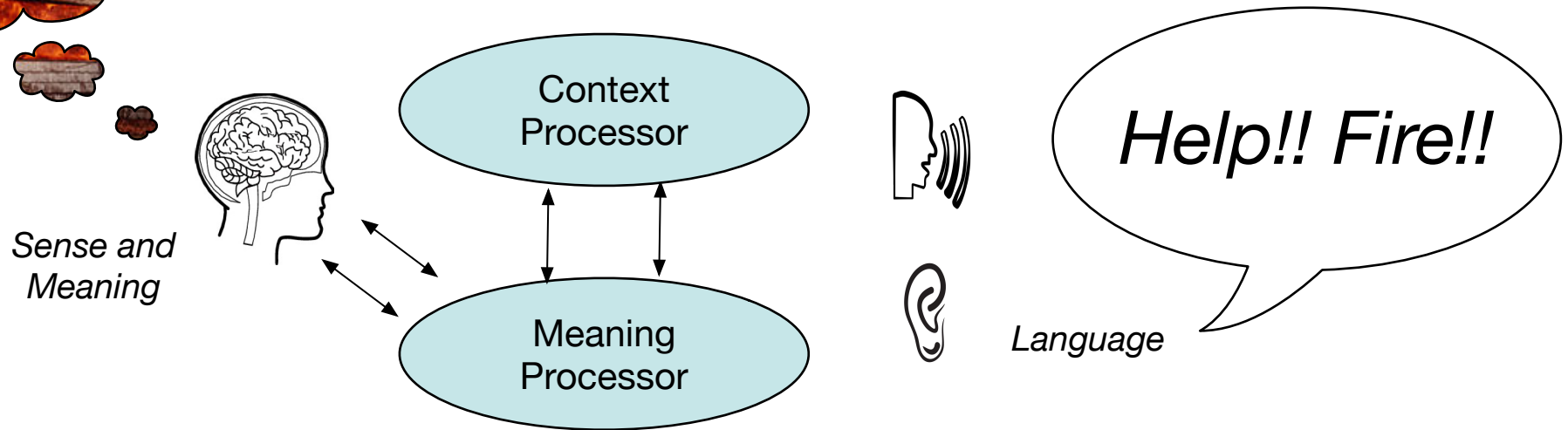
ADAM'S MODEL OF THE READING SYSTEM

Adams, M. (1990). Beginning to read: Thinking and learning about print. Cambridge, MA: The MIT Press.





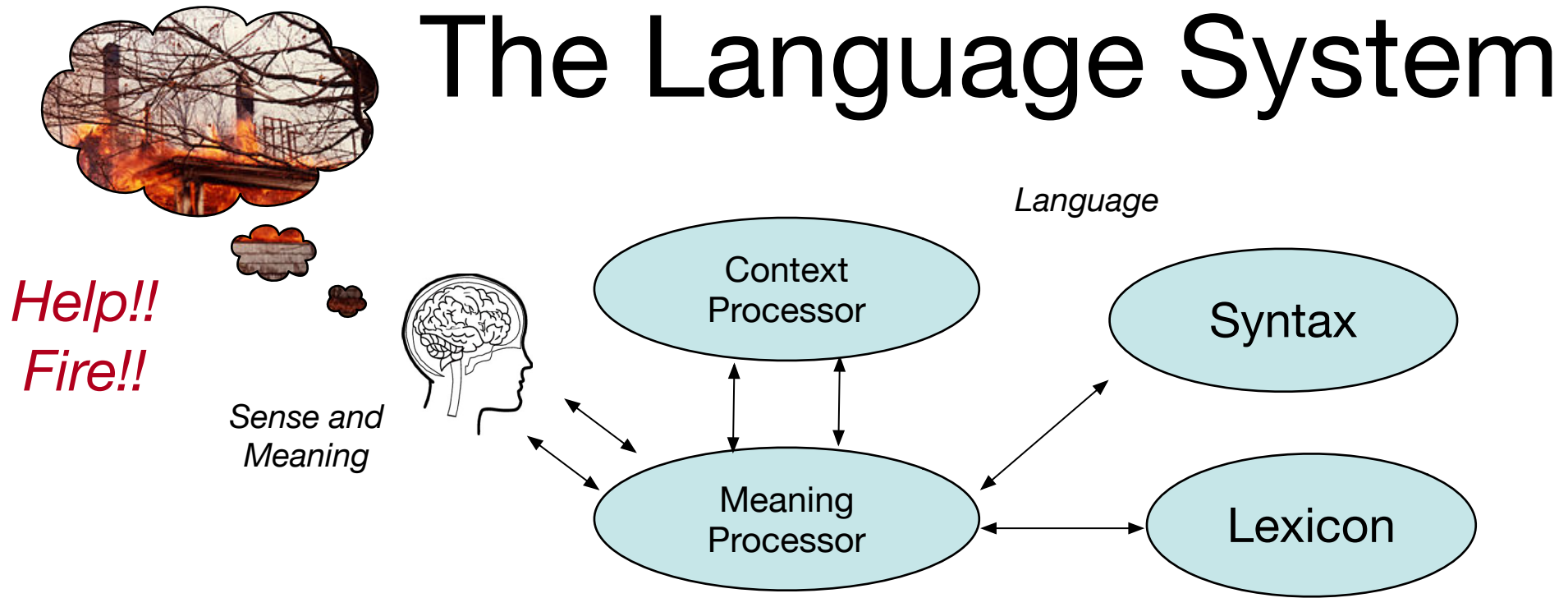
The Language System



“We read with our eyes, but the starting point is speech.”

(Seidenberg, 2017, p 21)

Seidenberg, M. (2017). *Language at the speed of sight: how we read, why so many can't, and what can be done about it*. New York: Basic Books.

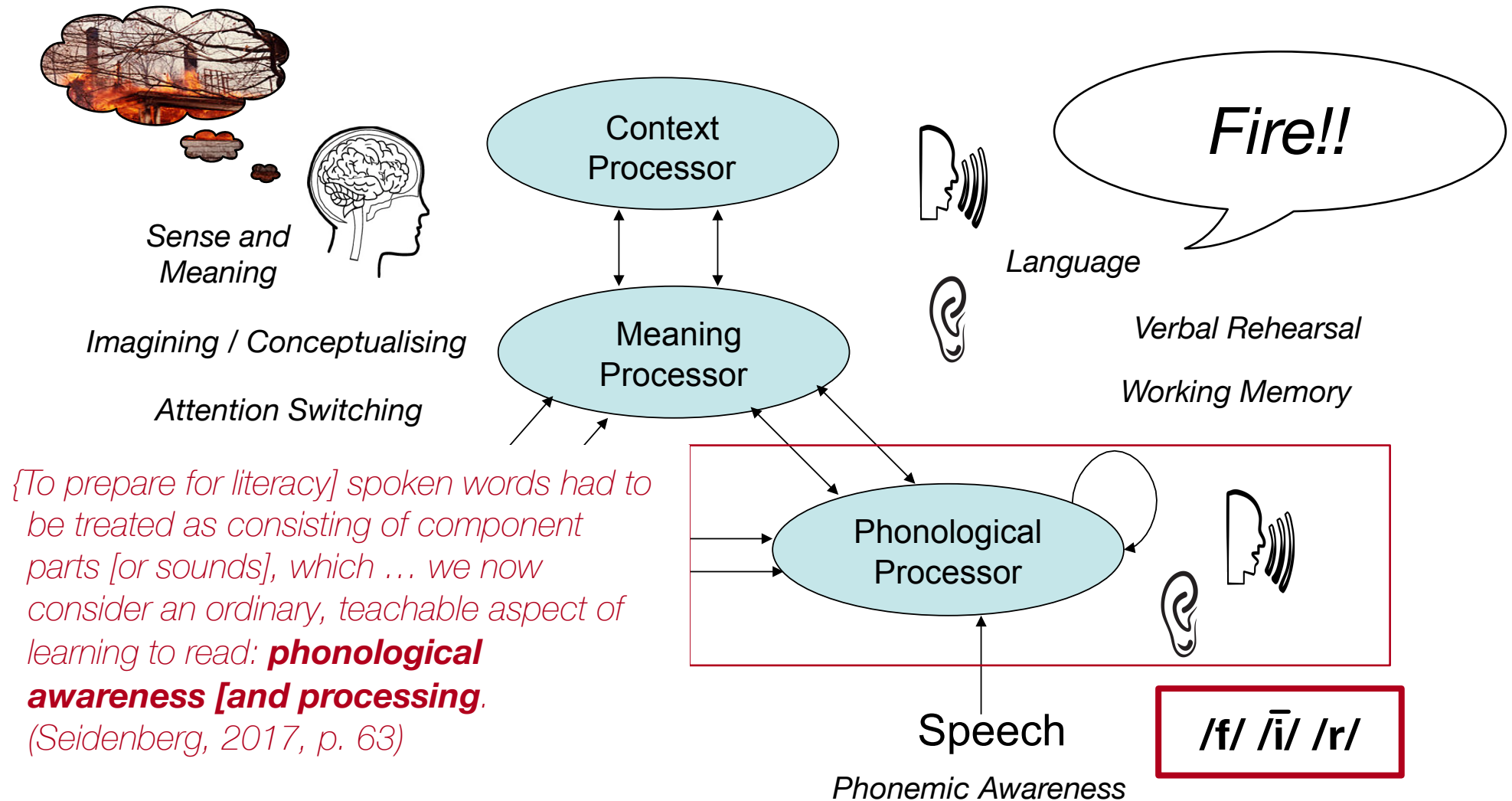


"Speech is messy. Producing a coherent message is a complex action: deciding what to say, picking the words and grammatical structures that express the intended meaning, loading the program to articulate the sequence of words, and running the program, all done on the fly."

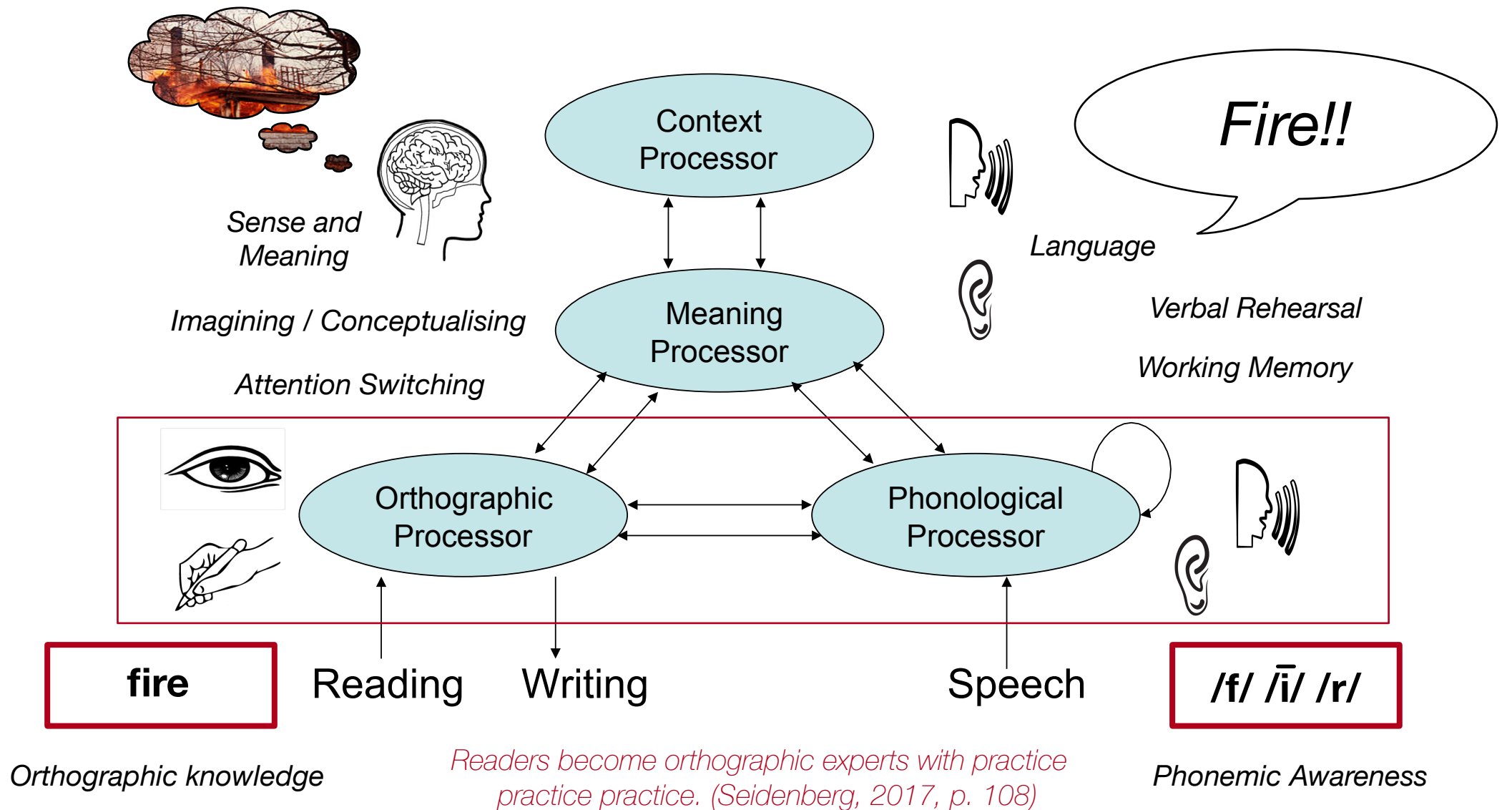
(Seidenberg, 2017, p 24)

Seidenberg, M. (2017). *Language at the speed of sight: how we read, why so many can't, and what can be done about it*. New York: Basic Books.

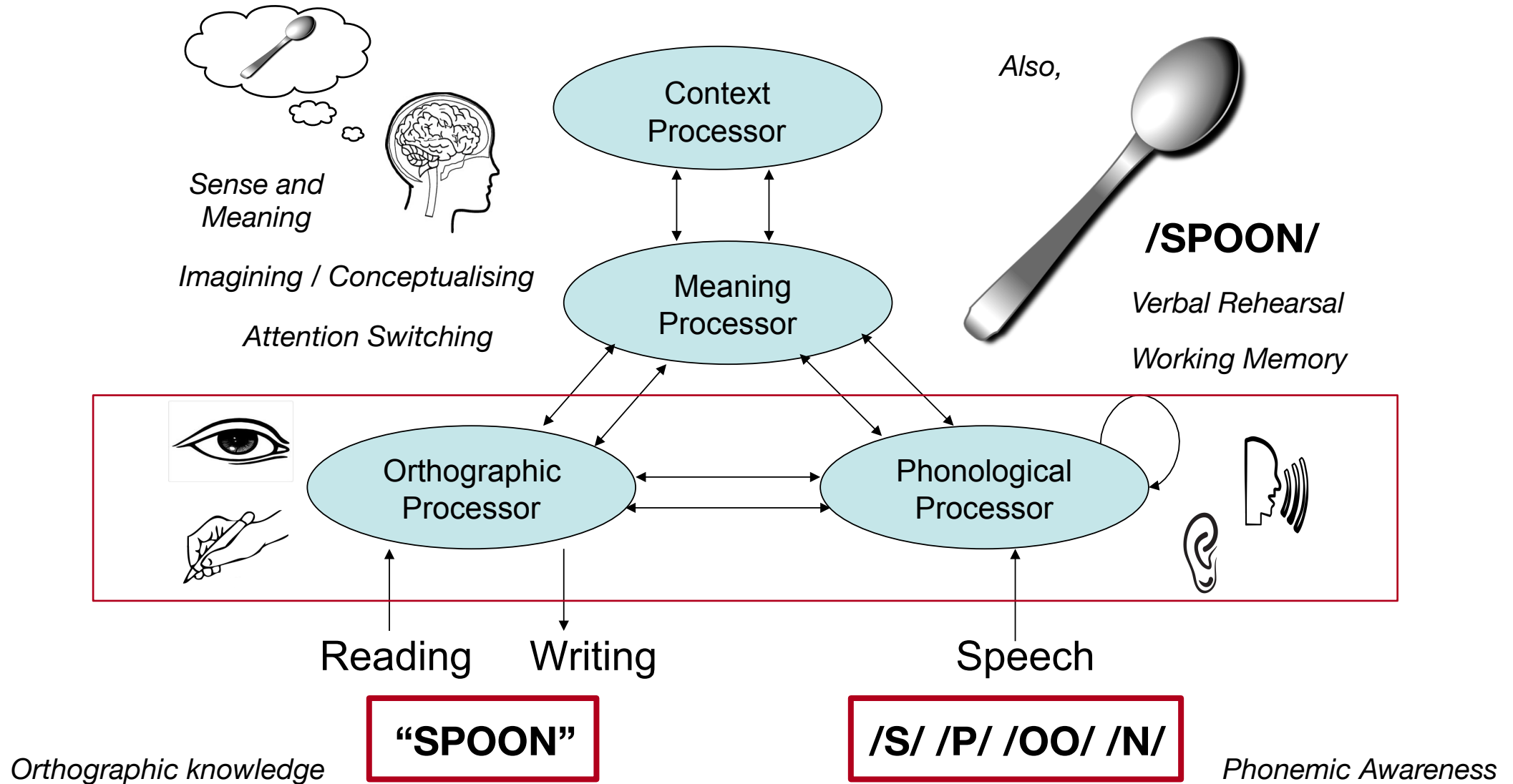
The Reading System (Adams)



The Reading System (Adams)



The Reading System (Adams)



[illegible]

/s/ /p/ /oo/ /n/

With experience, patterns are detected

“Learning to read is the process of acquiring the several types of statistical knowledge that support rapid and efficient comprehension, starting with phonological structure, orthographic structure, the mappings between orthography and phonology, vocabulary and grammar. Deficits in any of these areas can seriously interfere with children’s progress and adult proficiency.” (Seidenberg, 2017, p 88)

Seidenberg, M. (2017). *Language at the speed of sight: how we read, why so many can’t, and what can be done about it*. New York: Basic Books.



Reading eventually happens in the background

“So ... [eventually] people manage to be good at reading without knowing much about how they do it. Most of what goes on in reading is subconscious: we are aware of the result of having read something — that we understood it, that we found it funny, that it conveyed a fact, idea, or feeling — not the mental and neural operations that produced that outcome.” (Seidenberg, 2017, p 3-4)

Seidenberg, M. (2017). *Language at the speed of sight: how we read, why so many can't, and what can be done about it*. New York: Basic Books.



*But not from
the get go ...*



“Becoming virtually automatic does not happen overnight. These circuits and pathways are created through hundreds or ... thousands of exposures to letters and words.” (Wolf, 2008, p 14)

Wolf, M. (2008). Proust and the squid: the story and science of the reading brain. Cambridge: Icon Books.



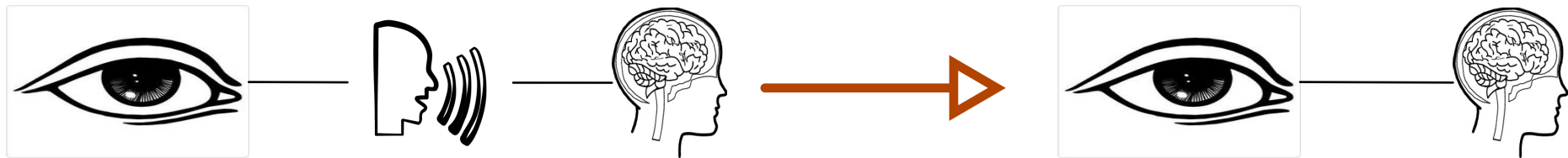
THE DORSAL-VENTRAL SHIFT HYPOTHESIS

Wise Younger, J., Tucker-Drob, E., & Booth, J. R. (2017). Longitudinal changes in reading network connectivity related to skill improvement. *NeuroImage*, 158(February), 90–98. <http://doi.org/10.1016/j.neuroimage.2017.06.044>



The Dorsal-Ventral Shift Hypothesis

[The Dorsal-Ventral Shift Hypothesis] proposes that there is a developmental shift from a reliance on “**sounding out**”, implicated in sound-symbol matching, **to rapid word recognition**, implicated in automatic recall of familiar vocabulary. (Wise Younger, 2017, Pugh et al., 2001).

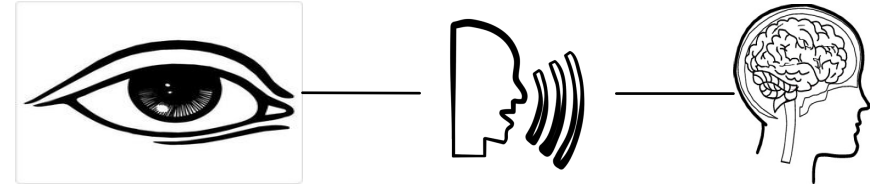


Pugh, K.R., Mencl, W.E., Jenner, A.R., Katz, L., Frost, S.J., Lee, J.R., Shaywitz, B.A., 2001. Neurobiological studies of reading and reading disability. *J. Commun. Disord.* 34 (6), 479–492. [http://dx.doi.org/10.1016/S0021-9924\(01\)00060-0](http://dx.doi.org/10.1016/S0021-9924(01)00060-0).

Wise Younger, J., Tucker-Drob, E., & Booth, J. R. (2017). Longitudinal changes in reading network connectivity related to skill improvement. *NeuroImage*, 158(February), 90–98. <http://doi.org/10.1016/j.neuroimage.2017.06.044>



The Dorsal Circuit



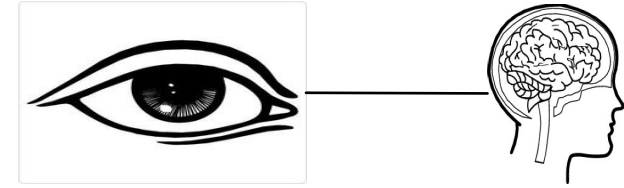
The **dorsal**, temporo-parietal circuit, including the left posterior superior temporal gyrus (L STG) and inferior parietal lobe (L IPL), is primarily involved in phonological processing and integrating visual (orthographic) and auditory (phonological) information, known as **phonological decoding** [or “sounding out”]. (Wise Younger et al., 2017, Pugh et al., 2001).

Pugh, K.R., Mencl, W.E., Jenner, A.R., Katz, L., Frost, S.J., Lee, J.R., Shaywitz, B.A., 2001. Neurobiological studies of reading and reading disability. *J. Commun. Disord.* 34 (6), 479–492. [http://dx.doi.org/10.1016/S0021-9924\(01\)00060-0](http://dx.doi.org/10.1016/S0021-9924(01)00060-0).

Wise Younger, J., Tucker-Drob, E., & Booth, J. R. (2017). Longitudinal changes in reading network connectivity related to skill improvement. *NeuroImage*, 158(February), 90–98. <http://doi.org/10.1016/j.neuroimage.2017.06.044>



The Ventral Circuit



The **ventral**, occipito-temporal circuit, including the fusiform gyrus (L FG) and inferior occipital gyrus (L IOG), is proposed to be critical for the **fast, automatic processing of visual word forms** (Pugh et al., 2001)

The ventral pathway tends to be used for words that are frequent (Coltheart, 2006; Jobard et al., 2003).

Coltheart, M., 2006. Dual route and connectionist models of reading: an overview. *Lond. Rev. Educ.* 4 (1), 5–17. <http://dx.doi.org/10.1080/13603110600574322>.

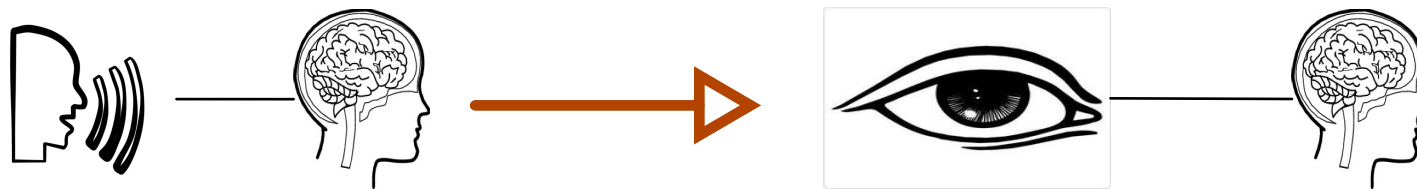
Jobard, G., Crivello, F., Tzourio-Mazoyer, N., 2003. Evaluation of the dual route theory of reading: a metanalysis of 35 neuroimaging studies. *NeuroImage* 20 (2), 693–712. [http://dx.doi.org/10.1016/S1053-8119\(03\)00343-4](http://dx.doi.org/10.1016/S1053-8119(03)00343-4).

Pugh, K.R., Mencl, W.E., Jenner, A.R., Katz, L., Frost, S.J., Lee, J.R., Shaywitz, B.A., 2001. Neurobiological studies of reading and reading disability. *J. Commun. Disord.* 34 (6), 479–492. [http://dx.doi.org/10.1016/S0021-9924\(01\)00060-0](http://dx.doi.org/10.1016/S0021-9924(01)00060-0).



The Dorsal-Ventral Shift

While both the dorsal and ventral streams are thought to be used throughout the lifespan depending on the type of word (i.e. familiar versus unfamiliar words), the dorsal-to-ventral shift hypothesis proposes that children rely more on dorsal stream processing [**sounding out**] for all word types **before shifting** to reliance on the ventral stream for [**automatic orthographic recognition** of] familiar words. (Wise Younger et al., 2017, p. 91)



Wise Younger, J., Tucker-Drob, E., & Booth, J. R. (2017). Longitudinal changes in reading network connectivity related to skill improvement. *NeuroImage*, 158(February), 90–98. <http://doi.org/10.1016/j.neuroimage.2017.06.044>



You can't skip a step, though ...

“I’m getting the hang of this!”

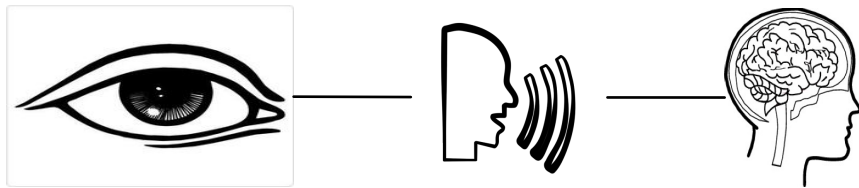
Strong phonological decoding skills are necessary for the development of the ventral stream for reading. Children who went on to improve their reading abilities had a sufficiently strong connection between orthographic word forms and their relationships with sounds before they made a shift away from using dorsal stream processing. (Wise Younger et al., 2017, p. 96)

Wise Younger, J., Tucker-Drob, E., & Booth, J. R. (2017). Longitudinal changes in reading network connectivity related to skill improvement. *NeuroImage*, 158(February), 90–98. <http://doi.org/10.1016/j.neuroimage.2017.06.044>

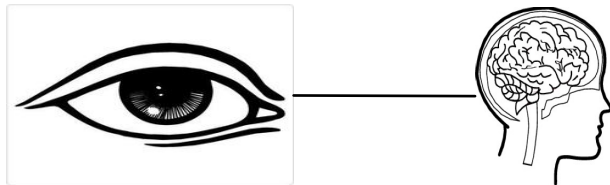


So, for a mature reader ...

Reading skill is related to using the **‘correct’ pathway** for the type of word being read. (Wise Younger et al., 2017, p. 91)



***“For unfamiliar and pseudo words”
“sounding out”***



***“For familiar words”
“automatic recognition”***

Wise Younger, J., Tucker-Drob, E., & Booth, J. R. (2017). Longitudinal changes in reading network connectivity related to skill improvement. *NeuroImage*, 158(February), 90–98. <http://doi.org/10.1016/j.neuroimage.2017.06.044>



In conculsion ...

Beginning readers need to develop strong skills in developing their phonological understanding of language and their understanding of sound-letter combinations. They need plentiful opportunities to use this knowledge to recognise and construct words.

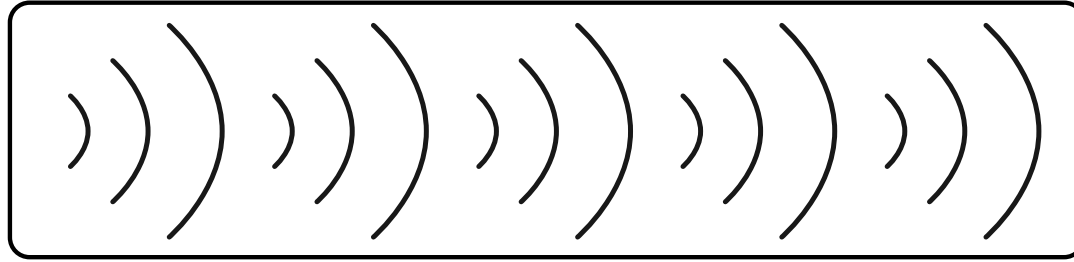
Effective readers must transition to a state whereby they are able to automatically and rapidly process words (visually) as they read fluently and with comprehension.

With experience, this system becomes more and more efficient, and language is immediately seen in the script.



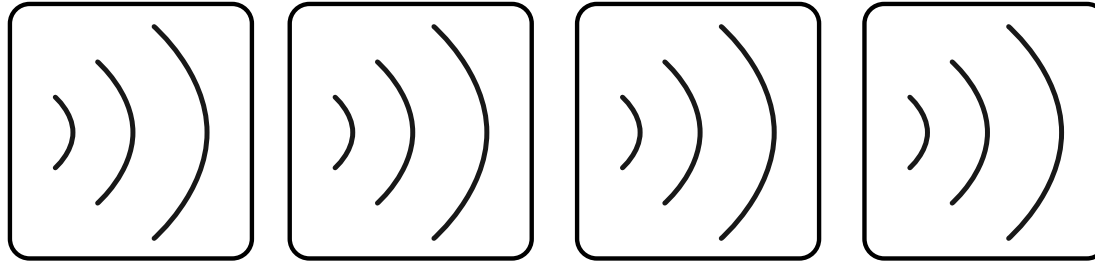
ELEMENTS OF THE CODE





Language

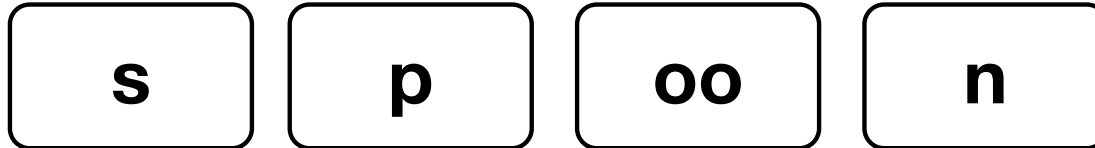
**Phonemic
Awareness**



**Phonemic
Knowledge**



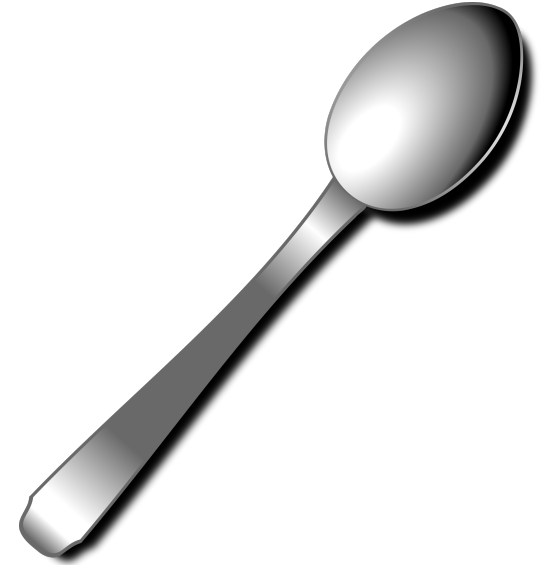
**Alphabets
/ Phonics**

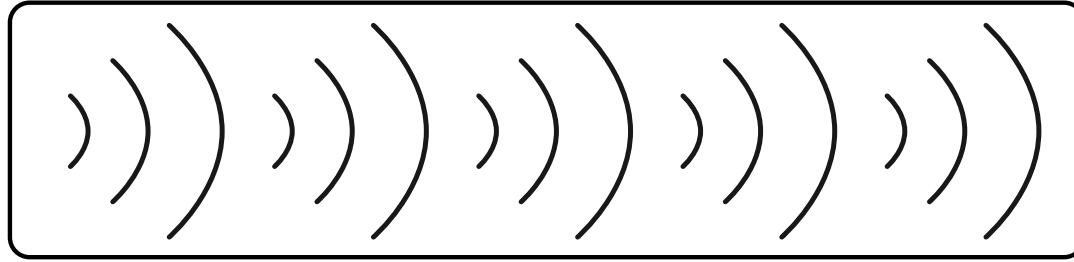


**Word
Construction**



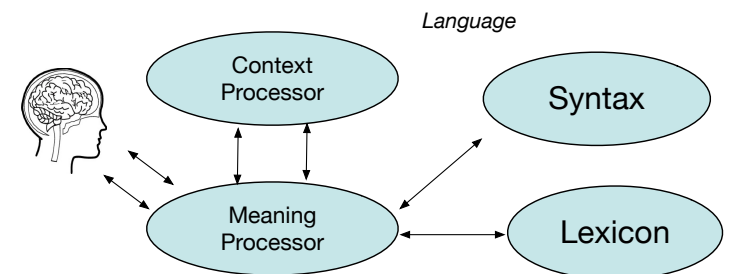
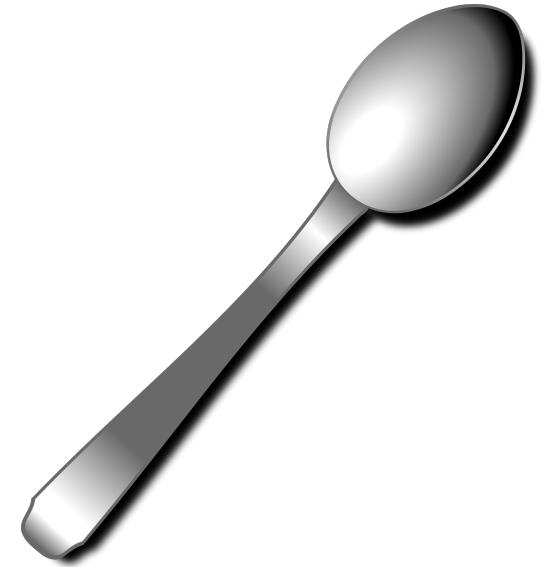
**Automatic Word
Recognition**





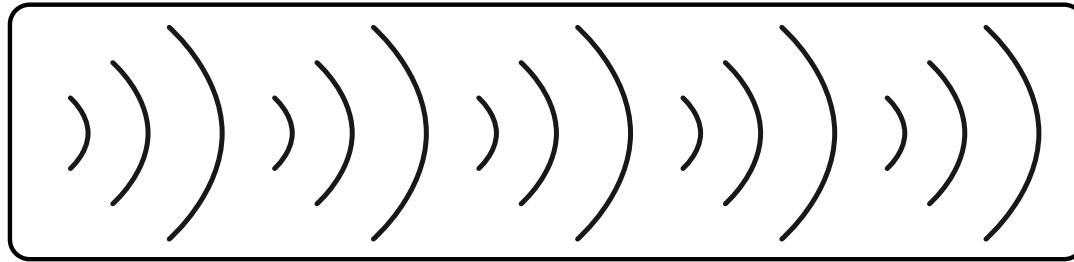
Language

We experience the world as a three-dimensional space populated by objects and events because of its ... regularities. **Language**, like the visual world, exhibits ... regularities on many levels — phonology, morphology, words, word sequences, relations between utterances and the context in which they occur, among others ... **Every time we use language**, we also update our [understanding] of it (Seidenberg, 2017, p. 102).

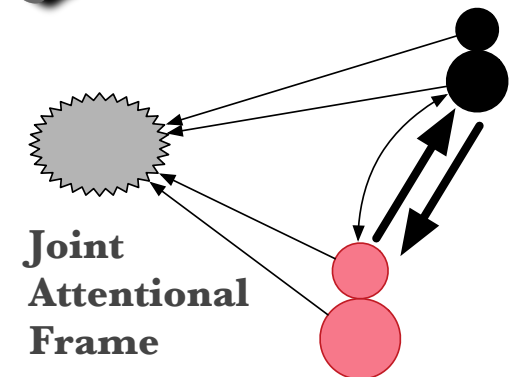
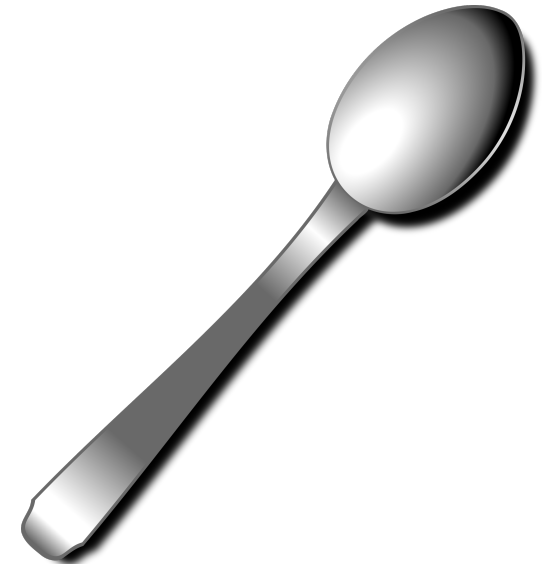
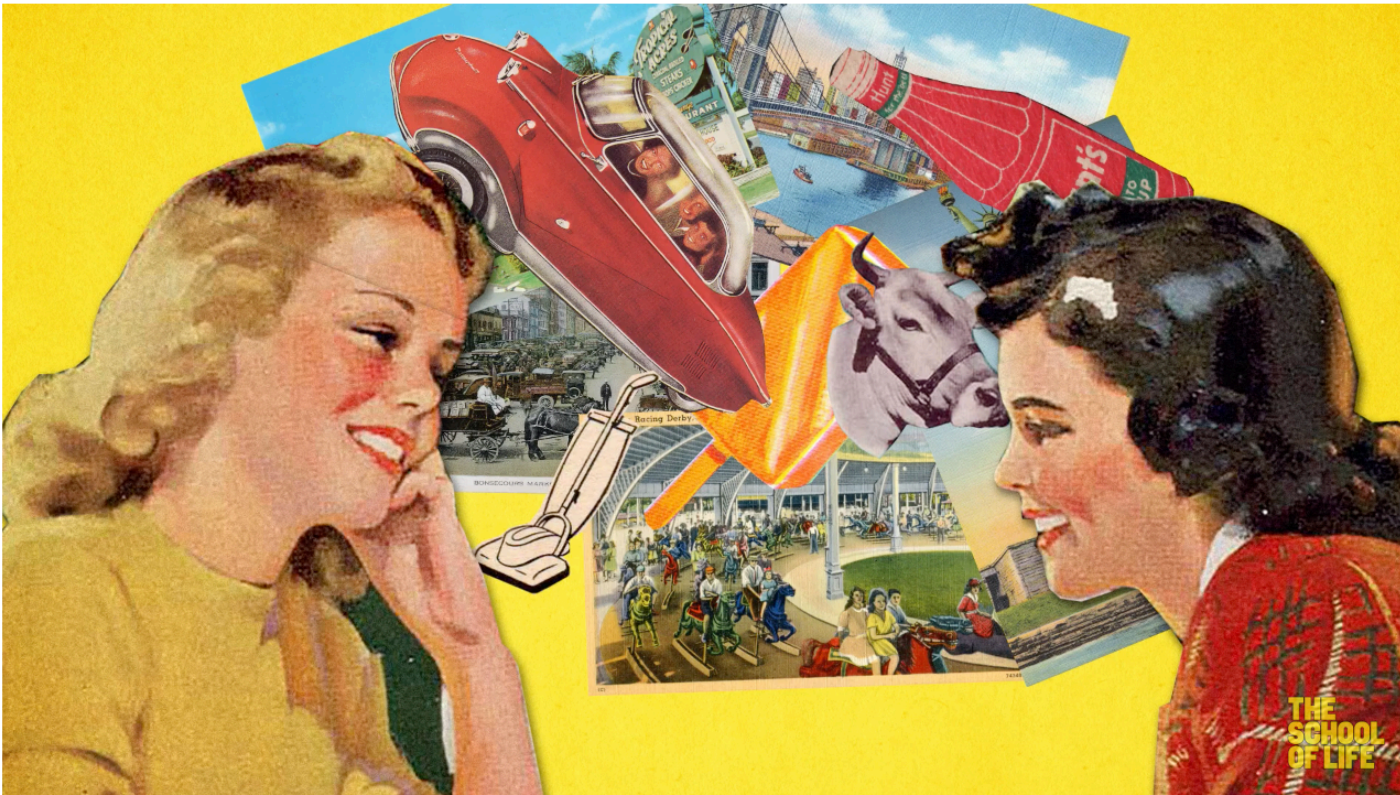


Seidenberg, M. (2017). Language at the speed of sight: how we read, why so many can't, and what can be done about it. New York: Basic Books.





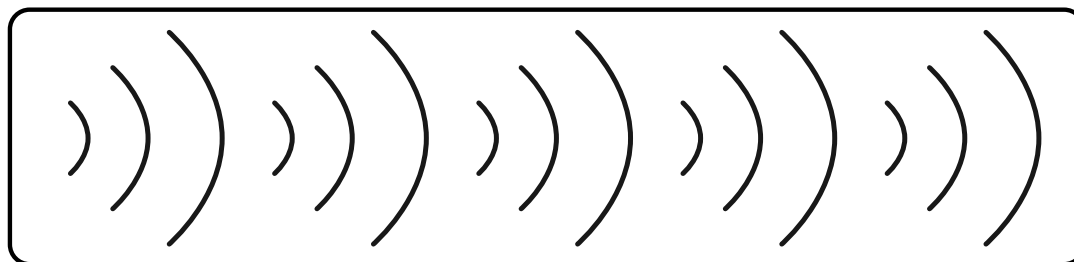
Language



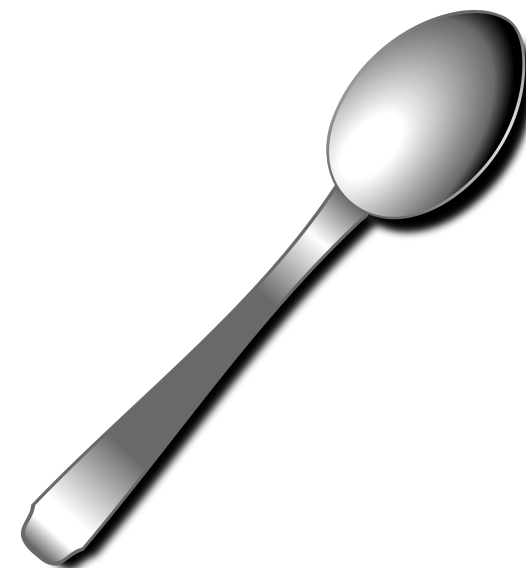
We speak about stuff to each other, hoping we are understood.

<https://youtu.be/pQ33gAyhg2c>





Language



FAMILY LANGUAGE STUDY

"From age 2 on, there exist large differences in childrens familiarity with unusual words, standard pronunciation, and complex syntax, a fact that was long suspected, but not well documented and quantified until the monumental research of Betty Hart and Todd Risley...." -*E.D. Hirsch, Jr.*

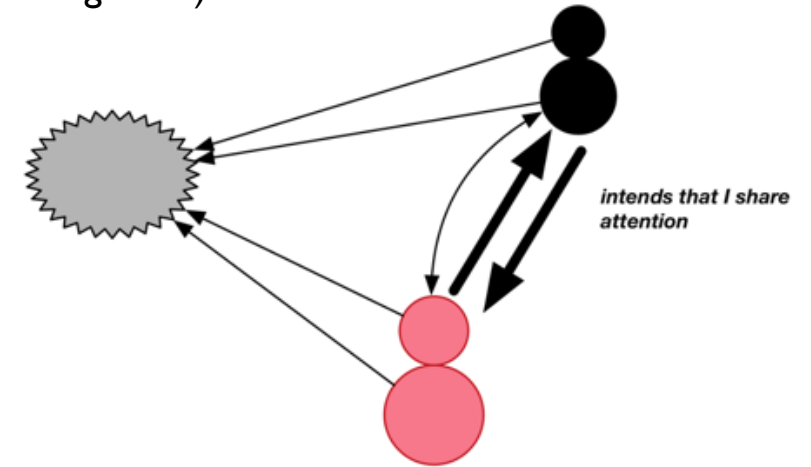
**30 Million
WordGap**

https://youtu.be/_OJ4yNRaPx24



WAYS TO HELP

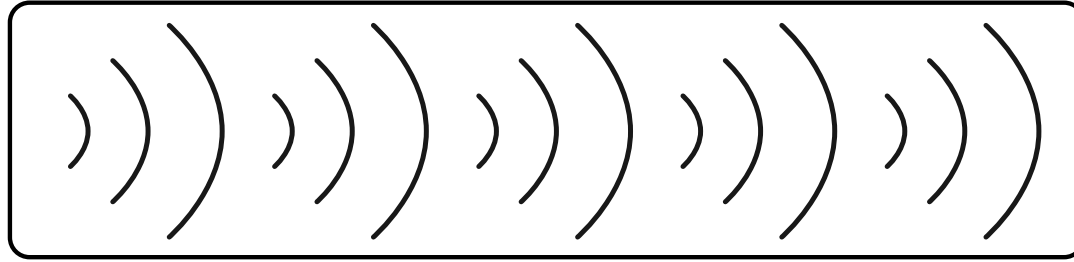
Joint Attentional Frame presents a conversation between individuals & a mediating tool (e.g. a picture book or a garden).



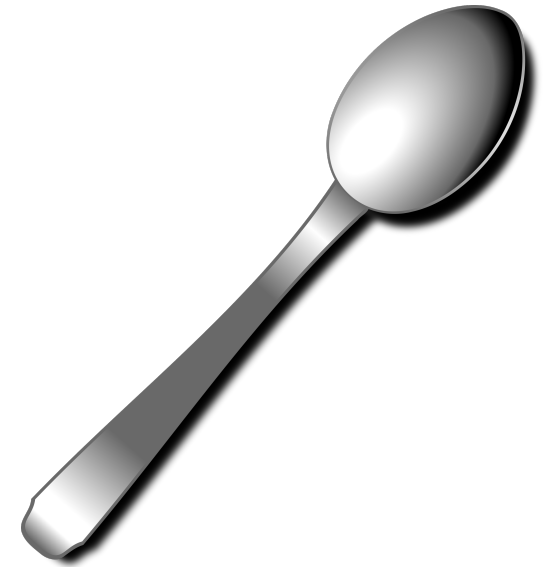
1. Use everyday activities as the context for practice.
2. Vocalise thoughts and describe ongoing actions.
3. Use parallel talk to describe what others are doing.
4. Use modelling to provide practice on a specific language skill.
5. Use recasting to reframe a learner response in a more fully developed way.
6. Use expansion to demonstrate how an idea can be expressed more completely.
7. Use “build ups” and “break downs” to emphasise the components of a message.

IN SUMMARY: It is important to model the complex syntax and vocabulary diversity that we want children to develop. For older students we want to create situations that allow them to engage in complex discussion and debate.





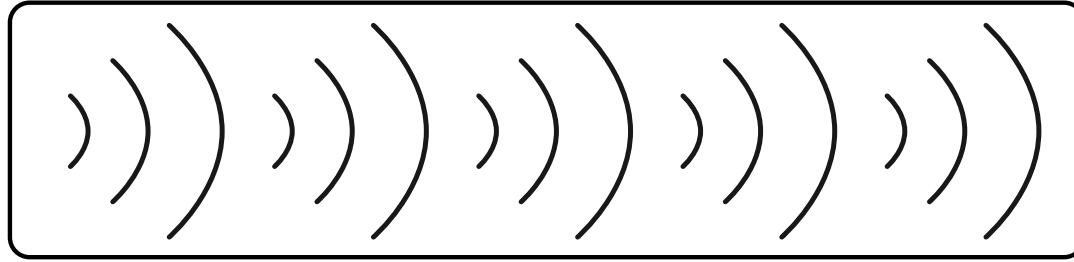
Language



**Scaffolding
Language
Development**

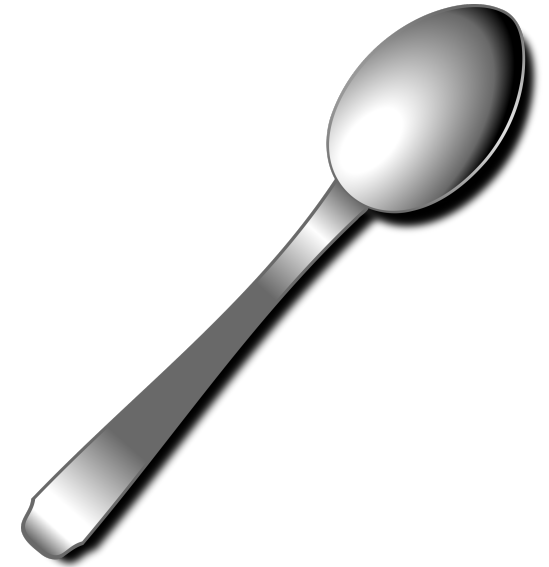
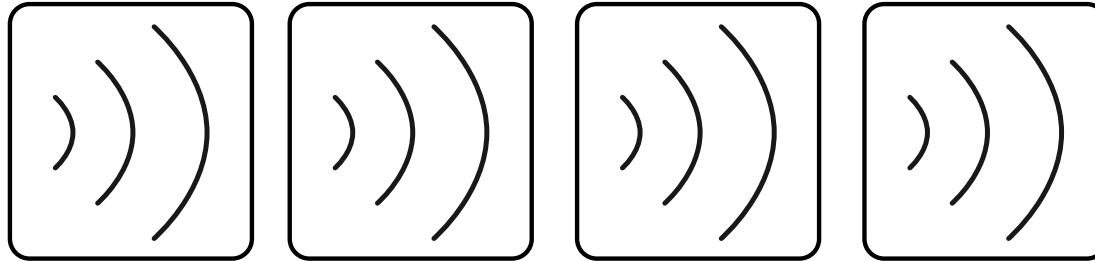
<https://youtu.be/e4oOQSEPt38>





Language

**Phonemic
Awareness**



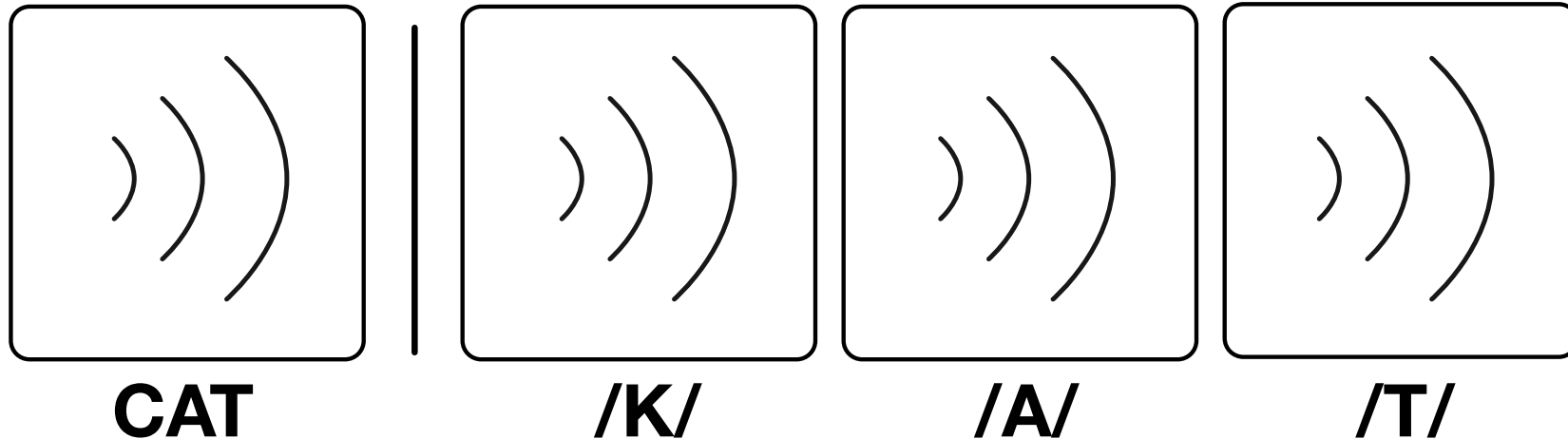
*{To prepare for literacy} spoken words had to be treated as consisting of component parts, which could then be represented by a much smaller number of graphical symbols. The would-be architects of writing systems had to develop something that we now consider an ordinary, teachable aspect of learning to read: **phonological awareness**. (Seidenberg, 2017, p. 63)*

Seidenberg, M. (2017). Language at the speed of sight: how we read, why so many can't, and what can be done about it. New York: Basic Books.

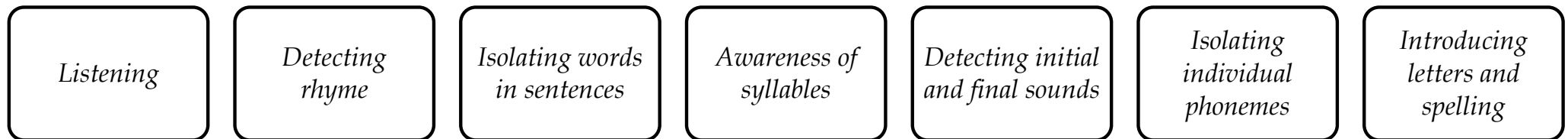


The Crux of Phonemic Awareness

To be able to detect the sounds within words, and hold this in working memory long enough as to begin matching sounds to graphemes.



The Seven Steps to Phonemic Awareness Are



Please note: phonemic knowledge is the exact knowledge of the 45 possible phonemes (give or take one to two). In addition, the development of oral language skills, including vocabulary skills is an inherent precursor.

PA MILESTONES (Ages when 80-90 % of typical students achieved a phonological skill. <http://www.readingrockets.org/article/development-phonological-skills>)

Awareness of rhyme emerges = 24 - 30 mths
Ability to produce rhyme emerges = 30 - 36 mths
Rote imitation and enjoyment of rhyme and alliteration = 4 yrs old
Rhyme recognition, odd word out = 5 yrs old
Recognition of phonemic changes in words = 5 yrs old
Clapping, counting syllables = 5 yrs old
Ability to segment words into phonemes begins = 5 - 7 yrs old

Noticing & remembering separate phonemes in a series = 5.5 yrs old
Blending onset and rime = 5.5 yrs old
Producing a rhyme = 5.5 yrs old
Matching initial sounds; isolating an initial sound = 5.5 yrs old
Compound word deletion = 6 yrs old
Syllable deletion = 6 yrs old
Blending of two and three phonemes = 6 yrs old

Segment words w/ 2 -3 phonemes (no blends) = 6 yrs old
Segment words w/ 3-4 phonemes (w/ blends) = 6.5 yrs old
Substitute phoneme in words (no blends) = 6.5 yrs old
Sound deletion (initial and final positions) = 7 yrs old
Sound deletion (initial position, include blends) = 8 yrs old
Sound deletion (medial & final blend positions) = 9 yrs old

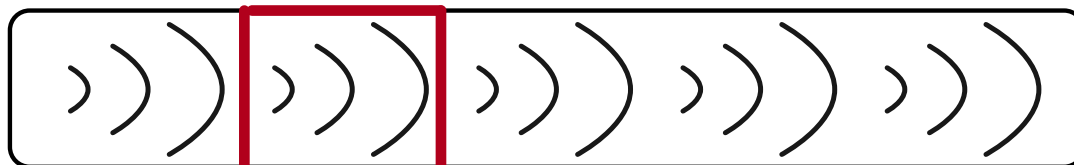
Refer to Vocabulary/Language Development for a child's development of familiar words which will be available for analysis.

Phoneme Awareness in the ELLI classroom

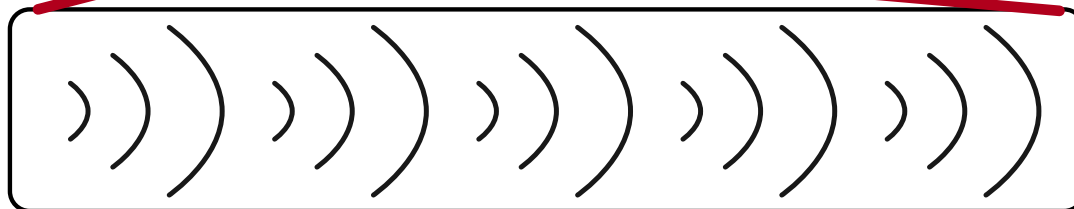


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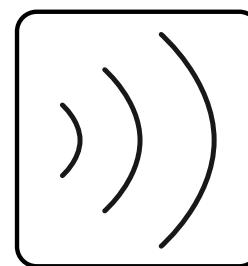
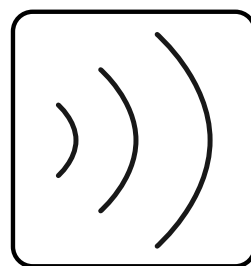
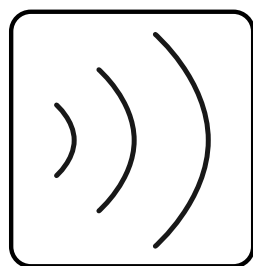
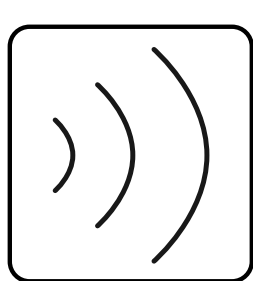




“The **helicopter** flew over the house”
whole word in a sentence



“Helicopter”
whole word



“Hel-i-cop-ter”
in syllables



/h/

/e/

/l/

/i/

/k/

/o/

/p/

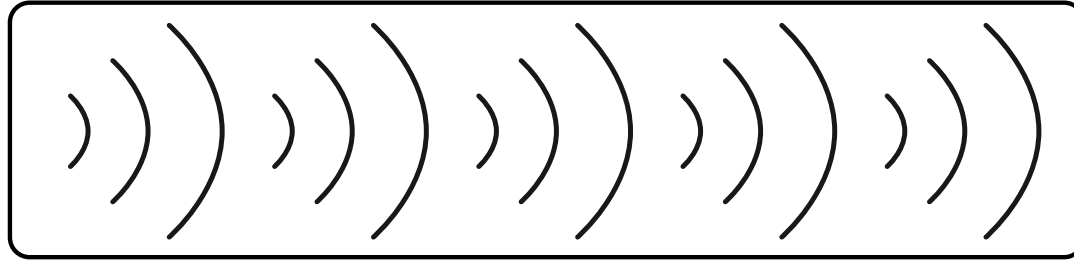
/t/

/er/

fully
segmented
into
phonemes

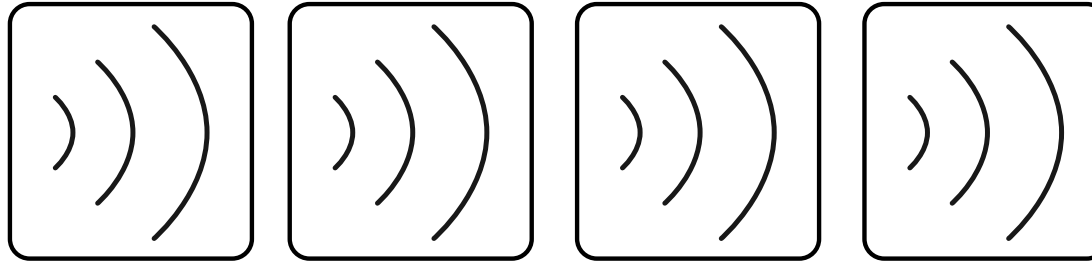
Spoken words [need] to be treated as consisting of component parts ... we now consider [this] an ordinary, teachable aspect of learning to read: **phonological awareness**. (Seidenberg, 2017, p. 63)



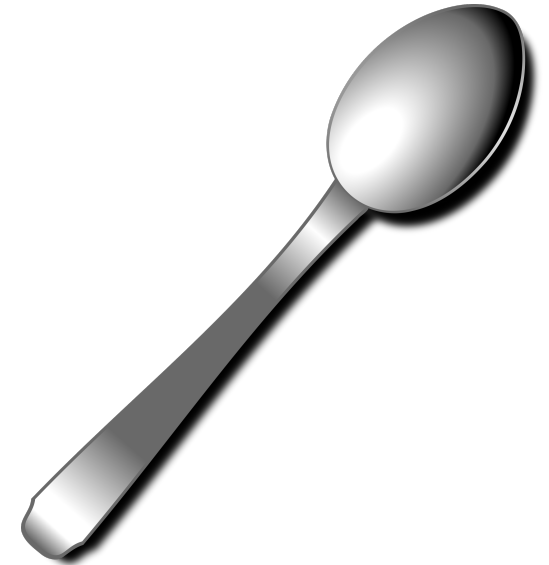


Language

**Phonemic
Awareness**















**Phonemic
Knowledge**

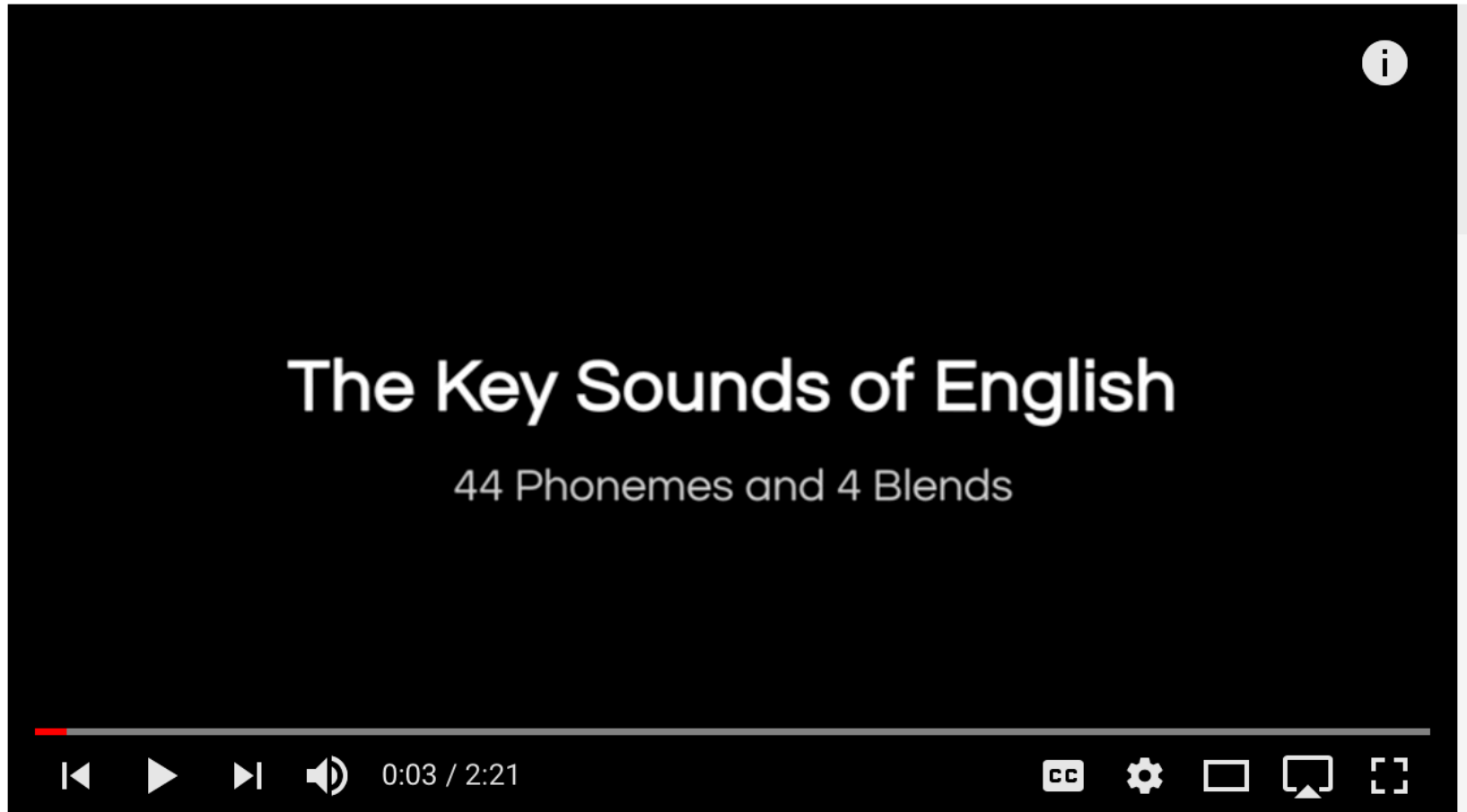


Discovering phonology: Writing systems require treating spoken words as consisting of parts, which can then be represented by a limited set of graphical elements. We take it as obvious that speech consists of units such as words, syllables, and phonemes, but these units are phonological abstractions that had to be discovered. Writing in the phonological way of thinking coevolved over a long period. (Seidenberg, 2017, p. 49)



/b/ (97% of time spelled w/ "b") bed bubbly Bhutan except bt in doubt is /t/ mb in numb is /m/	/ch/ (55% of time spelled w/ "ch") chair, catch, future - ch is used only after a single vowel that does not say its name except ch in chef is /ʃ/ ch in chord is /k/	/d/ (98% of time spelled w/ "d") dog daddy moved except -ed in jumped is /t/	/f/ (78% of time spelled w/ "f") food, stuff phone, calf laugh - gh is often silent in vowel constructs like eight , ough , except for occasions like laugh or tough	/g/ (88% of time spelled w/ "g") game giggle ghost guide G softens to /j/ when followed by E, I or Y. Otherwise, G says /g/	/h/ (98% of time spelled w/ "h") hot whole the letter "h" is often silent in such a phonogram as "gh" or is part of another phonogram like "th" or when "wh" makes the /hw/ sound.	/j/ (88% of time spelled w/ "g") jar giraffe cage fudge G softens to /j/ when followed by E, I or Y. Otherwise, G says /g/	/k/ (73% of time spelled w/ "c") cake, kite, back, cat chord, cheque C softens to /s/ when followed by E, I or Y. Otherwise, C says /k/ - ck is used only after a single vowel that says its short sound	/l/ (91% of time spelled w/ "l") lion fall little except lf in calf is /l/	/m/ (94% of time spelled w/ "m") man summer autumn comb
/n/ (97% of time spelled w/ "n") no funny knot gnat pneumonia mnemonic	/ng/ (41% of time spelled w/ "n") sing singing think	/p/ (96% of time spelled w/ "p") pie happy <p>"p" appear as a silent letter in the relatively rare phonograms "ps", "pt" and "pn"</p>	/kw/ (100% of time spelled w/ "qu") quick except -que in cheque is /k/	/r/ (97% of time spelled w/ "r") run hurry rhyme write	/s/ (73% of time spelled w/ "s") sun, messy house, science psychiatry, ceiling nice C softens to /s/ when followed by E, I or Y. Otherwise, C says /k/	/sh/ (26% of time spelled w/ "sh") shoe, chef sugar, conscience, pension, fashion, pressure, mission, nation, physician, appreciate, initiate, schnitzel , fascism	/zh/ (49% of time spelled w/ "si") confusion, casual, equation, seizure, , beige, regime, deja - vu	/t/ (97% of time spelled w/ "t") tree little jumped pterodactyl doubt except -ed in moved is /d/	/th/ (100% of time spelled w/ "th") the this that thumb except th in thyme is /t/
/v/ (99.5% spelled w/ "v" or "ve") van have of - (irregular)	/w/ (92% of time spelled w/ "w") water whale "w" is a silent in the word "write"	/hw/ (100% of time spelled w/ "wh") while except wh in whole is /h/ wh in whale is /w/	/wə/ one once won wonderful In "one" the /w/ sound is not represented by a letter, making hits an irregular phoneme	/ks/ (100% of time spelled w/ "x") fox except -x in xylophone is /z/	/y/ (42% of time spelled w/ "y") yellow onion "y" often serves a vowel and makes the short i, long i, long e and long a sounds.	/z/ (23% of time spelled w/ "z") zoo fuzzy snooze is choose xylophone	 (96% of time spelled w/ "a") cat laugh aesthetic (rare) plaid (rare) except ai is normally /long a/ as in paid	 (45% of time spelled w/ "a") paper, ape rain, straight day, steak, eight vein, they a vowel says its name (long form) at the end of a syllable as in paper.	 (91% of time spelled w/ "e") bed bread friend said (irregular)
 (70% of time spelled w/ "e") tree, she meat, eve, receive, key variation, petite chief, funny a vowel says its name (long form) at the end of a syllable as in she.	 (66% of time spelled w/ "i") sit myth	 (37% of time spelled w/ "i_e") bite, bicycle pie, high feisty, height buy, my a vowel says its name (long form) at the end of a syllable as in she.	 dog the short o sound is quite similar to the /aw/ sound in law or father	 (73% of time spelled w/ "o") veto, most bone, boat toe, soul grow, though, bureau a vowel says its name (long form) at the end of a syllable as in veto.	 (86% of time spelled w/ "u") bug touch	 (69% of time spelled w/ "u") pupil, tune, few, beauty a vowel says its name (long form) at the end of a syllable as in pupil. the /long u/ sound is quite similar to the /long oo/ sound in soon or do	 (31% of time spelled w/ "oo") cook put would woman the /long oo/ sound is quite similar to the /long u/ sound in few or tune	 (38% of time spelled w/ "oo") soon, do blue, soup through, super flute, suit, new the /long oo/ sound is quite similar to the /long u/ sound in few or tune	/ow/ (56% of time spelled w/ "ou") cow out drought
/oy/ (62% of time spelled w/ "oi") boy soil	/aw/ father law walk fraud fraught on fought the /aw/ sound is quite similar to the /short o/ sound in dog	/er/ (40% of time spelled w/ "er") father learn dollar girl work turn syrup	/or/ for more soar four	/ar/ (89% of time spelled w/ "ar") car, heart /yur/ cure, sure, pure, your, you're, Uranus	/air/ chair fare heir aerial tear error	/ear/ fear peer tier	schwa -ə (a, o, u) (24% of time spelled w/ "a") not really a single sound. It is more like an /uh/ or /eh/ breathy sound. alone gallop circus	schwa -ə (e) not really a single sound. It is more like an /uh/ or /eh/ breathy sound. jacket	schwa -ə (i) not really a single sound. It is more like an /uh/ or /eh/ breathy sound. pencil

Phonemic Knowledge



<https://youtu.be/xiqUVnXExTQ>



The Sounds of Standard English

	Lips	Lips/ Teeth	Tongue between Teeth	Tongue behind Teeth	Roof of Mouth	Back of Mouth	Throat
Stop	p <u>b</u>			t <u>d</u>		k <u>g</u>	
Nasal	<u>m</u>			<u>n</u>		<u>ng</u>	
Fricative		f <u>v</u>	th <u>th</u>	s <u>z</u>	sh <u>zh</u>		h
Affricate					ch <u>j</u>		
Glide	wh <u>w</u>				<u>y</u>		
Liquid				<u>l</u>	<u>r</u>		

<https://youtu.be/JZ5W17SWo64>



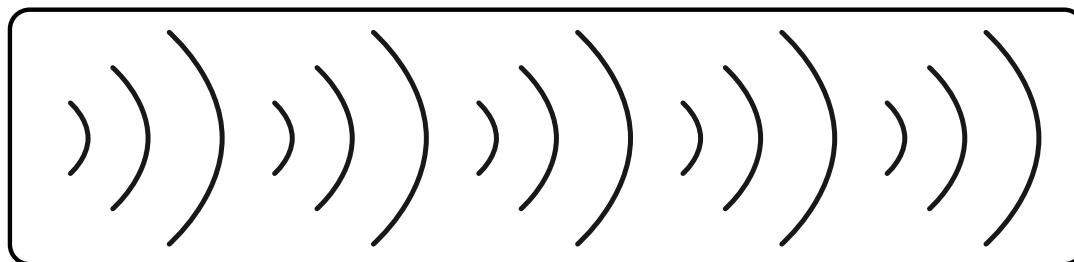
Sound Scientists



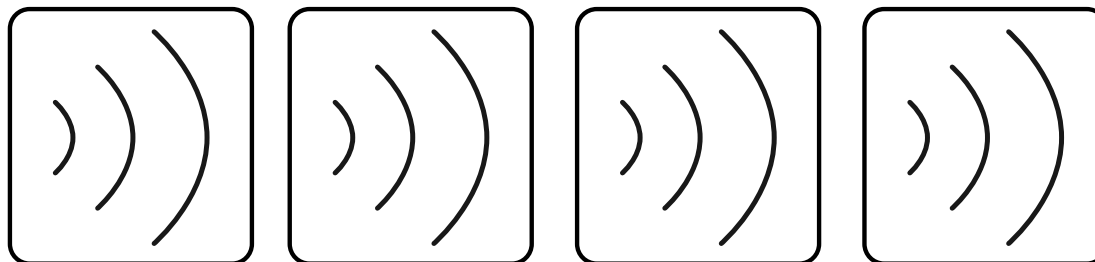
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Language



Phonemic Awareness



Phonemic Knowledge



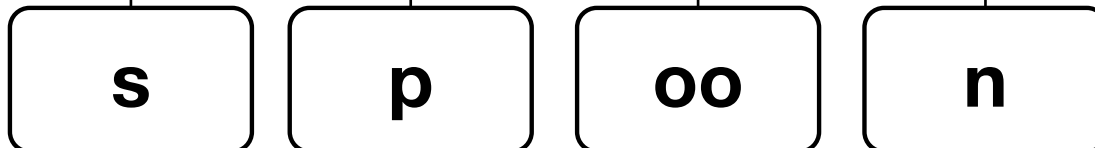
73%
chance

96%
chance

38%
chance

97%
chance

Alphabets / Phonics



Readers become orthographic experts by absorbing lots of data ... The path to orthographic expertise begins with practice practice practice but leads to more more more. (Seidenberg, 2017, p. 108)



Invented Spelling...

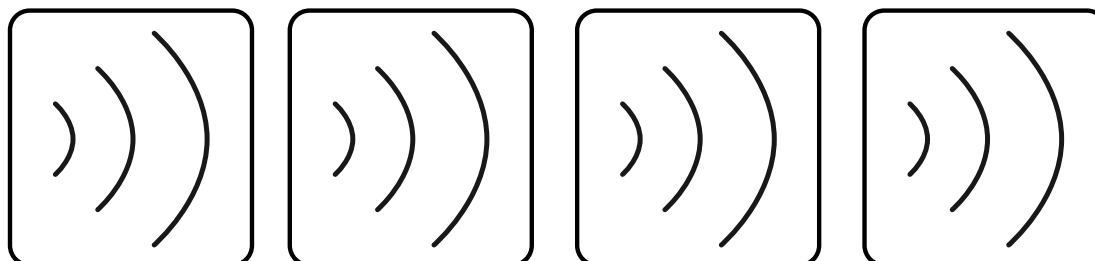
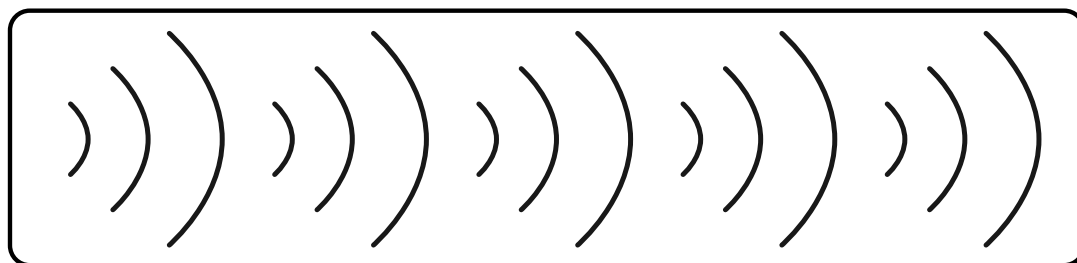
"Before children attain a conventional level of spelling... they use what they know about the phonology and orthography to create novel forms of spelling.

These **invented spellings** provide a window into their developing awareness of the alphabetic principle." (p 77)

Ouellette, G., & Sénéchal, M. (2017). Invented spelling in kindergarten as a predictor of reading and spelling in Grade 1: A new pathway to literacy, or just the same road, less known? *Developmental Psychology*, 53(1), 77–88.



encoding

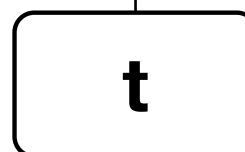
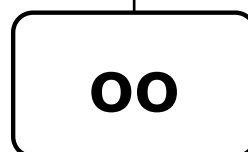
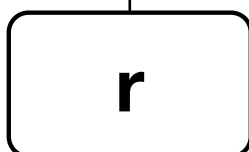
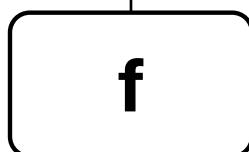


78%
chance

97%
chance

38%
chance

97%
chance



decoding



"The beginning reader's initial task is to learn how the spoken language they know relates to the written code they are learning." (Seidenberg, 2017, p 22)

**froot —> frute
—> fruit**



Consonant Patterns

Phoneme	Most likely grapheme	%
/th/	“th” (nb: voiced & unvoiced forms)	100%
/hw/	“wh” as in while (must discriminate from /w/)	100%
/ks/	“x” (but “x” can also make the /z/ sound)	100%
/kw/	“q” (but “qu” make the /k/ sound rarely)	100%
/v/	“v” (except in “of” when the “f” makes the /v/ sound)	99.5%
/d/	“d” (must discriminate from /b/)	98%
/h/	“h” (but the letter appears in many phonics patterns)	98%
/b/	“b” (must discriminate from /d/ and /p/)	97%
/n/	“n” (must discriminate from /m/ and /ng/)	97%
/r/	“r” (common words make the /r/ with “wr” or “rh”)	97%
/t/	“t” (even though the “t” can make the “ch” sound)	97%
/p/	“p” (must discriminate from /d/ and /b/)	96%

Phoneme	Most likely grapheme	%
/m/	“m” (must discriminate from /n/ and /ng/)	94%
/w/	“w” (must discriminate from /hw/)	92%
/l/	“l” (but also spelled will “ll”)	91%
/g/	“g” (but also spelled will “gh” and “g” also make /j/ sound)	88%
/f/	“f” (but also spelled will “gh” and “ph”)	78%
/k/	“c” (but the “c” also makes the /s/ sound)	73%
/s/	“s” (but /s/ is made by “c” 17% of the time)	73%
/j/	“g” (even though the letter “j” is /j/ 100% of the time)	66%
/z/	“s” (even though the /z/ sound is associated with “z”)	64%
/ng/	“ng” (even though “n” is /ng/ in “think”)	59%
/y/	“i” (which is probably the biggest surprise on the list)	55%
/ch/	“ch” (even though “t” can also make the /ch/ sound)	55%
/sh/	“ti” (is most common, though “sh” is quickest association)	53%
/zh/	“si” (even though represented in other ways)	49%



Phoneme	Most likely grapheme	%
/short a/	“a” (as in cat ... with regular CVC pattern predictability)	96%
/short e/	“e” (as in pen ... with regular CVC pattern predictability)	91%
/aw/	“a” (as in father ... with more diversity than short vowels)	89%
/short u/	“u” (as in dug ... with regular CVC pattern predictability)	86%
/short o/	“o” (as in dog ... with regular CVC pattern predictability)	79%
/long o/	“o” (long vowels could be spelled with more diversity)	73%
/long e/	“e” (long vowels could be spelled with more diversity)	70%
/long u/	“u” (long vowels could be spelled with more diversity)	69%
/short i/	“i” (the /short i/ can also be spelled with “y” as in “myth”)	66%
/oi/	“oi” as in “boil” with “oy” as in “boy” making another 32%	62%
/ow/	“ou” as in “loud” with “ow” as in “cow” making 29%	56%
/short oo/	“u” as in “put” as well as “oo” in look at 31%	54%

Phoneme	Most likely grapheme	%
/long a/	“a” (and a_e at 35% as in “cake”)	45%
/long oo/	“oo” as in boot, represented by u, o, ou, u_e, ew, ue	38%
/long i/	“i_e” as in fire and “i” as in find, also by ie, y, igh	37%
schwa	equally represented by the vowels a, e, i, o, u	— %
/er/	<i>not stated in research study</i>	— %
/ar/	<i>not stated in research study</i>	— %
/air/	<i>not stated in research study</i>	— %
/ear/	<i>not stated in research study</i>	— %
/yur/	<i>not stated in research study</i>	— %

The percentages provided are based on the number of times each sound-spelling appeared in the 17,000 most frequently used words (Hanna et al., 1966). These included multisyllabic words.

Hanna, P. R., R. E. Hodges, J. L. Hanna, and E. H. Rudolph. 1966. Phoneme-Grapheme Correspondences as Cues to Spelling Improvement. Washington, DC: U.S. Office of Education.



Before we go on ...a related presentation



Analysing Spoken Words

An activity that helps learners develop their awareness of the sound patterns within familiar words (a.k.a. phonological awareness) ... and which uses this awareness as one of the foundations for understanding the logic of the alphabetic principle.



<https://youtu.be/H Cv Y g H k 6 O D c>



*But for formal
study ...*



Example English Literacy Facts

There are **26 letters** in the English alphabet.

21 are consonants;
5 are vowels (or 6 if you treat “y” as a sometimes vowel)

We use these letters as well as letter combinations to represent **44 phonemes** or English sounds (give or take one or two).

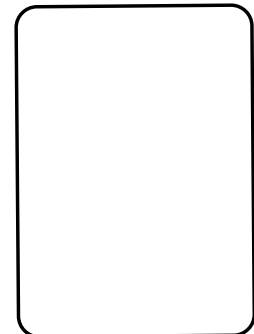
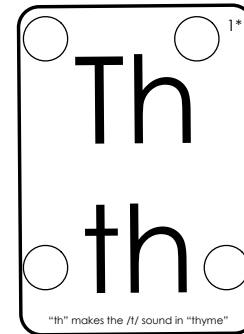
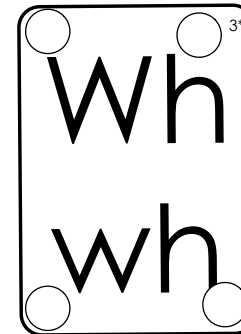
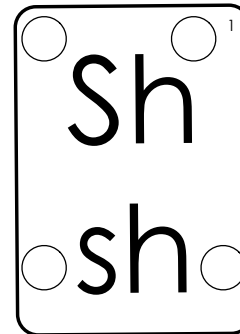
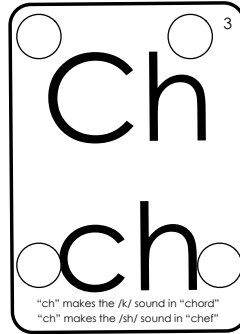
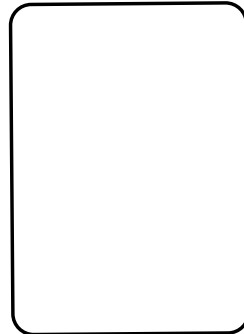
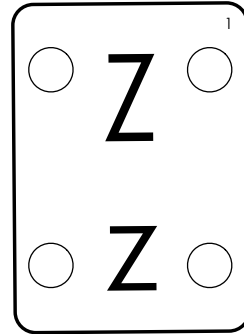
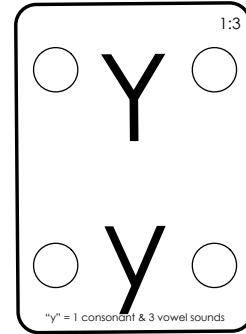
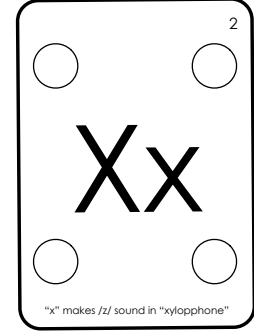
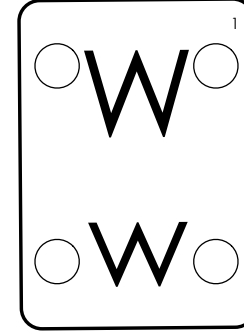
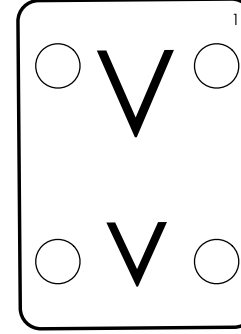
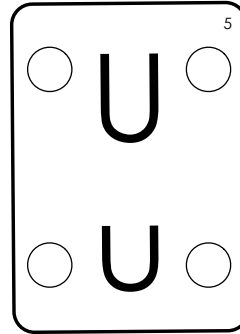
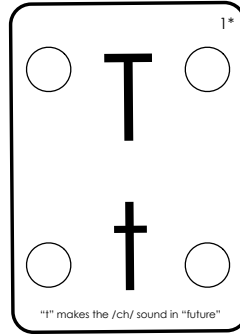
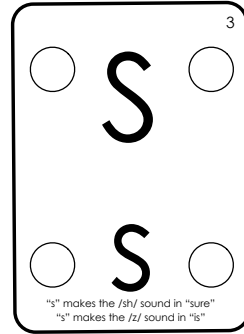
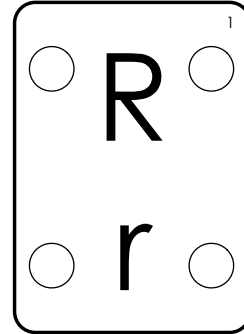
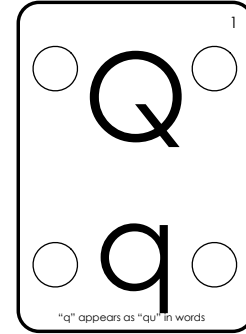
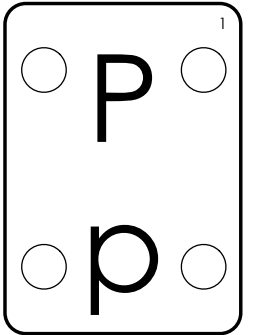
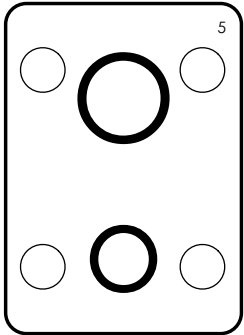
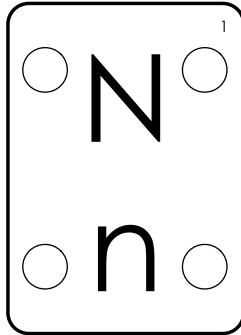
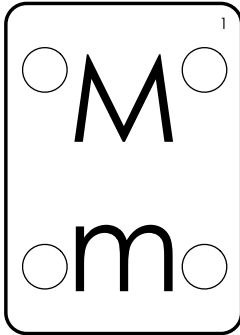
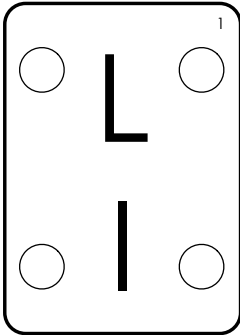
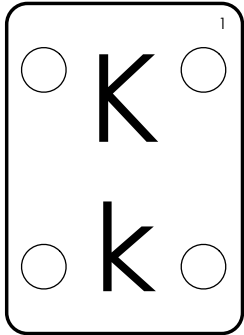
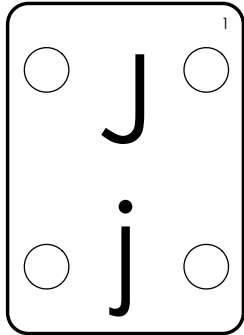
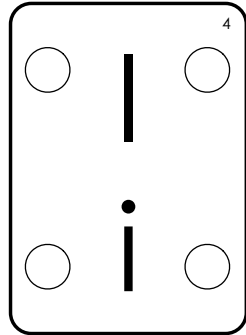
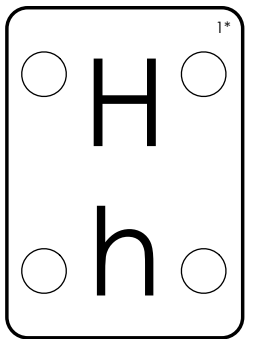
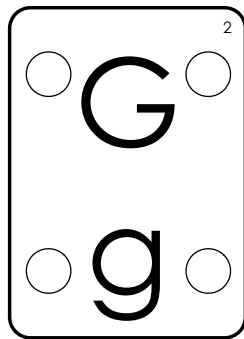
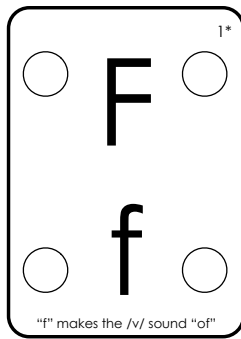
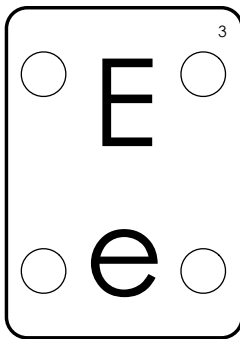
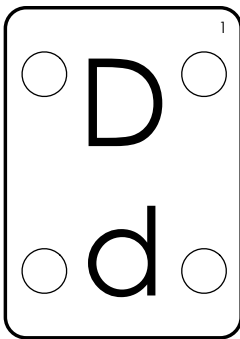
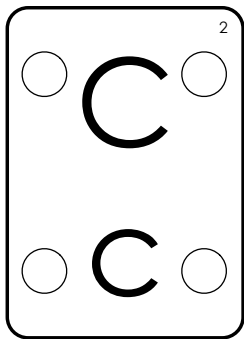
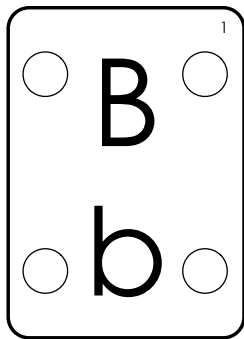
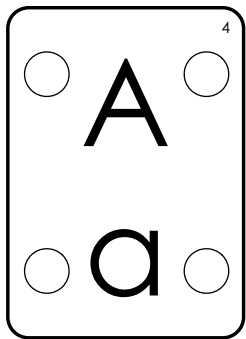
25 consonant sounds
19 vowel sounds

There are **74 common ways** to represent those 44 sounds (e.g. /oo/ as in true, new, shoe, flu)

These sounds are joined together to form words and syllables. There are **six common word and syllable types** in English.

Closed	This syllable ends with a consonant and contains a single following, often in its short form	mat or pic-nic or fresh (e.g CVC or CCVC)
Open	This syllable type ends with a vowel and the vowel is often long	me or ve-to
Silent e or vowel consonant e (ice)	This syllable has a silent e at the end which often signals that the vowel will be long	cape or stripe or cue
Vowel team or vowel pair	This syllable type contains two vowels that make one sound.	pain or head or toy
R-controlled vowel	This syllable contains a vowel with the letter r, and the vowel is neither short nor long.	far or ferment or torment
Consonant + le	This syllable always appears at the end of words and the consonant always goes with the -le	apple or simple or fickle

<div><div>/b/</div><div>86% of time spelled as "b"</div><div>best</div></div>	<div><div>/ch/</div><div>93% of time spelled as "ch"</div><div>chance</div></div>	<div><div>/d/</div><div>88% of time spelled as "d"</div><div>dog</div></div>	<div><div>/f/</div><div>93% of time spelled as "f"</div><div>foot</div></div>	<div><div>/g/</div><div>86% of time spelled as "g"</div><div>game</div></div>	<div><div>/h/</div><div>86% of time spelled as "h"</div><div>hat</div></div>	<div><div>/j/</div><div>88% of time spelled as "j"</div><div>jar</div></div>	<div><div>/k/</div><div>93% of time spelled as "k"</div><div>kit</div></div>	<div><div>/l/</div><div>91% of time spelled as "l"</div><div>lion</div></div>	<div><div>/m/</div><div>94% of time spelled as "m"</div><div>man</div></div>	<div><div>/n/</div><div>94% of time spelled as "n"</div><div>no</div></div>	<div><div>/ng/</div><div>91% of time spelled as "ng"</div><div>ring</div></div>	<div><div>/p/</div><div>86% of time spelled as "p"</div><div>pin</div></div>	<div><div>/kw/</div><div>93% of time spelled as "kw"</div><div>quack</div></div>	<div><div>/r/</div><div>87% of time spelled as "r"</div><div>run</div></div>	<div><div>/s/</div><div>93% of time spelled as "s"</div><div>sun</div></div>	<div><div>/sh/</div><div>93% of time spelled as "sh"</div><div>when</div></div>	<div><div>/t/</div><div>87% of time spelled as "t"</div><div>tree</div></div>	<div><div>/th/</div><div>93% of time spelled as "th"</div><div>the</div></div>	<div><div>/v/</div><div>86% of time spelled as "v"</div><div>van</div></div>	<div><div>/w/</div><div>93% of time spelled as "w"</div><div>water</div></div>	<div><div>/hw/</div><div>93% of time spelled as "hw"</div><div>white</div></div>	<div><div>/ks/</div><div>93% of time spelled as "ks"</div><div>x-ray</div></div>	<div><div>/y/</div><div>94% of time spelled as "y"</div><div>yacht</div></div>	<div><div>/z/</div><div>93% of time spelled as "z"</div><div>zoo</div></div>	<div><div>a</div><div>86% of time spelled as "a"</div><div>cat</div></div>	<div><div>a</div><div>86% of time spelled as "a"</div><div>paper</div></div>	<div><div>e</div><div>91% of time spelled as "e"</div><div>bad</div></div>	<div><div>e</div><div>93% of time spelled as "e"</div><div>she</div></div>	<div><div>i</div><div>93% of time spelled as "i"</div><div>oil</div></div>	<div><div>i</div><div>93% of time spelled as "i"</div><div>machine</div></div>	<div><div>o</div><div>93% of time spelled as "o"</div><div>dog</div></div>	<div><div>o</div><div>93% of time spelled as "o"</div><div>mouse</div></div>	<div><div>u</div><div>86% of time spelled as "u"</div><div>bag</div></div>	<div><div>u</div><div>86% of time spelled as "u"</div><div>paid</div></div>	<div><div>oo</div><div>91% of time spelled as "oo"</div><div>team</div></div>	<div><div>oo</div><div>93% of time spelled as "oo"</div><div>mean</div></div>	<div><div>/aw/</div><div>86% of time spelled as "aw"</div><div>behind</div></div>	<div><div>/ow/</div><div>93% of time spelled as "ow"</div><div>cow</div></div>	<div><div>/oy/</div><div>86% of time spelled as "oy"</div><div>boy</div></div>	<div><div>/er/</div><div>93% of time spelled as "er"</div><div>father</div></div>	<div><div>/or/</div><div>94% of time spelled as "or"</div><div>far</div></div>	<div><div>/ar/</div><div>86% of time spelled as "ar"</div><div>car</div></div>	<div><div>/air/</div><div>93% of time spelled as "air"</div><div>chair</div></div>	<div><div>/ear/</div><div>94% of time spelled as "ear"</div><div>near</div></div>	<div><div>/yur/</div><div>94% of time spelled as "yur"</div><div>care</div></div>	<div><div>schwa</div><div>94% of time spelled as "schwa"</div><div>alone</div></div>
<div><div>b</div><div>best</div></div>	<div><div>ch-</div><div>chance</div></div>	<div><div>d</div><div>dog</div></div>	<div><div>f</div><div>foot</div></div>	<div><div>g</div><div>game</div></div>	<div><div>h</div><div>hat</div></div>	<div><div>j</div><div>jar</div></div>	<div><div>k</div><div>kit</div></div>	<div><div>l</div><div>lion</div></div>	<div><div>m</div><div>man</div></div>	<div><div>n</div><div>no</div></div>	<div><div>-ng</div><div>ring</div></div>	<div><div>p</div><div>pin</div></div>	<div><div>qu-</div><div>quack</div></div>	<div><div>r</div><div>run</div></div>	<div><div>s</div><div>sun</div></div>	<div><div>sh</div><div>when</div></div>	<div><div>t</div><div>tree</div></div>	<div><div>th</div><div>the</div></div>	<div><div>v</div><div>van</div></div>	<div><div>w</div><div>water</div></div>	<div><div>wh</div><div>white</div></div>	<div><div>x</div><div>x-ray</div></div>	<div><div>y</div><div>yacht</div></div>	<div><div>z</div><div>zoo</div></div>	<div><div>a</div><div>cat</div></div>	<div><div>a</div><div>paper</div></div>	<div><div>e</div><div>bad</div></div>	<div><div>e</div><div>she</div></div>	<div><div>i</div><div>oil</div></div>	<div><div>i</div><div>machine</div></div>	<div><div>o</div><div>dog</div></div>	<div><div>o</div><div>mouse</div></div>	<div><div>u</div><div>bag</div></div>	<div><div>u</div><div>paid</div></div>	<div><div>u</div><div>team</div></div>	<div><div>oo</div><div>mean</div></div>	<div><div>a</div><div>behind</div></div>	<div><div>ow</div><div>cow</div></div>	<div><div>oy</div><div>boy</div></div>	<div><div>er</div><div>father</div></div>	<div><div>or</div><div>far</div></div>	<div><div>ar</div><div>car</div></div>	<div><div>air</div><div>chair</div></div>	<div><div>ear</div><div>near</div></div>	<div><div>ure</div><div>care</div></div>	<div><div>a</div><div>alone</div></div>
<div><div>bb</div><div>bubble</div></div>	<div><div>-tch</div><div>catch</div></div>	<div><div>dd</div><div>claddy</div></div>	<div><div>ff</div><div>stuff</div></div>	<div><div>gg</div><div>origin</div></div>	<div><div>wh-</div><div>whole</div></div>	<div><div>g-</div><div>groin</div></div>	<div><div>ck</div><div>back</div></div>	<div><div>ll</div><div>fall</div></div>	<div><div>mm</div><div>number</div></div>	<div><div>nn</div><div>funny</div></div>	<div><div>n</div><div>train</div></div>	<div><div>pp</div><div>happy</div></div>		<div><div>rr</div><div>hurry</div></div>	<div><div>ss</div><div>messy</div></div>	<div><div>ch</div><div>chaf</div></div>	<div><div>tt</div><div>little</div></div>	<div><div>*</div><div></div></div>	<div><div>-ve</div><div>free</div></div>	<div><div>wh</div><div>when</div></div>	<div><div>*</div><div></div></div>	<div><div>*</div><div></div></div>	<div><div>i</div><div>orion</div></div>	<div><div>zz</div><div>fuzzy</div></div>	<div><div>au</div><div>taught</div></div>	<div><div>a_e</div><div>apex</div></div>	<div><div>ea</div><div>bread</div></div>	<div><div>ee</div><div>tree</div></div>	<div><div>y</div><div>rhythm</div></div>	<div><div>i_e</div><div>idea</div></div>		<div><div>o_e</div><div>toe</div></div>	<div><div>ou</div><div>teach</div></div>	<div><div>u_e</div><div>furze</div></div>	<div><div>oo</div><div>cook</div></div>	<div><div>o</div><div>do</div></div>	<div><div>aw</div><div>law</div></div>	<div><div>ou</div><div>out</div></div>	<div><div>oi</div><div>cool</div></div>	<div><div>ear</div><div>learn</div></div>	<div><div>ore</div><div>more</div></div>	<div><div>ear</div><div>heart</div></div>	<div><div>are / ar</div><div>fare / aware</div></div>	<div><div>eer</div><div>peer</div></div>	<div><div>your</div><div>grouse</div></div>	<div><div>e</div><div>icked</div></div>
<div><div>bh</div><div>blown</div></div>	<div><div>t</div><div>future</div></div>	<div><div>-ed</div><div>ruined</div></div>	<div><div>ph-</div><div>phone</div></div>	<div><div>gh-</div><div>ghost</div></div>		<div><div>-ge</div><div>cage</div></div>	<div><div>c</div><div>cat</div></div>	<div><div>-le</div><div>little</div></div>	<div><div>-mn</div><div>autumn</div></div>	<div><div>kn-</div><div>knot</div></div>		<div><div>rh</div><div>rhythm</div></div>	<div><div>-se</div><div>house</div></div>	<div><div>s</div><div>egg</div></div>	<div><div>-ed</div><div>jumped</div></div>	<div><div>/zh/</div><div>94% of time spelled as "zh"</div><div>collaboration</div></div>	<div><div>f</div><div>of</div></div>		<div><div>/wə/</div><div>94% of time spelled as "wə"</div><div>collaboration</div></div>	<div><div>/ks/+ /sh/</div><div>94% of time spelled as "ks"</div><div>collaboration</div></div>		<div><div>-ze</div><div>increase</div></div>	<div><div>ae</div><div>aeon</div></div>	<div><div>ai</div><div>rain</div></div>	<div><div>ie</div><div>fiery</div></div>	<div><div>ea</div><div>meal</div></div>		<div><div>ie</div><div>pie</div></div>		<div><div>oa</div><div>boat</div></div>	<div><div>ew</div><div>few</div></div>	<div><div>oul</div><div>would</div></div>	<div><div>ue</div><div>blue</div></div>	<div><div>ai</div><div>walk</div></div>	<div><div>ough</div><div>thought</div></div>		<div><div>ar</div><div>doctor</div></div>	<div><div>oar</div><div>near</div></div>		<div><div>eir / aer</div><div>wear / aware</div></div>	<div><div>ier</div><div>far</div></div>	<div><div>ur</div><div>blurred</div></div>	<div><div>i</div><div>perched</div></div>			
	<div><div>-lf</div><div></div></div>	<div><div>gu-</div><div></div></div>			<div><div>-dge</div><div></div></div>	<div><div>ch</div><div></div></div>		<div><div>-mb</div><div></div></div>	<div><div>gn-</div><div></div></div>		<div><div>wr</div><div></div></div>	<div><div>sc-</div><div></div></div>	<div><div>sci</div><div></div></div>	<div><div>pt-</div><div></div></div>	<div><div>si</div><div></div></div>		<div><div>o</div><div></div></div>	<div><div>x</div><div></div></div>		<div><div>s</div><div></div></div>	<div><div>ai</div><div></div></div>	<div><div>aigh</div><div></div></div>	<div><div>ai</div><div></div></div>	<div><div>e_e</div><div></div></div>	<div><div>igh</div><div></div></div>		<div><div>oe</div><div></div></div>	<div><div>eau</div><div></div></div>	<div><div>o</div><div></div></div>	<div><div>ou</div><div></div></div>	<div><div>au</div><div></div></div>		<div><div>ir</div><div></div></div>	<div><div>our</div><div></div></div>	<div><div>ear</div><div></div></div>											



<p>b ¹</p> <p>b is /b/ as in <i>beet baby</i> bb is /b/ as in <i>bubble</i></p> <p>bb is /b/ as in <i>blizzard</i> (uncommon)</p> <p>ht is /t/ in <i>doubt</i> mb is /m/ in <i>thumb</i></p>	<p>c ²</p> <p>c is /k/ in <i>cut</i> e is /s/ in <i>circle</i> or <i>bicycle</i></p> <p>C softens to /tʃ/ when followed by E, I or Y. Otherwise, C says /k/. However, sc is /s/ in <i>scant</i> sc is /s/ + /n/ in <i>scare</i></p>	<p>d ¹</p> <p>d is /d/ as in <i>dog</i> dd is /d/ as in <i>addy</i></p> <p>-ed is /d/ as in <i>moved</i> -ed is /t/ as in <i>jumped</i></p>	<p>f ²</p> <p>f is /f/ as in <i>fun</i> ff is /f/ in <i>off</i> (this is irregular)</p> <p>ff is /f/ as in <i>stuffy</i> ff is /f/ as in <i>cafe</i> ph is /f/ as in <i>phone</i> gh is /f/ as in <i>laugh</i></p>	<p>g ²</p> <p>g is /g/ as in <i>game</i> gg is /g/ as in <i>gem</i> gg is /g/ as in <i>giggle</i> gh is /g/ as in <i>ghost</i> gu is /g/ as in <i>guide</i></p> <p>gh is /f/ as in <i>tough</i> G softens to /j/ if followed by E, I or Y. If not, G is /g/.</p>	<p>h ¹</p> <p>h is /h/ in <i>hole</i> wh are /h/ in <i>whole</i></p> <p>h is often combined in a number of consonant sounds, as a silent letter: as in <i>ghost</i> - or to represent a digraph sound - as in <i>photo</i> or <i>ough</i></p>	<p>j ¹</p> <p>j is only /j/ as in <i>jar</i></p> <p>yet <i>g-j</i> & <i>-dge</i> can also make the /j/ sound</p> <p>G softens to /j/ when followed by E, I or Y. Otherwise, G says /g/. English words don't end in j.</p>	<p>k ¹</p> <p>k is /k/ in <i>kite</i> -ck is /k/ in <i>back</i></p> <p>k is silent in <i>know</i>, <i>knight</i>, and <i>knob</i> c h & -que can also make the /k/ sound</p>	<p>l ¹</p> <p>l is /l/ in <i>little</i> ll is /l/ in <i>silly</i> -le is /l/ in <i>simple</i></p> <p>If it is /l/ in <i>cafe</i> and in <i>half</i> al is /aw/ in <i>walk</i> oul is /short oo/ in <i>would</i></p>	<p>a ⁴</p> <p>a is /short a/ in <i>cat</i> a is /long a/ in <i>a</i>, <i>a</i>, <i>e</i> mate a is /aw/ in <i>father</i> a is schwa in <i>alone</i></p> <p>a vowel says its name (long form) at the end of a syllable as in <i>paper</i>.</p>	<p>e ³</p> <p>e is /short e/ in <i>bed</i> e is /long e/ in <i>she</i> e is /schwa/ in <i>jacket</i></p> <p>a vowel says its name (long form) at the end of a syllable as in <i>she</i>.</p>	<p>i ^{1,4}</p> <p>i is /y/ in <i>onion</i>, as a consonant</p> <p>i is /short i/ in <i>fin</i> i is /long i/ in <i>thin</i> i is /long i/ in <i>theater</i> i is /long e/ in <i>variation</i> i is /schwa/ in <i>pencil</i></p>	<p>o ^{1,5}</p> <p>o is /short o/ in <i>dog</i> o is /long o/ in <i>do</i> o is /schwa/ in <i>on</i> o is schwa in <i>gallop</i> o is /long o/ in <i>one</i> o is /schwa/ in <i>one</i> o is /short oo/ and /aw/ are similar - vowel says its name at the end of a syllable as in <i>veto</i>.</p>	<p>u ⁵</p> <p>u is /short u/ in <i>tub</i> u is /long u/ in <i>put</i> u is /short oo/ in <i>put</i> u is /long oo/ in <i>sugar</i> u is /schwa/ in <i>circus</i></p> <p>-ay is /long i/ in <i>buy</i> -ye is also /long i/ in <i>bye</i> or <i>eye</i></p>	<p>y ^{1,3}</p> <p>y is /y/ in <i>yellow</i> y is /short y/ in <i>veto</i> y is /long y/ in <i>fanny</i> y is /short i/ in <i>my</i> y is /long i/ in <i>my</i> -ay is /long i/ in <i>buy</i> -ye is also /long i/ in <i>bye</i> or <i>eye</i></p>	<p>m ¹</p> <p>m is /m/ in <i>milk</i> mm is /m/ in <i>summer</i> mb is /m/ in <i>thumb</i></p> <p>m is always /m/, except in the rare <i>mute</i> is /n/ in <i>mnemonic</i></p>	<p>n ¹</p> <p>n is /n/ in <i>now</i> n is /ng/ in <i>think</i></p> <p>nn is /n/ in <i>sunny</i> kn is /n/ in <i>know</i> gn is /n/ in <i>gnat</i> pn is /n/ in <i>pneumonia</i> m is /m/ in <i>autumn</i> -ng is /ng/ in <i>sing</i></p>	<p>p ¹</p> <p>p is /p/ in <i>pie</i> pp is /p/ in <i>puppy</i></p> <p>ph is /f/ in <i>photo</i> p is silent in <i>ps</i>, <i>pt</i>, and <i>po</i></p>	<p>qu- ¹</p> <p>qu- is /kw/ as in <i>quick</i> whereas, -que is /k/ as in <i>cheque</i></p> <p>q is always accompanied by the "u" and so "qu" is not considered a vowel in this case.</p>	<p>r ¹</p> <p>r is /r/ in <i>rain</i> rr is /r/ in <i>rain</i> wr is /r/ in <i>write</i> rh is /r/ in <i>rhyne</i></p> <p>r is always /r/ and r appears in controlled-<i>r</i> vowels as in <i>far</i></p>	<p>s ¹</p> <p>s is /s/ in <i>sake</i> s is /sh/ in <i>sure</i> s is /z/ in <i>is</i> ss is /s/ in <i>assent</i> ss is /z/ in <i>mission</i> ps is /s/ in <i>psychiatry</i> ss is /sh/ in <i>pressure</i> sc is /z/ in <i>choose</i> -ce are /s/ in <i>cease</i> & <i>peace</i></p>	<p>t ¹</p> <p>t is /t/ in <i>talk</i> t is /ch/ in <i>future</i> -te is /t/ in <i>doubt</i> tt is /t/ in <i>little</i> ti is /sh/ in <i>nation</i> ti is /sh/ + /ng/ in <i>title</i> pt is /t/ in <i>peritodactyl</i></p>	<p>v ¹</p> <p>v is /v/ in <i>van</i> -ve is /v/ in <i>have</i></p> <p>f is /f/ in <i>off</i> (this is irregular)</p> <p>English words do not end in "v", which is why there is the "ve" form</p>	<p>w ¹</p> <p>w is /w/ in <i>water</i></p> <p>wh are /w/ in <i>whole</i> wh is /hw/ in <i>while</i> wh is /h/ in <i>whole</i> wr is /r/ in <i>write</i></p>	<p>x ²</p> <p>x is /ks/ in <i>fox</i> or <i>ox</i></p> <p>yet x is /x/ in <i>xylophone</i> (this is irregular)</p> <p>and x is /ks/ + /h/ in <i>luxury</i></p>	<p>y ¹</p> <p>(as a consonant)</p> <p>y is /y/ as in <i>yellow</i> when a consonant, I also makes the /y/ sound in <i>onion</i></p> <p>y often appears in vowel sounds, which appear on a separate card</p>	<p>z ¹</p> <p>z is /z/ in <i>zoo</i> zz is /z/ in <i>funny</i> -ze is /z/ in <i>choose</i></p> <p>x is /z/ in <i>xylophone</i> -se is /z/ in <i>choose</i></p>	<p>-bb ¹</p> <p>bb is /b/ as in <i>bubbly</i> bb is /b/ as in <i>beet baby</i></p> <p>the double b (bb) occurs after the short form of the vowel (e.g. bubble) and the long form (bubbly). A word does not end with mm</p>	<p>-dd ¹</p> <p>d is /d/ as in <i>dog</i> dd is /d/ as in <i>addy</i></p> <p>the double d (dd) occurs after the short form of the vowel (e.g. daddy). A word does not end with mm</p>	<p>-ff ¹</p> <p>ff is /f/ as in <i>stuffy</i> ff is /f/ as in <i>fun</i> ff is /f/ as in <i>cafe</i></p> <p>the double f (ff) occurs after the short form of the vowel (e.g. stuff).</p>	<p>-gg ¹</p> <p>gg is /g/ as in <i>giggle</i> gg is /g/ as in <i>game</i></p> <p>the double g (gg) occurs after the short form of the vowel (e.g. giggle). A word does not end with 99</p>	<p>-ll ¹</p> <p>ll is /l/ in <i>silly</i> ll is /l/ in <i>little</i> -le is /l/ in <i>simple</i></p> <p>the double l (ll) occurs after the short form of the vowel (e.g. full or fall or ball).</p>	<p>-mm ¹</p> <p>mm is /m/ in <i>summer</i> m is /m/ in <i>milk</i> mb is /m/ in <i>thumb</i></p> <p>the double m (mm) occurs after the short form of the vowel (e.g. mummy or hammer). A word does not end with mm</p>	<p>-nn ¹</p> <p>nn is /n/ in <i>sunny</i> n is /n/ in <i>now</i> kn is /n/ in <i>know</i> gn is /n/ in <i>gnat</i></p> <p>the double n (nn) occurs after the short form of the vowel (e.g. funny). A word does not end with nn</p>	<p>-pp ¹</p> <p>pp is /p/ in <i>puppy</i> p is /p/ in <i>pie</i></p> <p>the double p (pp) occurs after the short form of the vowel (e.g. puppy). A word does not end with pp</p>	<p>-rr ¹</p> <p>rr is /r/ in <i>rain</i> rr is /r/ in <i>rain</i> wr is /r/ in <i>write</i></p> <p>the double r (rr) occurs after the short form of the vowel and does not create a controlled-<i>r</i> vowel (e.g. hurry). A word does not end with rr.</p>	<p>-ss ²</p> <p>ss is /s/ in <i>messy</i> ss is /sh/ in <i>pressure</i></p> <p>w is /s/ in <i>sake</i> s is /sh/ in <i>sure</i></p> <p>the double s (ss) occurs after the short form of the vowel (e.g. little).</p>	<p>-tt ¹</p> <p>tt is /t/ in <i>little</i> t is /t/ in <i>talk</i> t is /ch/ in <i>future</i></p> <p>the double t (tt) occurs after the short form of the vowel (e.g. little).</p>	<p>-zz ¹</p> <p>zz is /z/ in <i>funny</i> -ze is /z/ in <i>choose</i></p> <p>the double z (zz) occurs after the short form of the vowel (e.g. buzz) as opposed to the long vowel (e.g. face)</p>	<p>ch ¹</p> <p>ch is /ch/ in <i>cheese</i> ch is /h/ in <i>chord</i> ch is /sh/ in <i>chef</i></p> <p>t is /ch/ in <i>future</i> tch is /ch/ in <i>catch</i> -ch is used after a single vowel that does NOT say its name</p>	<p>sh ¹</p> <p>sh is /sh/ in <i>ship</i>, <i>share</i>, sh is /sh/ in <i>sugar</i> ss is /sh/ in <i>pressure</i> ss is /sh/ in <i>mission</i> sch is /sh/ in <i>conscience</i> ti is /sh/ in <i>nation</i> si is /sh/ in <i>confusion</i> ci is /sh/ in <i>physician</i> ch is /sh/ in <i>chef</i></p>	<p>th ²</p> <p>th is /th/ in <i>this</i>, that, <i>the</i> th is always /th/, except in the rare <i>thyme</i> is /t/ in <i>thyme</i> there are voiced/unvoiced forms of /th/</p>	<p>wh- ¹</p> <p>wh are /h/ in <i>whole</i> wh is /w/ in <i>while</i> wh is /hw/ in <i>while</i></p>	<p>-ng ³</p> <p>ng is always /ng/ as in <i>sing</i> and in <i>singing</i> n is also /ng/ in <i>think</i></p>	<p>-ck ¹</p> <p>-ck is /k/ in <i>back</i></p> <p>-ck is used only after a single vowel which says its short sound (e.g. back as opposed to streak)</p>	<p>-tch ¹</p> <p>-tch is /ch/ in <i>catch</i> -tch is used after a single vowel that does NOT say its name</p>	<p>-ed ²</p> <p>-ed is /t/ as in <i>moved</i> -ed is /t/ as in <i>jumped</i></p> <p>d is /d/ as in <i>dog</i> dd is /d/ as in <i>addy</i></p>	<p>ph- ¹</p> <p>ph is /f/ as in <i>phone</i> ff is /f/ as in <i>fun</i> ff is /f/ as in <i>stuffy</i> ff is /f/ as in <i>cafe</i> ff is /f/ as in <i>stuffy</i></p> <p>the "p" is silent in "ph", "pt" and "pm"</p>	<p>-lf ¹</p> <p>If it is /f/ as in <i>cafe</i> ff is /f/ as in <i>fun</i> ff is /f/ as in <i>stuffy</i></p> <p>ph is /f/ as in <i>phone</i> -gh is /f/ as in <i>laugh</i></p>	<p>-gh ²</p> <p>-gh is /f/ as in <i>laugh</i> ff is /f/ as in <i>fun</i> ff is /f/ as in <i>stuffy</i> ff is /f/ as in <i>cafe</i> ff is /f/ as in <i>stuffy</i></p> <p>whereas gh is /g/ as in <i>ghost</i> -gh is often silent in the vowel constructs like <i>ough</i>, <i>ough</i>, but not in a word like <i>tough</i></p>	<p>eigh ²</p> <p>eigh is /long i/ in <i>eight</i> eigh is /long i/ in <i>height</i></p>	<p>ew ²</p> <p>ew is /long u/ in <i>few</i> ew is /long u/ in <i>new</i></p> <p>the two sounds - /long u/ & /long oo/ - sound near identical if not exactly the same</p>	<p>er ¹</p> <p>er is /er/ in <i>father</i> ur is /er/ in <i>dollar</i> ur is /er/ in <i>blare</i> ur is /er/ in <i>heart</i> ur is /er/ in <i>learn</i> yr is /er/ in <i>symp</i></p>	<p>ear ¹</p> <p>ear is /ear/ in <i>learn</i> ear is /ear/ in <i>learn</i> ear is /er/ in <i>learn</i></p>	<p>eer ¹</p> <p>eer is /ear/ in <i>peer</i> ier is /ear/ in <i>tier</i></p>	<p>ie ³</p> <p>ie is /short a/ in <i>friend</i> ie is /long i/ in <i>believe</i> ie is /long i/ in <i>pie</i></p>	<p>igh ¹</p> <p>igh is /long i/ in <i>high</i> t e is /long i/ in <i>flute</i> t is /long i/ in <i>believe</i> t is /long i/ in <i>flute</i> t is /long i/ in <i>teach</i> t is /long i/ in <i>teach</i> t is /long i/ in <i>teach</i> t is /long i/ in <i>teach</i></p>	<p>gh- ²</p> <p>gh is /g/ as in <i>ghost</i></p> <p>whereas, -gh is /f/ as in <i>laugh</i> ff is /f/ as in <i>fun</i> ff is /f/ as in <i>stuffy</i> ph is /f/ as in <i>phone</i></p>	<p>gu- ¹</p> <p>gu- is /g/ as in <i>guide</i></p> <p>g is /g/ as in <i>game</i> gg is /g/ as in <i>ghost</i> gh is /g/ as in <i>ghost</i></p>	<p>-dge ¹</p> <p>-dge is /j/ as in <i>judge</i></p> <p>yet <i>g-j</i> & <i>-dge</i> can also make the /j/ sound</p> <p>-dge is used only after a single vowel which says its short sound. Otherwise -ge is used as in <i>age</i></p>	<p>-le ¹</p> <p>-le is /f/ in <i>simple</i> ll is /l/ in <i>silly</i> ff is /f/ in <i>little</i></p> <p>If it is /f/ in <i>cafe</i> and in <i>half</i> al is /aw/ in <i>walk</i> oul is /short oo/ in <i>would</i></p>	<p>kn- ¹</p> <p>kn is /n/ in <i>know</i> n is /n/ in <i>now</i> nn is /n/ in <i>sunny</i> gn is /n/ in <i>gnat</i> pn is /n/ in <i>pneumonia</i></p> <p>m is /m/ in <i>autumn</i> ng is /ng/ in <i>sing</i></p>	<p>-que ¹</p> <p>-que is /k/ as in <i>cheque</i> whereas, qu- is /kw/ as in <i>quick</i> c h, k & ck can also make the /k/ sound</p> <p>In American spelling, <i>cheque</i> is <i>check</i></p>	<p>-mn ¹</p> <p>-mn is /m/ in <i>autumn</i> m is /m/ in <i>milk</i> mm is /m/ in <i>summer</i> mn is /m/ in <i>thumb</i></p> <p>m is always /m/, except in the rare <i>mute</i> is /n/ in <i>mnemonic</i></p>	<p>-mb ¹</p> <p>mb is /m/ in <i>thumb</i> m is /m/ in <i>milk</i> mm is /m/ in <i>summer</i> mn is /m/ in <i>thumb</i></p> <p>m is always /m/, except in the rare <i>mute</i> is /n/ in <i>mnemonic</i></p>	<p>ir ¹</p> <p>ir is /er/ in <i>girl</i> er is /er/ in <i>father</i> ur is /er/ in <i>dollar</i> ur is /er/ in <i>blare</i> ur is /er/ in <i>heart</i> ur is /er/ in <i>learn</i> yr is /er/ in <i>symp</i></p>	<p>ier ¹</p> <p>ier is /ear/ in <i>tier</i> ear is /ear/ in <i>learn</i> eer is /ear/ in <i>peer</i></p>	<p>oa ¹</p> <p>oa is /long o/ in <i>boat</i></p> <p>oar is /er/ in <i>oar</i> o is /long o/ in <i>most</i> & <i>veto</i> o is /long o/ in <i>note</i> o is /long o/ in <i>boat</i> ou is /long o/ in <i>now</i> ou is /long o/ in <i>though</i></p>	<p>oe ¹</p> <p>oe is /long o/ in <i>toe</i></p> <p>o is /long o/ in <i>most</i> & <i>veto</i> o is /long o/ in <i>note</i> o is /long o/ in <i>boat</i> ou is /long o/ in <i>now</i> ou is /long o/ in <i>though</i></p>	<p>oo ¹</p> <p>oo (short oo) in <i>cook</i> oo (long oo) in <i>boat</i></p> <p>ou is /long oo/ in <i>soup</i> ou is /short oo/ in <i>touch</i> ou is /ow/ in <i>out</i> oul (short oo) would</p>	<p>ou ¹</p> <p>ou is /long oo/ in <i>soup</i> ou is /short oo/ in <i>touch</i> ou is /ow/ in <i>out</i> oul (short oo) would</p> <p>oul is /short oo/ in <i>would</i> ou is /long oo/ in <i>soup</i> ou is /short oo/ in <i>touch</i> ou is /ow/ in <i>out</i> ou is /ow/ in <i>out</i></p>	<p>gn- ¹</p> <p>gn is /n/ in <i>gnat</i> n is /n/ in <i>now</i> nn is /n/ in <i>sunny</i> kn is /n/ in <i>know</i> pn is /n/ in <i>pneumonia</i></p> <p>m is /m/ in <i>autumn</i> ng is /ng/ in <i>sing</i></p>	<p>rh ¹</p> <p>rh is /r/ in <i>rhyne</i> r is /r/ in <i>rain</i> rr is /r/ in <i>rain</i> wr is /r/ in <i>write</i></p> <p>r is always /r/ and r appears in controlled-<i>r</i> vowels as in <i>far</i></p>	<p>wr ¹</p> <p>wr is /r/ in <i>write</i> rr is /r/ in <i>rain</i> rr is /r/ in <i>rain</i> wr is /r/ in <i>write</i></p> <p>r is always /r/ and r appears in controlled-<i>r</i> vowels as in <i>far</i></p>	<p>sc ³</p> <p>so is /s/ in <i>scout</i> or <i>scenery</i> so is /sh/ in <i>tascom</i> sc is /s/ + /n/ in <i>scare</i></p> <p>C softens to /ʃ/ when followed by E, I or Y. Otherwise, C says /k/.</p>	<p>sci ¹</p> <p>sci- is /s/ + long in <i>science</i> sch is /sh/ in <i>conscience</i></p>	<p>ssi ¹</p> <p>ssi is /sh/ in <i>mission</i></p> <p>ti is /sh/ in <i>nation</i> si is /sh/ in <i>confusion</i> ci is /sh/ in <i>physician</i></p>	<p>si- ³</p> <p>si- is /s/ + V in <i>single</i> /sing si is /sh/ in <i>mission</i> si is /sh/ in <i>confusion</i></p> <p>ti is /sh/ in <i>nation</i> si is /sh/ in <i>confusion</i> ci is /sh/ in <i>physician</i></p>	<p>ci- ³</p> <p>ci is /s/ + V in <i>citation</i> or <i>circle</i> ci is /sh/ in <i>clinician</i></p> <p>ti is /sh/ in <i>nation</i> si is /sh/ in <i>confusion</i> ci is /sh/ in <i>physician</i></p>	<p>-ce ¹</p> <p>-ce are /s/ in <i>peace</i> & <i>pace</i></p> <p>C softens to /ʃ/ when followed by E, I or Y. Otherwise, C says /k/.</p>	<p>ough ¹</p> <p>ough /long o/ in <i>though</i> ough /long oo/ in <i>through</i> ough is /aw/ in <i>fought</i> ough /ow/ in <i>drought</i> ough is /short u/ + /t/ in <i>tough</i></p>	<p>ow ²</p> <p>ow is /long o/ in <i>grow</i> ow is /ow/ in <i>cow</i></p>	<p>oy ¹</p> <p>oy is /oi/ in <i>boy</i> oi is /oi/ in <i>soil</i></p>	<p>oi ¹</p> <p>oi is /oi/ in <i>soil</i> oy is /oi/ in <i>boy</i></p>	<p>or ¹</p> <p>or is /er/ in <i>for</i> or is /er/ in <i>work</i></p> <p>our is /er/ in <i>four</i> our is /er/ in <i>oar</i> our is /er/ in <i>more</i> for is /er/ in <i>door</i></p>	<p>ore ¹</p> <p>ore is /er/ in <i>more</i> or is /er/ in <i>for</i> our is /er/ in <i>four</i> our is /er/ in <i>oar</i> our is /er/ in <i>more</i> for is /er/ in <i>door</i></p>	<p>oor ¹</p> <p>oor is /er/ in <i>door</i> or is /er/ in <i>for</i> our is /er/ in <i>four</i> our is /er/ in <i>oar</i> our is /er/ in <i>more</i> for is /er/ in <i>door</i></p>	<p>ps- ¹</p> <p>ps is /s/ in <i>psychiatry</i> or <i>psychiatrist</i></p> <p>p is silent in <i>ps</i> and <i>pt</i> and <i>po</i></p>	<p>-sch ¹</p> <p>-sch is /sh/ in <i>schultz</i> (rare)</p>	<p>shi ¹</p> <p>shi- is /sh/ in <i>fashion</i></p>	<p>ti- ³</p> <p>ti- is /sh/ in <i>nation</i> ti is /sh/ in <i>equation</i> ti is /t/ + /ong i/ in <i>title</i> (this is irregular)</p> <p>t is /t/ in <i>talk</i> ti is /t/ in <i>little</i> si is /sh/ in <i>confusion</i> ci is /sh/ in <i>physician</i></p>	<p>-bt ¹</p> <p>-bt is /t/ in <i>doubt</i> tt is /t/ in <i>little</i> t is /t/ in <i>talk</i> t is /ch/ in <i>future</i> pt is /t/ in <i>peritodactyl</i></p> <p>ti is /sh/ in <i>nation</i> ti is /t/ + /ong i/ in <i>title</i></p>	<p>-ve ¹</p> <p>v is /v/ in <i>van</i> -ve is /v/ in <i>have</i></p> <p>f is /f/ in <i>off</i> (this is irregular)</p> <p>English words do not end in "v", which is why there is the "ve" form</p>	<p>i ¹</p> <p>(as a consonant)</p> <p>i is /y/ as in <i>onion</i>, when a consonant, I also makes the /y/ sound</p> <p>i is primarily a vowel, and infrequently makes the /y/ sound</p>	<p>-ze ¹</p> <p>z is /z/ in <i>zoo</i> zz is /z/ in <i>funny</i> -ze is /z/ in <i>choose</i></p> <p>x is /z/ in <i>xylophone</i> -se is /z/ in <i>choose</i></p>	<p>-se ²</p> <p>-se is /s/ in <i>mouse</i> or <i>mouse</i> -se is /z/ in <i>choose</i> or <i>choose</i> or <i>noose</i></p>	<p>oar ¹</p> <p>oar is /er/ in <i>oar</i> er is /er/ in <i>for</i> our is /er/ in <i>four</i> our is /er/ in <i>oar</i> our is /er/ in <i>more</i> for is /er/ in <i>door</i></p>	<p>our ²</p> <p>our is /er/ in <i>four</i> our is /ow/ + t in <i>hour</i></p>	<p>ui ¹</p> <p>ui is /long u/ or /long oo/ in <i>suit</i> and <i>fruit</i></p> <p>the two sounds - /long u/ & /long oo/ - sound near identical if not exactly the same</p>	<p>ue ¹</p> <p>ue is /long oo/ in <i>blue</i></p> <p>the two sounds - /long u/ & /long oo/ - sound near identical if not exactly the same</p>	<p>-uy ¹</p> <p>-uy is /long i/ in <i>buy</i> y is also /long i/ in <i>my</i> -ye is also /long i/ in <i>bye</i> or <i>eye</i></p>	<p>ur ²</p> <p>ur is /er/ in <i>turn</i> ur is /yur/ in <i>Uranus</i></p> <p>er is /er/ in <i>father</i> ur is /er/ in <i>dollar</i> ur is /er/ in <i>blare</i> ur is /er/ in <i>heart</i> ur is /er/ in <i>learn</i> yr is /er/ in <i>symp</i></p>	<p>-ure ¹</p> <p>-ure is /yur/ in <i>pure</i>, <i>sure</i> and <i>cure</i></p> <p>The phoneme could be /long u/ + /t/, but there seems to be a unique /y/ and controlled-<i>r</i> blend</p>
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*Over time, we learn
to combine elements
to form words.*



b

1

b is /b/ as in bed baby
bb is /b/ as in bubbly
bh is /b/ as in Bhutan (uncommon)
bt is /t/ in doubt
mb is /m/ in thumb

c

2

c is /k/ in cat
e is /s/ in circle or bicycle
C softens to /s/ when followed by E, I or Y. Otherwise, C says /k/, likewise, sc is /s/ in scent
sc is /s/ + /k/ in scare

d

1

d is /d/ as in dog
dd is /d/ as in daddy
-ed is /d/ as in moved
-ed is /t/ as in jumped

f

2nd

f is /f/ as in fun
f is /v/ in of (this is irregular)
ff is /f/ as in stuffy
lf is /f/ as in calf
ph is /f/ as in phone
-gh is /f/ as in laugh

g

2

g is /g/ as in game
g is /j/ as in gem
gg is /g/ as in giggle
gh- is /g/ as in ghost
gu- is /g/ as in guide
-gh is /f/ in tough
G softens to /j/ if followed by E, I or Y. If not, G is /g/

h

1st

h is /h/ in hole
wh are /h/ in whole
h is often combined in a number of consonant sounds, as a silent letter - as in ghost - or to represent a digraph sound - as in phone or laugh

j

1st

j is only /j/ as in jar
yet g -ge & -dge can also make the /j/ sound
G softens to /j/ when followed by E, I or Y. Otherwise, G says /g/. English words don't end in j.

k

1st

k is /k/ in kite
-ck is /k/ in back
k is silent in know, knight, and knot
c ch & -que can also make the /k/ sound

l

1

l is /l/ in little
ll is /l/ in silly
-le is /l/ in simple
lf is /f/ in calf and in half
al is /aw/ in walk
oul is /short oo/ in would

m

1

m is /m/ in milk
mm is /m/ in summer
mb is /m/ in thumb
-mn is /m/ in autumn
m is always /m/, except in the rare mn- is /n/ in mnemonic

n

2

n is /n/ in now
n is /ng/ in think
nn is /n/ in sunny
kn is /n/ in know
gn is /n/ in gnat
pn is /n/ in pneumonia
-mn is /m/ in autumn
-ng is /ng/ in sing

p

1st

p is /p/ in pie
pp is /p/ in puppy
ph is /f/ in phone
p is silent in pn-, pt-, and ps-

qu-

1st

qu- is /kw/ as in quick
whereas, -que is /k/ as in cheque
q is always accompanied by the "u" and so "u" is not considered a vowel in this case.

r

1

r is /r/ in rain
rr is /r/ in hurry
wr is /r/ in write
rh is /r/ in rhyme
r is always /r/ and r appears in controlled-vowels as far

s

3

s is /s/ in snake
s is /sh/ in sure
s is /z/ in is
se is /s/ in scent
-se is /s/ in mouse
ss is /s/ in messy
ps is /s/ in psychiatry
ss is /sh/ in pressure
-se is /z/ in choose
c -ce are /s/ in cease & peace

t

2

t is /t/ in talk
t is /ch/ in future
-bt is /t/ in doubt
tt is /t/ in little
ti- is /sh/ in nation
ti- is /t/ + /long i/ in time
pt is /t/ in pterodactyl

v

1

v is /v/ in van
-ve is /v/ in have
f is /v/ in of (this is irregular)
English words do not end in "v", which is why there is the "ve" form

w

1st

w is /w/ in water
wh are /w/ in whole
wh is /hw/ in while
wh is /h/ in whole
wr is /r/ in write

x

2nd

x is /ks/ in fox or ox
yet
x is /z/ in xylophone (this is irregular)

y

1st

(as a consonant)
y is /y/ as in yellow when a consonant, i also makes the /y/ sound in onion
y often appears in vowel sounds, which appear on a separate card

z

1

z is /z/ in zoo
zz is /z/ in fuzzy
-ze is /z/ in snooze
x is /z/ in xylophone
s is /z/ in is
-se is /z/ in choose

ch

3

ch is /ch/ in cheese
ch is /k/ in chord
ch is /sh/ in chef
t is /ch/ in future
th is /ch/ in catch
-tch is used after a single vowel that does NOT say its name

sh

1

sh- is /sh/ in ship, share,
s is /sh/ in sugar
ss is /sh/ in pressure
ssi is /sh/ in mission
sci- is /sh/ in conscience
ti- is /sh/ in nation
di- is /sh/ in confusion
ci- is /sh/ in physician
ch is /sh/ in chef

th

2nd

th is /th/ in this, that, the
th is always /th/, except in the rare th is /t/ in thyme
there are voiced/unvoiced forms of /th/

-ack

1

/ă/ + /k/

words: back, tack, rack, sack,
non-words: dack, fack,

-ake

1

/ā/ + /k/

words: bake, cake, fake, lake
non-words: make, yake

-an

1

/ă/ + /n/

words: ban, can, fan, pan, ran
non-words: zan, yan, quan

-ane

1

/ā/ + /n/

words: ban, can, fan, pan, ran
non-words: zan, yan, quan

-ain

1

/ā/ + /n/

words: pain, rain, train, stain
non-words: yain, quain

-ale

1

/ă/ + /l/

words: bale, pale, kale, sale
non-words: zale, quale

-ail

1

/ā/ + /l/

words: quail, rail, pail, nail
non-words: cail, zail

-at

1

/ă/ + /t/

words: at, bat, cat, mat, gnat
non-words: lat, dat, zat

-ate

1

/ā/ + /t/

words: date, late, fate, create
non-words: zate, wate

-ame

1

/ā/ + /m/

words: same, name, fame, lame
non-words: wame, zame

-ap

1

/ă/ + /p/

words: cap, nap, map, trap
non-words: quap, vap, wap

-ape

1

/ā/ + /p/

words: cape, drape, shape, tape
non-words: quape, zape

-ash

1

/ă/ + /sh/

words: sash, quash, smash
non-words: zash, nash, vash

-ank

1

/ā/ + /n/ + /k/

words: thank, bank, tank
non-words: zank, vank, cank

-ag

1

/ă/ + /g/

words: bag, lag, nag, wag
non-words: zag, quag, yag

-aw

1

/aw/

words: saw, law, paw, claw
non-words: zaw, vaw, tav

-ay

1

/ā/

words: say, play, tray, way
non-words: zay, tay, vay

-eat

1

/ē/ + /t/

words: eat, wheat, treat, neat
non-words: zeat, veat, yeat

-est

1

/ē/ + /s/ + /t/

words: best, zest, west, nest
non-words: hest, yest

-ell

1

/ē/ + /l/

words: tell, sell, well, bell, yell
non-words: zell, fell, mell

-ed

1

/ē/ + /d/

words: bed, fled, Ted
non-words: yed, ved

-en

1

/ē/ + /n/

words: hen, Ben, zen, den, pen
non-words: ken, ven, quen

-ill

1

/ī/ + /l/

words: bill, hill, vill, quill, trill
non-words: zill, yill

-ick

1

/ī/ + /k/

words: lick, trick, wick, quick
non-words: zick, yick

-ice

1

/ī/ + /s/

words: mice, twice, lice, nice
non-words: zice, yice

-it

1

/ī/ + /t/

words: sit, quit, vit, lit, exit
non-words: yit, dit, git

-ight

1

/ī/ + /t/

words: light, slight, fight, tight
non-words: zight, wight

-ite

1

/ī/ + /t/

words: site, bite, lite, quite
non-words: zite, hite, twite

-ip

1

/ī/ + /p/

words: sip, lip, flip, bip, zip
non-words: yip

-ig

1

/ī/ + /g/

words: big, gig, twig, wig
non-words: vig, yig

-in

1

/ī/ + /n/

words: win, fin, bin,
non-words: hin, zin, min

-ine

1

/ī/ + /n/

words: mine, twine, line, dine
non-words: zine, nine, bine

-ink

1

/ī/ + /n/ + /k/

words: sink, think, blink, wink
non-words: zink, yink, hink

-ide

1

/ī/ + /d/

words: side, wide, slide, hide
non-words: zide, yide, dide

-ock

1

/ō/ + /k/

words: sock, mock, flock, clock
non-words: zock, yock, vock

-oke

1

/ō/ + /m/

words: poke, smoke, yoke
non-words: doke, loke, voke

-ot

1

/ō/ + /t/

words: hot, bot, lot, not, rot
non-words: yot, zot, vot

-oat

1

/ō/ + /t/

words: moat, boat,
non-words: zoat, y oat

-oom

1

/ōō/ + /m/

words: room, boom, zoom
non-words: yoom, toom

-ook

1

/ōō/ + /k/

words: look, book, took, cook
non-words: yook, zook, vook

-ore

1

/or/

words: core, more, store
non-words: zore, vore

-og

1

/ō/ + /n/

words: dog, log, bog, blog
non-words: zog, yog, vog

-op

1

/ō/ + /p/

words: pop, top, mop, bop
non-words: zop, yop, vops

-unk

1

/ŭ/ + /n/ + /k/

words: trunk, sunk, bunk
non-words: zunk, yunk

-ump

1

/ŭ/ + /m/ + /p/

words: jump, lump, stump
non-words: zump, wump

-ut

1

/ŭ/ + /t/

words: but, nut, hut, rut, gut
non-words: sut, lut, yut

-ug

1

/ŭ/ + /g/

words: hug, bug, tug, lug
non-words: zug, nug, vug

-un

1

/ŭ/ + /n/

words: fun, bun, sun, run
non-words: yun, zun, lun



We learn about word patterns



m s
a n
t i p

CVC words

p i n m a t

s a p s i p

short vowel

CVCe words

p i n → p i n e

m a t → m a t e

short vowel

long vowel

ay
ee
ea
oi
ie

CVVC words

day boil

tree

bread

friend

Multisyllabic words

hotdog before

bottle helicopter

banana



Emergent (3 to 5 yrs old)

A - Z



CAT



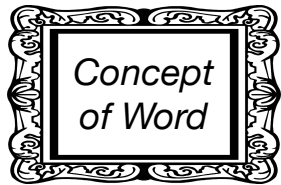
/K/



/A/



/T/



Pre-speller to spell it how it sounds
Oral language, print awareness, phonemic awareness and alphabetic awareness are the key features of this stage. These are the building blocks for formal literacy.

Letter-Name Alphabetic (4 to 7 years old)

C

V

C

Spell it how it sounds

The single-syllable, CVC form is the easiest way for learners to master consonants sounds, consonant digraphs, consonant blends, the short form of the vowels and simple r-controlled vowels.

Consonant - cat, bed, pig, sun, bot, bog, gig, bib, quit ...

Digraph - with, chat, ship, fish, mush ...

Blends - plan, flag,

r-controlled vowels - car, far, fir, stir, star, blur,

NB: the short form of each vowel (a, e, i, o, u) is only represented by a small number of spelling options ... unlike the long form —>



Within-Word Pattern (7 to 9 Years old)

C

V

C

e

C

V

V

C

Spell it by pattern

Once a learner has mastered the CVC pattern, it is time to contrast the short vowel sounds with long vowel sound.

Once this contrast is developing, learners explore the various diphthong forms and diverse vowel sounds in single-syllable words, such as *bright*. Learners also explore plurals, contractions, homophones, homographs and compound words.

Learners clarify spelling patterns with the help of dictionary aids

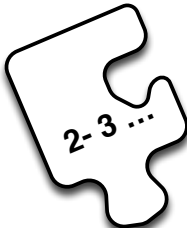
Affixes/Suffixes (9 to 11 years old)

-ed

-ing

-ly

re-



Spell by rule & dictionary aids

By this stage, learners can decode most, if not all, single syllable words. At this stage, learners become adept at adding common prefixes and suffixes as well as spelling a range of multisyllabic words, which requires that they identify *syllable junctures*. The unstressed, ambiguous *schwa* sound (often pronounced "uh") is also present in many multisyllabic words, such as *alone* and *confident*. Learners will need to turn to other tools to disambiguate these unclear vowel sounds.

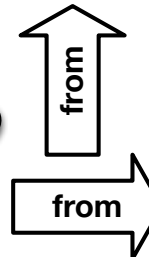
Derivational (11 years & older)

prefixes

suffixes

bases

roots



10 - 13: use many strategies / 13+: spell from knowledge

At this stage, there are few items which are missing from one's skill set. Instead, spelling & vocabulary learning are inextricable linked.

Six Most Common Syllable Patterns

Closed	This syllable ends with a consonant and contains a single following, often in its short form	mat or pic-nic or fresh (e.g CVC or CCVC)
Open	This syllable type ends with a vowel and the vowel is often long	me or ve-to
Silent e or vowel consonant e (ice)	This syllable has a silent e at the end which often signals that the vowel will be long	cape or stripe or cue
Vowel team or vowel pair	This syllable type contains two vowels that make one sound.	pain or head or toy
R-controlled vowel	This syllable contains a vowel with the letter r, and the vowel is neither short nor long.	far or ferment or torment
Consonant + le	This syllable always appears at the end of words and the consonant always goes with the -le	apple or simple or fickle

END NOTE: As encoding and decoding skills become automatic, there is a gradual shift in the treatment of literacy. There is a shift away from encoding/decoding and toward composition/comprehension. Consequently, teachers assume that learners have the skills to create and consume texts. There is now an onus on conveying and extracting meaning and intentions through text. For instance, it is assumed that one can read the text [government form], but does one know what its means in context?

We learn to add inflectional endings



Adding -ing

hop → **hopping**
CVC

hope → **hoping**
CVCe

Adding -ed

bat → **batted**
CVC

look → **looked**
CVVC





a pathetic

not feeling the quality of

phil anthro py

love mankind/humankind the quality of



Common Prefixes

un- <i>/ʃɔːrt u/ + /n/</i> not ... the opposite of untic, undo, unconscious, unveil	re- <i>/r/ + /lɒŋ e/</i> repeat ... do again return, revisit, rerun, recap, repeat, reuse	pre- <i>/p/ + /r/ + /lɒŋ e/ or /p/ + /r/ + /ʃɔːrt e/</i> before ... to go before preview, precede, preface, pretrial, prepare, preschool	dis- <i>/d/ + /ʃɔːrt i/ + /s/</i> not, do not, not recognise disagree, disappear, disapprove, disengage, discard	ex- <i>/ʃɔːrt e/ + /ks/</i> keep out, outside, former exit, exclude, external, exoskeleton, ex-president	in- <i>/ʃɔːrt i/ + /n/</i> not incorrect, inconsiderate, independent, incredible	uni- <i>/lɒŋ u/ + /n/ + /lɒŋ e/ or /lɒŋ u/ + /n/ + /ʃɔːrt i/</i> one, single, once unicycle, unite, unilateral, universe, unilow	bi- <i>/b/ + /lɒŋ i/</i> two, twice bicycle, bilateral, biannual, bisexual, bipolar
tri- <i>/t/ + /r/ + /lɒŋ i/ or /t/ + /r/ + /ʃɔːrt i/ or</i> three, thrice tricycle, triplicate, trifecta, triennial, tripod	sub- <i>/s/ + /ʃɔːrt u/ + /b/</i> under, less, below subtract, submarine, subzero, subpar, submit, substitute	post- <i>/p/ + /lɒŋ o/ + /s/ + /t/</i> after postpone, postage, posterior, posthumous, postnatal	mis- <i>/m/ + /ʃɔːrt i/ + /s/</i> not, failed to, wrong misunderstand, misanthropic, misnomer, mischance	non- <i>/n/ + /ʃɔːrt o/ + /n/</i> not, lacking non-event, noncommittal, nonsense, non-existent	mal- <i>/m/ + /schwa/ + /l/</i> bad, evil, poorly malevolent, maladapted, malignant, malnourished	anti- <i>1 /ʃɔːrt a/ + /n/ + /t/ + /n/ + /lɒŋ e/ 2 /n/ + /lɒŋ e/</i> against, opposed to, opposite antipathy, antithesis, antitumor, antidote, antibiotic	inter- <i>1 /ʃɔːrt i/ + /n/ + /t/ + /n/ + /e/ 2 /n/ + /lɒŋ e/</i> between, across international, interpersonal, intersect, interpolate, internet
intra- <i>1 /ʃɔːrt i/ + /n/ + /t/ + /r/ + /schwa/ 2 /n/ + /lɒŋ e/</i> within intrapersonal, intranet, intracultural	super- <i>1 /s/ + /lɒŋ u/ + /p/ + /e/ 2 /s/ + /e/</i> above, beyond superfuous, superscript, superb, superior	fore- <i>/f/ + /e/</i> before, come before foreshadow, forward, foreman, forebear, forecast, forebode	pro- <i>/p/ + /r/ + /lɒŋ o/</i> before or supportive prologue, proceed, propose, probable, proclaim, pronounce	quad- <i>/kw/ + /aw/ + /d/</i> four quadrangle, quadbike, quadrupled, quadrant	pent- <i>/p/ + /ʃɔːrt e/ + /n/ + /t/</i> five pentagon, pentameter, pentecost, pentadactyl	multi- <i>1 /m/ + /ʃɔːrt a/ + /t/ + /t/ + /lɒŋ e/ 2 /m/ + /lɒŋ e/</i> many multigrain, multicultural, multiply, multicoloured	a- <i>/ʃɔːrt a/ or /lɒŋ a/</i> without, not apathy, amoral, aiotic, asymmetrical, atheist
dys- <i>/d/ + /ʃɔːrt i/ + /s/</i> abnormal, bad dysfunction, dyslexia, dysplasia, dystopia, dysgraphia	com- <i>/k/ + /ʃɔːrt o/ + /m/</i> together, bring together complete, compare, comfort, compile, commingle	ambi- <i>1 /ʃɔːrt a/ + /m/ + /t/ + /lɒŋ e/ 2 /m/ + /lɒŋ e/</i> both ambiguous, ambidextrous, ambivalent, (amphibian)	co- <i>/k/ + /lɒŋ o/</i> together, partnership coproduction, cofounder, copilot, coexist, coincidence	dia- <i>1 /d/ + /lɒŋ i/ + /ʃɔːrt a/ 2 /d/ + /lɒŋ i/</i> through ... across diameter, diagonal, diagnosis, diachronic, diaspora	con- <i>1 /k/ + /schwa/ + /n/ + /t/ + /lɒŋ e/ 2 /k/ + /ʃɔːrt o/ + /n/</i> with, joined, together connect, continue, cousin, congregate, concurrently	poly- <i>1 /p/ + /ʃɔːrt o/ + /t/ + /t/ + /lɒŋ e/ 2 /p/ + /lɒŋ e/</i> many polygon, polyester, polychrome, polypeptide, polygot	mono- <i>1 /m/ + /ʃɔːrt o/ + /t/ + /n/ + /t/ + /lɒŋ e/ 2 /m/ + /lɒŋ e/</i> single, one monolingual, monotonous, monologue, monopoly

Common Suffixes

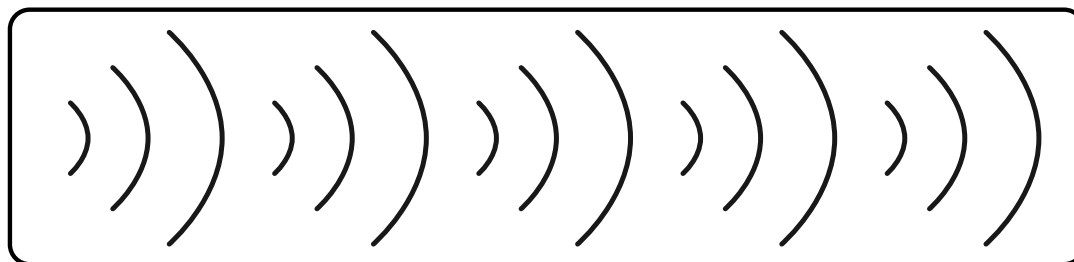
-s <i>/s/</i> either indicates the plural form of a noun or the singular form of a verb dogs, ducks, walks, jumps, debates	-es <i>/schwa/ + /s/</i> either indicates the plural form of a noun or the singular form of a verb dishes, washes, crosses, discusses	-ed <i>/d/ or /t/ or /schwa/ + /d/</i> either indicates the past tense of a verb or the past participle of a verb walked, jumped, traded (had) discussed	-ing <i>/short i/ + /ŋ/</i> either indicates the present participle or the gerund form walking, trading, seeing, hopping, running	-ly <i>/l/ + /long i/</i> often indicates the adverb form of words (or the "hour") quickly, silently, happily, nervously	-able <i>/schwa/ + /b/ + /l/</i> having the quality of ... (noun) capable, affable, enjoyable, liable, enviable	-ful <i>/f/ + /schwa/ + /l/</i> being full of ... cheerful, deceitful, colourful, beautiful	-tion <i>/ʃ/ + /schwa/ + /n/</i> the nominalisation of a verb ... or when we turn a verb into a noun (common in academic writing) creation, dictation, detection, summation
-ness <i>/n/ + /short e/ + /s/</i> the quality of ... noun form of an adjective happiness, wickedness, suspiciousness, powerlessness	-less <i>/l/ + /short e/ + /s/</i> without ... (adjective) careless, fearless, nameless, spotless, homeless, useless	-ous <i>/schwa/ + /s/ or /short u/ + /s/</i> having the quality of ... (adjective) aqueous, various, conscious, malicious	-ive <i>/short i/ + /v/</i> having the quality of ... decisive, inquisitive, collective, expressive, cooperative, perceptive	-ish <i>/short i/ + /ʃ/</i> being like or having the quality of ... or ... common in many verbs sheepish, selfish, publish, vanish, establish	-ship <i>/ʃ/ + /short i/ + /p/</i> the quality of ... noun form of an adjective or concept friendship, matchship, hardship, censorship, workmanship	<div>Uncovering the Logic of English (Advanced Version)</div> <div>Appendix F</div> <div>ADDING A SUFFIX TO ANY WORD</div> <div><div>Does the word end in a Silent Letter?<div><div>Does it end with the letter l?</div><div>Does it end with the letter o?</div><div>Does it end with the letter e?</div><div>Does it end with the letter a?</div><div>Does it end with the letter i?</div><div>Does it end with the letter u?</div><div>Does it end with the letter y?</div><div>Does it end with the letter z?</div><div>Does it end with the letter x?</div><div>Does it end with the letter q?</div><div>Does it end with the letter v?</div><div>Does it end with the letter w?</div><div>Does it end with the letter g?</div><div>Does it end with the letter n?</div><div>Does it end with the letter m?</div><div>Does it end with the letter p?</div><div>Does it end with the letter k?</div><div>Does it end with the letter c?</div><div>Does it end with the letter t?</div><div>Does it end with the letter b?</div><div>Does it end with the letter f?</div><div>Does it end with the letter h?</div><div>Does it end with the letter j?</div><div>Does it end with the letter s?</div><div>Does it end with the letter r?</div><div>Does it end with the letter g?</div><div>Does it end with the letter l?</div><div>Does it end with the letter o?</div><div>Does it end with the letter e?</div><div>Does it end with the letter a?</div><div>Does it end with the letter i?</div><div>Does it end with the letter u?</div><div>Does it end with the letter 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Common Greek/Latin Roots

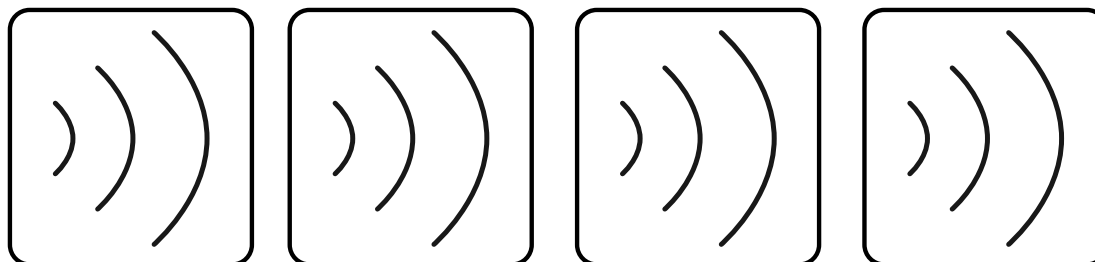
acri- <i>1 /ʃɔːrt a/ + /k/ 2 /r/ + /ʃɔːrt i/</i> bitter, stinging acrimony, acrid, acrimony	agr- <i>1 /ʃɔːrt a/ + /g/ + /r/ 2 /r/ + /ʃɔːrt i/</i> relating to farming agronomy, agriculture, agrarian, agritourism	anthro- <i>1 /ʃɔːrt a/ + /n/ 2 /h/ + /r/ + /lɒŋ o/</i> mankind, humankind anthropology, misanthrope, philanthropy, anthropomorphism	aqu- <i>1 /aw/ + /kw/ or /ʃɔːrt a/ + /kw/</i> water aquatic, aquarium, aqueous, aquamarine	arch- <i>1 /ar/ + /ch/</i> head, chief, kind archenemy, monarchy, oligarchy, ambidexose	auto- <i>1 /aw/ + /t/ + /lɒŋ o/ or /ʃɔːrt o/</i> on its own autonomous, automobile, automatic, automaton	ben- <i>1 /b/ + /ʃɔːrt e/ + /n/</i> good beneficial, benefit, benediction, benefactor, benevolent	bibli- <i>1 /b/ + /ʃɔːrt i/ + /b/ + /l/ + /lɒŋ e/ or /ʃɔːrt i/</i> book bibliophile, bibliography, bible, benefactor, bibliographer
bio- <i>1 /b/ + /lɒŋ i/ + /ʃɔːrt o/</i> life biology, biography, biotic, albino, antibiotic, biogeochemistry	carn- <i>1 /k/ + /ar/ + /n/</i> meat, flesh carnal, carnivore, carnivorous, incarcination	cent- <i>1 /s/ + /ʃɔːrt e/ + /n/ + /t/</i> one hundred centimetre, century, centipede, bicentennial	cert- <i>1 /s/ + /er/ + /t/</i> confidently know certainty, certificate, ascertain, certifiable	chrom- <i>1 /k/ + /r/ + /lɒŋ o/ + /m/</i> colour chromatic, chromatology, chromatotherapy	chron- <i>1 /k/ + /r/ + /ʃɔːrt o/ + /n/</i> time chronicle, chronicle, chronology, chronometer	circ- <i>1 /s/ + /er/ + /k/</i> round, around circle, circumference, circuitous, circumference	cog- <i>1 /s/ + /ʃɔːrt o/ + /g/</i> mind, aware, think cognition, cogent, cognitive, neuro cognitive, cogitate
contra- <i>1 /k/ + /ʃɔːrt o/ + /n/ + /t/ + /lɒŋ e/ 2 /k/ + /r/ + /ʃɔːrt o/ + /n/ + /t/</i> against contradict, contravene, contrast, contra-political	corp- <i>1 /k/ + /ar/ + /t/ + /p/</i> body corpus, corporal, corpulent, incorporate, corporate	cosm- <i>1 /k/ + /ʃɔːrt o/ + /s/ + /m/</i> space, stars cosmic, cosmology, cosmopolitan, cosmonaut	cred- <i>1 /k/ + /r/ + /ʃɔːrt e/ + /d/</i> belief credible, incredible, credit, credulous	crypt- <i>1 /k/ + /r/ + /ʃɔːrt i/ + /t/ + /p/ + /t/</i> hidden cryptic, crypt, cryptogram, apocryphal	ego- <i>1 /lɒŋ e/ + /l/ + /g/ + /lɒŋ o/</i> self egotistic, egotist, ego, egomaniac	equi- <i>1 /lɒŋ e/ + /l/ + /kw/ + /ʃɔːrt i/</i> equal equal, equivalent, equilateral, equinox	fid- <i>1 /f/ + /ʃɔːrt i/ + /d/</i> faith, trust fidelity, infidelity, fiduciary, confident, confidence
geo- <i>1 /g/ + /lɒŋ e/ + /t/ + /lɒŋ o/</i> earth geologist, geology, geometry, geocentric	graph- <i>1 /g/ + /r/ + /ʃɔːrt a/ + /t/</i> writing, representing dysgraphia, orthography, geography, graphics	hetero- <i>1 /h/ + /ʃɔːrt e/ + /t/ + /lɒŋ o/</i> mixed, diverse heterogeneous, heterosexuality, heterodyne	homo- <i>1 /h/ + /lɒŋ o/ + /t/ + /m/ + /t/ + /lɒŋ e/</i> same, singular (Greek) ... or human (Latin) homogeneity, homonym, homosexual, homo sapien	hydr- <i>1 /h/ + /lɒŋ i/ + /d/ + /r/</i> water hydraulic, hydrogen, hydrophobia, hydrant	hyper- <i>1 /h/ + /lɒŋ i/ + /p/ + /e/ + /t/</i> above, beyond, over hyperactive, hypersensitive, hyperbolic, hypertension	hypo- <i>1 /h/ + /lɒŋ i/ + /p/ + /e/ + /t/</i> below, lower, under hypodermis, hypothermia, hypoglycemia, hypochondria	kilo- <i>1 /k/ + /lɒŋ e/ + /t/ + /lɒŋ o/</i> one thousand kilogram, kilometre, kiloton
lingu- <i>1 /l/ + /ʃɔːrt i/ + /ŋ/ + /t/ + /lɒŋ e/ 2 /l/ + /ŋ/</i> language linguistic, lingual, multilingual, linguist	locu- <i>1 /l/ + /lɒŋ o/ + /k/ + /t/ + /lɒŋ e/</i> location, interlocutor, circumlocution	macro- <i>1 /m/ + /ʃɔːrt a/ + /k/ + /t/ + /lɒŋ e/ 2 /m/ + /lɒŋ e/</i> large macrocosm, macroscopic, macroeconomy, macrobiotic	man- <i>1 /m/ + /ʃɔːrt a/ + /n/</i> hand manual, manuscript, manufacture, manipulate	medi- <i>1 /m/ + /lɒŋ e/ + /t/ + /lɒŋ e/ 2 /m/ + /lɒŋ e/</i> half medium, median, mediscare	micro- <i>1 /m/ + /lɒŋ i/ + /k/ + /t/ + /lɒŋ e/ 2 /m/ + /lɒŋ e/</i> small microscopic, microscope, microcosm, microbiotic	morph- <i>1 /m/ + /ar/ + /t/</i> change, transform morph, morphology, anthropomorphic, metamorphosis	omni- <i>1 /ʃɔːrt o/ + /m/ + /t/ + /lɒŋ e/ 2 /m/ + /lɒŋ e/</i> all omnipotent, omniscient, omnipresent
pan- <i>1 /p/ + /ʃɔːrt a/ + /n/</i> over all, all, across all panacea, pan-Pacific, pantheism, panorama	path- <i>1 /p/ + /ʃɔːrt a/ + /t/</i> feeling sympathy, apathy, empathy, antipathy	phil- <i>1 /f/ + /ʃɔːrt i/ + /t/</i> love philanthropy, philander, philosopher, bibliophile	phon- <i>1 /f/ + /lɒŋ o/ + /n/</i> sound telephone, phonology, phonogram, symphony	phot- <i>1 /f/ + /lɒŋ o/ + /t/</i> light photon, photography, photosynthesis, photoelectric	phys- <i>1 /f/ + /ʃɔːrt i/ + /s/</i> nature, natural bodies physical, physics, physician, biophysics	pseud- <i>1 /s/ + /o/ + /d/</i> false, not exact, not real pseudo psychology, pseudonym, pseudoscience, pseudograph	psych- <i>1 /s/ + /lɒŋ i/ + /k/</i> mind psychology, psychosis, psychiatry, psychic
soph- <i>1 /s/ + /lɒŋ o/ + /f/ or /s/ + /ʃɔːrt o/ + /f/</i> wisdom sophist, philosophy, sophisticated, sophistication	stell- <i>1 /s/ + /t/ + /ʃɔːrt e/ + /t/</i> star stellar, constellation, interstellar	struct- <i>1 /s/ + /t/ + /ʃɔːrt u/ + /t/ + /t/</i> form, formed, order structure, construction, instruction	tel- <i>1 /t/ + /ʃɔːrt e/ + /t/</i> far, far off telephone, television, teleporter	term- <i>1 /t/ + /er/ + /m/</i> time, length of time term, terminal, termination, interminable, indeterminate	therm- <i>1 /t/ + /er/ + /m/</i> heat thermal, thermometer, hypothermia, geothermal	vac- <i>1 /v/ + /ʃɔːrt a/ + /k/</i> empty, extract vacuum, vacuous, vacant, evacuate, evacuee	viv- <i>1 /v/ + /lɒŋ i/ + /v/ 2 /v/ + /ʃɔːrt i/ + /v/</i> life, lively vivid, vivacious, vitality, vitamin

Morphemes - the smallest, meaningful units within a word

Language



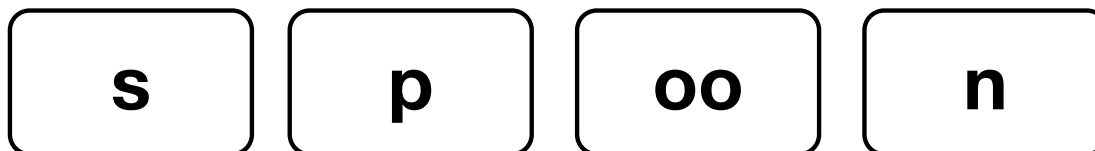
Phonemic Awareness



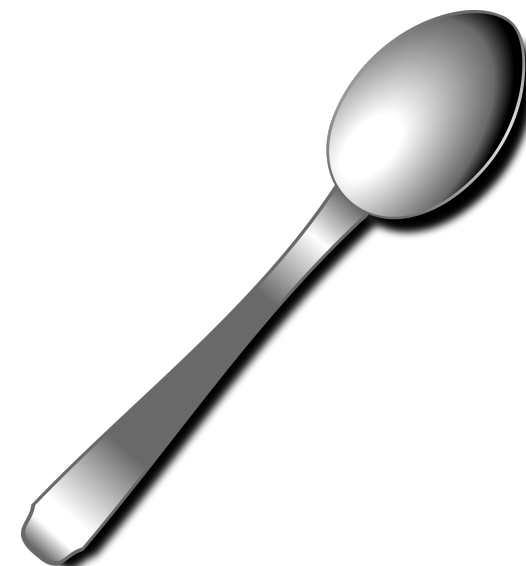
Phonemic Knowledge



Alphabets / Phonics



Word Construction



*Bringing print and speech
into alignment makes
reading feasible.
(Seidenberg, 2017, p. 40)*

Automatic Word Recognition



What words do learners learn to use, read and spell?

common, familiar vocabulary	high frequency words	print words encountered in books and the environment	topical words being studied (e.g. at school)	words based on progressive patterns in phonics program
<p>NB: At age six, a child may know thousands of words when heard but few in print.</p> <p>Despite this, a word which is familiar to a learner may be easier to read and spell as the learner call upon both his/her semantic and phonetic systems to recall the word.</p> <p>These words are often called upon in phonics studied so students can generalise where patterns can be found.</p>	<p>Some words - like “no” - are recognised prior to any phonetic instruction.</p> <p>Other words - like “was” - are both ubiquitous and irregular, and are often taught by sight rather than analysis.</p> <p>When referring to high frequency words, we use lists like Dolche or Fry.</p> <p>As with common vocabulary, these words are open to analysis when the time comes, so students can generalise where patterns can be found.</p>	<p>One of the best sources of print vocabulary is through environmental scans and book reading.</p> <p>In an environmental scan a child may recognise the word “STOP” in a sign and - then - in isolation well before having the skills to decode the word.</p> <p>It goes without saying that book reading is important, both at the beginning and throughout one’s reading life. Reading connected texts help learners apply word reading skills and semantic problem solving strategies.</p>	<p>Still other words are studied as part of exploring “content”, such as “breakfast words” or “dinosaurs” or “art instruments”</p> <p>As with common vocabulary, a child can know a word when heard but lack the skills to decode it independently.</p> <p>That said, having access to the word’s meaning may provide the incentive for the child to persevere in order to work out its pronunciation and spelling.</p>	<p>Now we get to the “evidence-based” practice, which is found to be effective for a wide range of children ... a progressive program in which learners develop the skills to blend, segment and decode increasingly complex graphemes, phonograms and words.</p> <p>A learner can call upon his/her wide knowledge of print words to help generalise the patterns being explored in the sequenced, synthetic phonics program.</p>

NB: Please do not underestimate a learner’s invented spellings. They reveal the patterns which have been mastered and those which are to come.



*

[illegible]

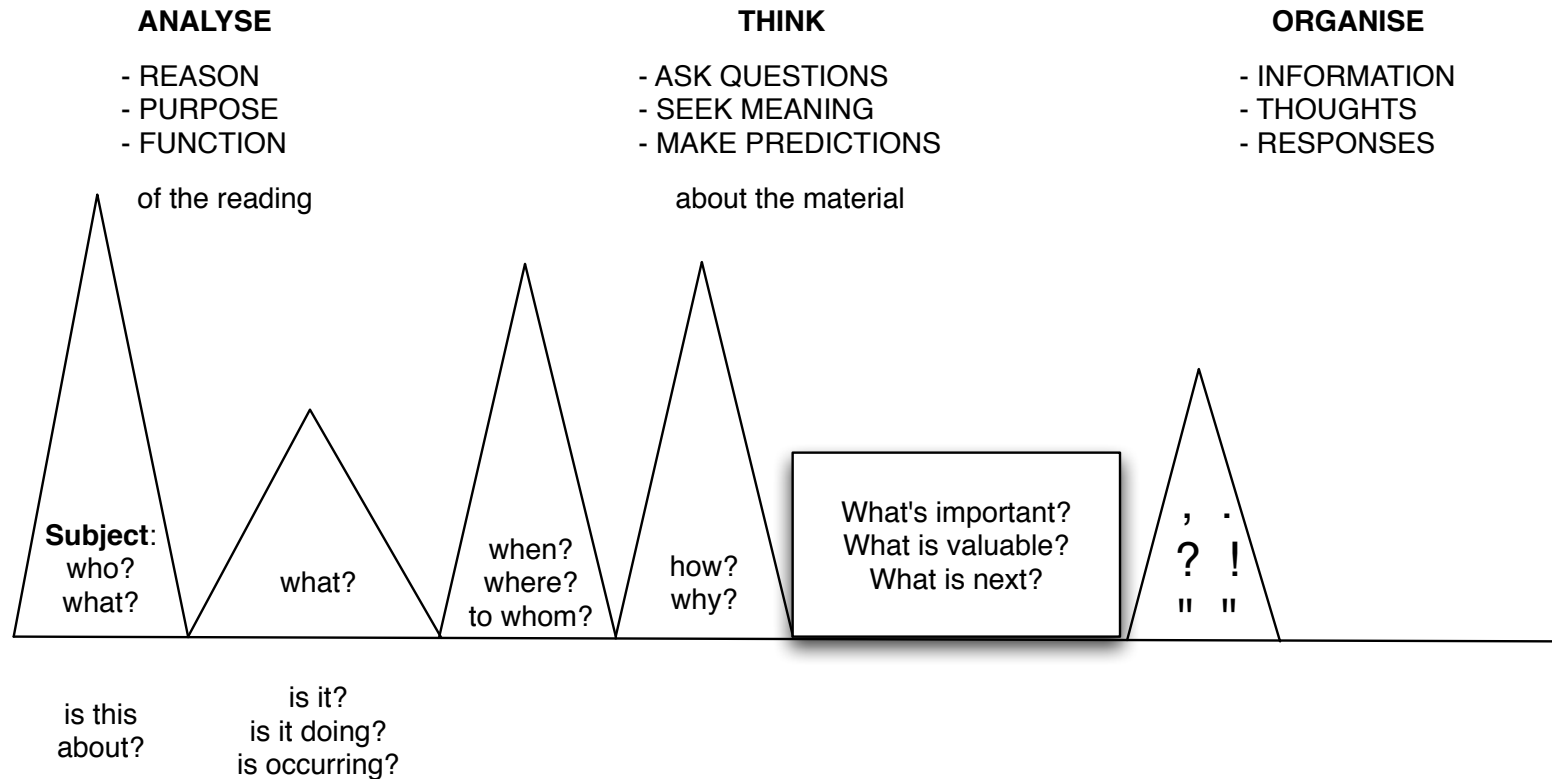
Fry's Second 100 Words + A Few Other Relevant Words

also [ʔaw/ + /h/][ʔn/ + /əŋ ə/] adverb: in addition to Fry's second hundred	am /short ə/ + /m/ verb: to be (singular personal) Dolche: Primer Fry's second hundred	another [ʔschwa/][ʔn/ + /schwa/][ʔth/ + / er/] pronoun: additional one Fry's second hundred	away [ʔschwa/][ʔn/ + /əŋ ə/] adjective: leave or not here Dolche: preprimer Fry's second hundred	back /b/ + /short ə/ + /k/ verb, noun, adjective: behind, reverse Fry's second hundred	ball /b/ + /aw/ + /l/ noun: round object (often bouncy) Fry's second hundred	because [ʔb/ + /əŋ ə/][ʔk/ + /schwa/ + /s/] conjunction: causation Dolche: Second Grade Fry's second hundred	best /b/ + /short ə/ + /s/ + /t/ adjective: better than Dolche: Second Grade Fry's second hundred	better [ʔb/ + /short ə/][ʔt/ + /er/] adjective, verb: improve, good Dolche: Third Grade Fry's second hundred	big /b/ + /short i/ + /g/ adjective: large Dolche: preprimer Fry's second hundred	black /b/ + /l/ + /short ə/ + /k/ colour Dolche: Primer Fry's second hundred	book /b/ + /short ə/ + /k/ verb, noun: bound reading material Fry's second hundred
both /b/ + /əŋ ə/ + /b/ pronoun Dolche: Second Grade Fry's second hundred	box /b/ + /short ə/ + /s/ verb, noun: square or rectangular vessel Fry's second hundred	break /b/ + /r/ + /əŋ ə/ + /k/ verb, noun: (to) fracture Fry's second hundred - additional	bring /b/ + /r/ + /short i/ + /ŋ/ verb: to carry to you Dolche: Third Grade Fry's second hundred	call /k/ + /aw/ + /l/ verb, noun: to speak out, request Dolche: Second Grade Fry's second hundred	came /k/ + /əŋ ə/ + /m/ verb: to arrive Dolche: Primer Fry's second hundred	colour [ʔk/ + /schwa/][ʔl/ + /er/] noun, verb: (to) add a shade or hue Fry's second hundred	could /k/ + /short ə/ + /d/ verb: able Dolche: First Grade Fry's second hundred	dear /d/ + /ear/ adjective, noun: lovely (one) Fry's second hundred	done /d/ + /short u/ + /n/ adjective: completed Dolche: Third Grade	draw /d/ + /r/ + /aw/ verb: to sketch Dolche: Third Grade	drink /d/ + /r/ + /short i/ + /n/ + /k/ verb, noun: to imbibe liquid Dolche: Third Grade
each /əŋ ə/ + /ch/ pronoun Fry's second hundred	ear /ear/ noun: used to hear Fry's second hundred	end /short ə/ + /n/ + /d/ noun, verb: to complete; completion Fry's second hundred	far /f/ + /ar/ adjective, adverb: at a distance Dolche: Third Grade Fry's second hundred	find /f/ + /əŋ i/ + /n/ + /d/ verb: to locate Dolche: Second Grade Fry's second hundred	first /f/ + /er/ + /s/ + /t/ adjective, adverb: one in order Dolche: Second Grade Fry's second hundred	five /f/ + /əŋ i/ + /v/ number Dolche: Second Grade Fry's second hundred	found /f/ + /aw/ + /n/ + /d/ verb, adjective: to find (past tense) Dolche: Second Grade Fry's second hundred	four /f/ + /or/ number Dolche: Primer Fry's second hundred	friend /f/ + /r/ + /short ə/ + /n/ + /d/ noun: a confidant Fry's second hundred	girl /g/ + /er/ + /l/ noun: female (young) Fry's second hundred	going [ʔg/ + /əŋ ə/][ʔl/ + /short i/ + /ŋ/ /t/ verb, gerund: to move toward Dolche: First Grade
got /g/ + /short ə/ + /t/ verb Dolche: Third Grade Fry's second hundred	great /g/ + /r/ + /əŋ ə/ + /t/ adjective: really good Fry's second hundred - additional	greet /g/ + /r/ + /əŋ ə/ + /t/ verb: to introduce oneself, say hello Fry's second hundred - additional	hand /h/ + /short ə/ + /n/ + /d/ noun, verb: human use to grip; found at the end of the arm Fry's second hundred	high /h/ + /əŋ i/ adjective: up, tall and/or in the air Fry's second hundred	home /h/ + /əŋ ə/ + /m/ noun: place of residence Fry's second hundred	house /h/ + /aw/ + /s/ noun: place of residence Fry's second hundred	hurt /h/ + /er/ + /t/ verb, noun, adjective: damage/pain Dolche: Third Grade	into [ʔshort i/ + /w/][ʔl/ + /əŋ ə/] preposition Dolche: Third Grade Fry's second hundred	kick /k/ + /short i/ + /k/ noun, verb: to hit with the foot Fry's second hundred - additional	kind /k/ + /əŋ i/ + /n/ + /d/ adjective: nice Dolche: Third Grade Fry's second hundred	last /l/ + /short ə/ + /s/ + /t/ verb, adjective: ultimate one; final in series Fry's second hundred
laugh /l/ + /short ə/ + /f/ verb, noun: sign of amusement Dolche: Third Grade	leave /l/ + /əŋ ə/ + /v/ noun: to go away, depart Fry's second hundred	left /l/ + /short ə/ + /f/ + /t/ adjective, verb: not right or to leave (past tense) Fry's second hundred	let /l/ + /short ə/ + /t/ verb: to allow, permit Dolche: First Grade Fry's second hundred	light /l/ + /əŋ i/ + /t/ verb, noun: to illuminate Dolche: Third Grade	live /l/ + /short i/ + /v/ or /l/ + /əŋ i/ + /v/ or /l/ + /əŋ i/ + /s/ or /l/ + /əŋ i/ + /t/ verb, adjective: vibrant, existing Dolche: First Grade Fry's second hundred	lock /l/ + /short ə/ + /k/ verb: to close securely Fry's second hundred - additional	look /l/ + /short ə/ + /k/ verb, noun: to see, appearance Dolche: preprimer Fry's second hundred	made /m/ + /əŋ ə/ + /d/ verb, adjective: to make (past tense) Dolche: Second Grade Fry's second hundred	may /m/ + /əŋ ə/ modal verb Dolche: First Grade Fry's second hundred	men /m/ + /short ə/ + /n/ noun: males (group of males) Fry's second hundred	more /m/ + /or/ pronoun, adverb: at a larger amount Fry's second hundred
morning [ʔm/ + /or/][ʔl/ + /short i/ + /ŋ/ /g/ noun: early part of the day Fry's second hundred	most /m/ + /əŋ ə/ + /s/ + /t/ pronoun, adverb: the largest amount Fry's second hundred	mother [ʔm/ + /schwa/][ʔl/ + /th/ + /er/] noun, verb: female parent Fry's second hundred	must /m/ + /short u/ + /s/ + /t/ modal verb, noun Dolche: Primer Fry's second hundred	name /n/ + /əŋ ə/ + /m/ noun, verb: to label (a label) Fry's second hundred	near /n/ + /ear/ adjective: close by Fry's second hundred	never [ʔn/ + /short ə/][ʔl/ + /er/] adverb: not occurring (none or in past) Dolche: Third Grade Fry's second hundred	next /n/ + /short ə/ + /k/ + /t/ conjunction, adjective: the following item in a sequence Fry's second hundred	night /n/ + /əŋ i/ + /t/ noun: the end of the day Fry's second hundred	only [ʔəŋ ə/ + /n/][ʔl/ + /əŋ ə/] adjective: the one or unique Dolche: Third Grade Fry's second hundred	open [ʔəŋ ə/][ʔp/ + /short ə/ + /n/] verb, adjective: the one or unique Dolche: First Grade Fry's second hundred	over [ʔəŋ ə/][ʔv/ + /er/] preposition Dolche: First Grade Fry's second hundred
own [ʔəŋ ə/ + /n/ adjective, pronoun: possessive Dolche: Third Grade Fry's second hundred	people [ʔp/ + /əŋ ə/][ʔp/ + /schwa/ + /l/ /l/ noun: human beings Fry's second hundred	pick /p/ + /short i/ + /k/ verb, noun: to point or pointed item Dolche: Third Grade	play /p/ + /l/ + /əŋ ə/ verb, noun: to enjoy and/or perform Dolche: preprimer Fry's second hundred	please /p/ + /l/ + /əŋ ə/ + /s/ verb, adverb Dolche: Primer Fry's second hundred	present [ʔp/ + /r/ + /short ə/][ʔn/ + /short ə/ + / s/ + /n/ + /t/ or [ʔp/ + /r/ + /əŋ ə/][ʔn/ + /short ə/ + /n/ + /t/ noun, verb: gift or to demonstrate Fry's second hundred	pretty [ʔp/ + /r/ + /schwa/][ʔl/ + /əŋ ə/] adjective: attractive Dolche: Primer Fry's second hundred	ran /r/ + /short ə/ + /n/ verb: to run (past tense) Dolche: Primer Fry's second hundred	read /r/ + /short ə/ + /d/ or /r/ + /əŋ ə/ + /d/ or /r/ + /əŋ ə/ + /t/ verb: to extract language from print Dolche: Second Grade Fry's second hundred	red /r/ + /short ə/ + /d/ colour Dolche: preprimer Fry's second hundred	right /r/ + /əŋ i/ + /t/ adjective, noun: correct or not left Dolche: Second Grade Fry's second hundred	road /r/ + /əŋ ə/ + /d/ noun: a wide path to travel on Fry's second hundred - additional
run /r/ + /short ə/ + /n/ verb: to move quickly Dolche: preprimer Fry's second hundred	safe /s/ + /əŋ ə/ + /f/ noun, verb, adjective: to keep secure and away from harm Fry's second hundred - additional	saw /s/ + /aw/ verb, noun: to see (past); sharp tool Dolche: Primer Fry's second hundred	say /s/ + /əŋ ə/ verb: to speak Dolche: Primer Fry's second hundred	school /s/ + /k/ + /əŋ ə/ + /l/ noun: a place for learning Fry's second hundred	seem /s/ + /əŋ ə/ + /m/ verb: to appear like Fry's second hundred	shall /ʃ/ + /short ə/ + /l/ modal verb Dolche: Third Grade Fry's second hundred	should /ʃ/ + /short ə/ + /d/ modal verb Fry's second hundred	sick /s/ + /short i/ + /k/ noun, adjective: not feeling well, ill Fry's second hundred - additional	smile /s/ + /m/ + /əŋ i/ + /l/ noun, verb: facial express when happy Fry's second hundred - additional	snack /s/ + /n/ + /short ə/ + /k/ verb, noun: light meal Fry's second hundred - additional	snake /s/ + /n/ + /əŋ ə/ + /k/ verb, noun: a cold-blood, scaly creature with no legs (slithers) Fry's second hundred - additional
soon /s/ + /əŋ ə/ + /n/ adverb: near in time Dolche: Primer Fry's second hundred	stand /s/ + /t/ + /short ə/ + /n/ + /d/ noun, verb: to present upright and firm Fry's second hundred	such /s/ + /short ə/ + /ch/ pronoun, determiner Fry's second hundred	sure /ʃ/ + /yur/ adjective: confident, certain Fry's second hundred	tell /t/ + /short ə/ + /l/ verb: to speak and inform Dolche: Second Grade Fry's second hundred	than /θ/ + /short ə/ + /n/ conjunction, preposition Fry's second hundred	these /θ/ + /əŋ ə/ + /s/ pronoun (plural) Dolche: Third Grade Fry's second hundred	thing /θ/ + /short i/ + /ŋ/ noun: an item, object Fry's second hundred	think /θ/ + /short i/ + /ŋ/ + /k/ verb: to consider Dolche: First Grade Fry's second hundred	too /t/ + /əŋ ə/ adverb Dolche: Primer Fry's second hundred	tree /t/ + /r/ + /əŋ i/ noun: a tall woody plant with leaves and seed pods, (can flower) Fry's second hundred	under [ʔshort ə/ + /n/][ʔl/ + /d/ + /er/] preposition Dolche: Primer Fry's second hundred
until [ʔschwa/ + /n/][ʔl/ + /short i/ + /t/ /l/ preposition, conjunction Fry's second hundred	upon [ʔschwa/][ʔp/ + /short ə/ + /n/ /t/ preposition Dolche: Second Grade Fry's second hundred	use /əŋ ə/ + /s/ verb, noun: to utilize Dolche: Second Grade Fry's second hundred	want /w/ + /schwa/ + /n/ + /t/ verb: to desire Dolche: Primer Fry's second hundred	way /w/ + /əŋ ə/ noun: a path, route Fry's second hundred	week /w/ + /əŋ ə/ + /k/ noun: seven days Fry's second hundred - additional	where /w/ + /air/ adverb: position Dolche: preprimer Fry's second hundred	while /w/ + /əŋ i/ + /l/ conjunction, relative adverb: at the same time Fry's second hundred	white /w/ + /əŋ i/ + /t/ colour Dolche: Primer Fry's second hundred	why /w/ + /əŋ i/ interrogative, relative adverb Dolche: Second Grade Fry's second hundred	wish /w/ + /short i/ + /ʃ/ verb, noun: a desire or hope Dolche: Second Grade Fry's second hundred	year /j/ + /ear/ noun: duration of 12 months Fry's second hundred

Fry's Third 100 Words + A Few Other Relevant Words

along [l/əwɔ/][l/əw/ + /ŋg/] preposition Fry's third hundred	always [əw/ + /l/][l/w/ + /ŋg a/ + /s/] adverb: occurring regularly Dolche: Second Grade Fry's third hundred	anything [əʃənt/][l/əw/ + /ŋg e/] [tʰ/ + /ʃənt/ + /ŋg/] pronoun Fry's third hundred	around [əwɔ/][l/əw/ + /ŋw/ + /s/ + /d/] adverb, preposition: in the area Dolche: Second Grade Fry's third hundred	ask /ʃərt a/ + /s/ + /k/ verb, noun: to question; or a question Dolche: Third Grade Fry's third hundred	ate /ŋg a/ + /t/ verb: past tense (eat) Dolche: Second Grade Fry's third hundred	bed /b/ + /ʃərt e/ + /d/ noun: furniture to sleep on Fry's third hundred	brother [b/ + /r/ + /əwɔ/][l/əw/ + /er/] noun: male sibling Fry's third hundred - additional	brown /b/ + /r/ + /ow/ + /n/ colour Dolche: Primer Fry's third hundred	buy /b/ + /ŋg/ + /t/ verb, noun: purchase Dolche: Second Grade Fry's third hundred	car /k/ + /ar/ noun: a motor vehicle Fry's third hundred	carry [k/ + /air/][l/ŋg e/] verb: to hold and bring to you Dolche: Third Grade Fry's third hundred
clean /k/ + /l/ + /ŋg e/ + /n/ verb, adjective: to remove dirt/mess Dolche: Third Grade Fry's third hundred	close /k/ + /l/ + /ŋg u/ + /s/ or /k/ + /l/ + /ŋg u/ + /z/ verb, adjective: nearby or to shut Fry's third hundred	clothes /k/ + /l/ + /ŋg a/ + /b/ + /s/ noun: attire Fry's third hundred	coat /k/ + /ŋg a/ + /t/ noun, verb: a heavy warm piece of clothing; jacket, to cover Fry's third hundred	cold /k/ + /ŋg e/ + /l/ + /d/ adjective: very cool Dolche: Second Grade Fry's third hundred	cut /k/ + /ʃərt u/ + /t/ verb, noun: to slice Dolche: Third Grade Fry's third hundred	didn't [d/ + /ʃərt/][l/əw/ + /n/ + /t/] verb: do not Fry's third hundred	does /d/ + /əwɔ/ + /s/ verb: to do Dolche: Second Grade Fry's third hundred	dog /d/ + /ʃərt a/ + /g/ noun, verb: a canine creature Fry's third hundred	don't /d/ + /ŋg e/ + /n/ + /t/ verb: do not Dolche: Second Grade Fry's third hundred	door /d/ + /ar/ noun: a hinged barrier to close off a room Fry's third hundred	dream /d/ + /r/ + /ŋg e/ + /m/ verb, noun: imagine (often whilst asleep) Fry's third hundred - additional
dress /d/ + /r/ + /ʃərt e/ + /s/ verb, noun: to put on clothes, a long skirted piece of attire Fry's third hundred	early [er/][l/əw/ + /s/] adjective, adverb: near the start of Fry's third hundred	eight /ŋg a/ + /t/ number Dolche: Third Grade Fry's third hundred	every [əʃənt/][l/əw/ + /er/][l/ŋg e] adjective Dolche: First Grade Fry's third hundred	eyes /ŋg/ + /s/ noun: used to see, fur vision Fry's third hundred	face /f/ + /ŋg a/ + /s/ noun, verb: front part of the head (with eyes, nose, mouth) Fry's third hundred	fall /f/ + /aw/ + /l/ verb, noun: to decline or autumn Dolche: Third Grade Fry's third hundred	fast /f/ + /ʃərt a/ + /s/ + /t/ adjective: quickly Dolche: Second Grade Fry's third hundred	fat /f/ + /ʃərt a/ + /t/ adjective, noun: oily greasy substance, contributes to obesity Fry's third hundred	feet /f/ + /ŋg e/ + /t/ noun: humans walk on two of them (below the ankle) Fry's third hundred - additional	fine /f/ + /ŋg/ + /a/ + /n/ adjective, noun: slim, thin or a pleasantly incurring exchange of money Fry's third hundred	finger [f/ + /ʃərt/ + /a/][l/ŋg + /er/] noun: a human hand has five of these Fry's third hundred - additional
fire /f/ + /ŋg/ + /r/ noun: heat caused by burning object, such as wood Fry's third hundred	food /f/ + /ŋg u/ + /d/ noun: edible substance Fry's third hundred	foot /f/ + /ʃərt u/ + /t/ noun: humans walk on (below the ankle) Fry's third hundred - additional	fruit /f/ + /r/ + /ŋg u/ + /t/ noun: organic food with seeds, often sweet as it stores sugar Fry's third hundred - additional	full /f/ + /ʃərt u/ + /l/ adjective: "to the top" Dolche: Third Grade Fry's third hundred	funny [f/ + /ʃərt u/ + /l/ + /n/ + /ŋg e/] adjective - humorous Dolche: Second Grade Fry's third hundred	fly /f/ + /l/ + /ŋg/ + /t/ verb, noun: to move through air Dolche: Third Grade Fry's third hundred	gave /g/ + /ŋg a/ + /v/ verb: to give (past tense) Dolche: Second Grade Fry's third hundred	goes /g/ + /ŋg e/ + /s/ verb: to go Dolche: Second Grade Fry's third hundred	green /g/ + /r/ + /ŋg e/ + /n/ colour Dolche: Second Grade Fry's third hundred	grow /g/ + /ŋg e/ + /t/ verb: to mature; get bigger Dolche: Third Grade Fry's third hundred	hat /h/ + /ʃərt a/ + /t/ noun: object worn on the top of the head Fry's third hundred
happy [h/ + /ʃərt a/][l/əw/ + /ŋg e/] adjective: content, amused Fry's third hundred	hard /h/ + /ar/ + /d/ adjective: firm, rock-like Fry's third hundred	head /h/ + /ʃərt e/ + /d/ noun: where the brain is located. Above the neck and shoulders Fry's third hundred	hear /h/ + /ar/ verb: sensed by the ears Fry's third hundred	help /h/ + /ʃərt e/ + /t/ + /p/ verb, noun: assist Dolche: preprimer Fry's third hundred	hold /h/ + /ŋg a/ + /l/ + /d/ verb, noun: to contain, container Dolche: Third Grade Fry's third hundred	hope /h/ + /ŋg/ + /p/ verb, noun: to desire, dream, wish to happen Fry's third hundred	hot /h/ + /ʃərt a/ + /t/ adjective: lots of heat Dolche: Third Grade Fry's third hundred	inside [əʃənt/ + /n/][l/əw/ + /ŋg/ + /d/] noun, adjective: the interior of Fry's third hundred - additional	jump /j/ + /ʃərt u/ + /m/ + /p/ verb, noun: to leap Dolche: preprimer Fry's third hundred	keep /k/ + /ŋg e/ + /p/ verb: to obtain; hold onto Dolche: Third Grade Fry's third hundred	letter [l/ + /ʃərt e/][l/əw/ + /er/] noun: a writer part of the alphabet, or a text addressed to someone Fry's third hundred
longer [l/ + /ʃərt u/ + /ŋg/][l/ŋg + /er/] adjective: to be of greater length Fry's third hundred	love /l/ + /ʃərt u/ + /v/ noun, verb: to have great affection for Fry's third hundred	might /m/ + /ŋg/ + /t/ modal verb or noun (strength) Fry's third hundred	money [m/ + /əwɔ/][l/əw/ + /ŋg e/] noun: currency for trade Fry's third hundred	myself [m/ + /ŋg/][l/əw/ + /əwɔ/ + /l/ + /t/] pronoun Dolche: Third Grade Fry's third hundred	nervous [n/ + /er/][l/əw/ + /əwɔ/ + /n/] adjective: anxious, related to nerves Fry's third hundred - additional	nothing [n/ + /əwɔ/][l/əw/ + /ʃərt/ + /ŋg/ + /t/] pronoun, adjective Fry's third hundred - additional	now /n/ + /ow/ adverb Dolche: Primer Fry's third hundred	o'clock [l/ŋg e/][l/əw/ + /t/ + /ʃərt a/ + /k/] adverb: indicating hourly time Fry's third hundred	off /aw/ + /t/ preposition, adverb Dolche: Second Grade Fry's third hundred	once /w/ + /əwɔ/ + /n/ + /s/ adjective: on one occasion Dolche: First Grade Fry's third hundred	order [er/][l/əw/ + /er/] noun, verb: to be in sequence or give a direction Fry's third hundred
outside [ow/ + /t/][l/əw/ + /ŋg/ + /d/] noun, adjective: the exterior of Fry's third hundred - additional	pair /p/ + /air/ noun: a set of two things Fry's third hundred	part /p/ + /ar/ + /t/ noun, verb: a component of gg to separate Fry's third hundred	phone /f/ + /ŋg e/ + /n/ verb, noun: to call, an instrument used to make calls Fry's third hundred - additional	quick /kw/ + /ʃərt/ + /k/ adjective: fast Fry's third hundred - additional	quite /kw/ + /ŋg/ + /t/ adverb: to an extent/degree Fry's third hundred - additional	ride /r/ + /ŋg/ + /d/ verb: to travel in or in Dolche: Primer Fry's third hundred	round /r/ + /ow/ + /n/ + /d/ adjective, verb: of circular shape Dolche: First Grade Fry's third hundred	same /s/ + /ŋg a/ + /m/ adjective, pronoun: a similar or exact one Fry's third hundred	sat /s/ + /ʃərt a/ + /t/ verb: to rest in a chair (past tense) Fry's third hundred	second [s/ + /ʃərt e/][l/əw/ + /əwɔ/ + /n/ + /d/] adjective: number two in order Fry's third hundred	set /s/ + /ʃərt e/ + /t/ verb, noun, adjective Fry's third hundred
seven [s/ + /ʃərt e/][l/əw/ + /ʃərt e/ + /n/] number Dolche: Third Grade Fry's third hundred	show /ʃ/ + /ŋg u/ noun, verb: to demonstrate Dolche: Third Grade Fry's third hundred	sing /s/ + /ʃərt/ + /ŋg/ verb: vocal music Dolche: Second Grade Fry's third hundred	sister [s/ + /ʃərt/ + /s/][l/əw/ + /er/] noun: female sibling Fry's third hundred	sit /s/ + /ʃərt/ + /t/ verb (e.g. to rest in a chair) Dolche: Second Grade Fry's third hundred	six /s/ + /ʃərt/ + /ks/ number Dolche: Third Grade Fry's third hundred	sleep /s/ + /l/ + /ŋg e/ + /p/ verb, noun: to rest (with eyes closed) Fry's third hundred	small /s/ + /m/ + /aw/ + /l/ adjective: little Dolche: Third Grade Fry's third hundred	smell /s/ + /m/ + /ʃərt e/ + /l/ verb, noun: sensed by the nose Fry's third hundred - additional	something [s/ + /ʃərt u/ + /m/][l/əw/ + /ʃərt/ + /ŋg/] pronoun Fry's third hundred - additional	start /s/ + /t/ + /ar/ + /t/ verb, noun: to begin; beginning Dolche: Third Grade Fry's third hundred	stop /s/ + /t/ + /ʃərt a/ + /p/ verb, noun: to cease movement Dolche: Third Grade Fry's third hundred
sunlight [s/ + /ʃərt u/ + /n/][l/əw/ + /ŋg/ + /t/] noun: the hot light coming from the sun Fry's third hundred - additional	taste /t/ + /ŋg a/ + /s/ + /t/ verb, noun: sensed by the tongue Fry's third hundred - additional	ten /t/ + /ʃərt e/ + /n/ number Dolche: Third Grade Fry's third hundred	thank /tʰ/ + /ʃərt a/ + /ŋg/ + /k/ verb: to express appreciation Dolche: First Grade Fry's third hundred	third /tʰ/ + /er/ + /d/ adjective: in a sequence after two Fry's third hundred	those /tʰ/ + /ŋg e/ + /s/ pronoun (plural) Dolche: Second Grade Fry's third hundred	though /tʰ/ + /ŋg u/ conjunction, adverb Fry's third hundred	today [t/ + /ŋg u/][l/əw/ + /ŋg a/] or [t/ + /əwɔ/][l/əw/ + /ŋg a/] noun: this day Dolche: Third Grade Fry's third hundred	together [t/ + /ŋg u/][l/ŋg + /ʃərt e/][l/əw/ + /er/] adverb, adjective: all as one Dolche: Third Grade Fry's third hundred	took /t/ + /ʃərt u/ + /k/ verb: to take (past tense) Fry's third hundred	town /t/ + /ow/ + /n/ noun: small city Fry's third hundred	turn /t/ + /er/ + /n/ verb, noun: go around a corner Fry's third hundred
twice /t/ + /w/ + /ŋg/ + /s/ adverb, conjunction: on two occasions Fry's third hundred - additional	try /t/ + /r/ + /ŋg/ + /t/ verb, noun: to attempt or a goal Dolche: Third Grade Fry's third hundred	walk /w/ + /aw/ + /k/ verb: to move slowly on legs Dolche: Third Grade Fry's third hundred	warm /w/ + /ar/ + /m/ adjective, verb: a bit hot or to heat Dolche: Third Grade Fry's third hundred	wash /w/ + /aw/ + /ʃ/ verb: to clean Dolche: Second Grade Fry's third hundred	water [w/ + /aw/][l/əw/ + /er/] noun, verb: clear, fresh liquid Fry's third hundred	window [w/ + /ʃərt/ + /u/][l/əw/ + /ŋg u/] noun: a piece of glass through which one looks out of or into a building Fry's third hundred - additional	woman [w/ + /əwɔ/][l/əw/ + /ʃərt a/ + /n/] noun: female (adult) Fry's third hundred	write /r/ + /ŋg/ + /t/ verb: to use pen and/or print Dolche: Second Grade Fry's third hundred	yellow [j/ + /ʃərt e/][l/əw/ + /ŋg u/] adjective: colour Dolche: preprimer Fry's third hundred	yes /j/ + /əw/ + /s/ + /n/ exclamation Dolche: Primer Fry's third hundred	yesterday [j/ + /ʃərt e/ + /s/][l/əw/ + /er/ + /d/ + /ŋg a/] noun, adverb: day before today Fry's third hundred

... And organising words into rich sentences



The Prime Minister released a policy to the Parliament yesterday, because he wanted to address the problem of littering.

You can switch the sentence order but you still ask similar questions

Because he wanted to address the problem of littering, the Prime Minister yesterday released a policy to Parliament



Structures

In traditional grammar, there are four **types** of sentences:

Declarative - are statements that consist of a subject and a predicate to make a claim on the world

Interrogative - are questions that include some form of who, what, where, when or how.

Imperative - are commands, such as “close the door” or “describe the experiment”. The subject of the sentence is the implied “you” (e.g. [you] close the door). You will notice that essay “questions” are not really questions. They are commands, such as “analyse the poem”.

Exclamatory - are exclamations and are set apart by their emphatic tone, such as “He is alive!”

In traditional grammar, there are four **structures** for declarative sentences:

Simple - consist of one *independent clause* made up of a subject and predicate, such as “Mr Williams walked across the road.”

Compound - consist of at least two *independent clauses* that are joined by a *conjunction*, such as “Mr Williams walked across the road, and Mr Black followed him.”

Complex - consist of at least one *independent clause* with at least one *dependent clause*, such as “Mr Williams, who is my English teacher, walked across the road.”

Compound-Complex - consist of at least two *independent* that are joined by a conjunction and which include at least one *dependent clause*, such as “Mr Williams, who is my English teacher, walked across the road, and Mr Black followed him.”

In traditional grammar, there are four **three** elements in a sentence:

Words - *self-explanatory*

Phrases - a group of words which serve the function of a grammatical category, such as prepositional phrase or a noun phrase like “the red car”

Clause - consists of a subject and predicate. An independent clause is a simple sentence, and a dependent clause is a clause that starts with a relative pronoun that links to an independent clause

Types of Words/Phrases

In traditional grammar, there are **open classes** of words and **closed classes** of words. **Open classes** grow as the language grows. **Closed classes** are finite. The following are **CLOSED CLASSES**

Articles - including words like *the, a, and an*

Pronouns - including common pronouns, like *I, you, they, we*, as well as possessive pronouns like *mine, yours, my, their*, as well as relative pronouns like *that, which, whose*.

Prepositions - include all words that indicate position such as *on, next to, above, before, below, beside, through*. In school, I was told that a preposition was anything you do with a cloud, such as going *through a cloud, below a cloud, above a cloud, beneath a cloud*.

Conjunctions - are *joining words* such as *and, but, because, or, if, meanwhile, therefore, etc.*

OPEN CLASSES include:

Nouns - refers to “things” both concrete items and abstract ones like *chair, emu, rock, girl, freedom, sadness*

Verbs - refers to actions (both concrete items and abstract actions) like *jumping, running, stirring, thinking, feeling, resenting*

Adjectives - words that describe a noun, such as *red, deep, beautiful*

Adverbs - words that describe an action, such as *slowly, quickly, thoroughly, falsely*

A phrase might consist of multiple types of words, but its main focus is on a particular grammatical function.

Noun phrase - “*the red car*” describes a thing (the car)

Verb phrase - *walked slowly and carefully* describes the action (walking)

Prepositional phrase - “*on the pine needle floor on the forest*” describes the position of events.

Adjectival phrase - “*red as the dawn of the day*” collectively provides a description.

Ultimately, we arrange the words and phrases to make a statement about the world. We use many types of words. Some hold deep meaning, and others are more functional in nature.

In Discourse

Some sentences do not comply with the traditional logical order of actor-action-consequence. In particular, there are times when the object of an action becomes the grammatical subject of a sentence. This is known as the **passive voice**, as illustrated below:

Active - “*The boy kicked the ball.*”

Passive - “*The ball was kicked by the boy.*”

At first, English language learners may struggle with the passive voice; that is, they struggle until this pattern is pointed out to them.

The **indirect form** is also a unique sentence structure, which is encountered regularly.

Direct - “*The president lied to Congress.*”

Indirect - “*It is believed that the president lied to Congress.*” or “*Mr Brown said that the president lied to Congress.*”

A statement of fact becomes something much more subjective.

Whilst there are many ways to add meaning to a sentence, the following are three categories which might help analysis:

Horizontal - involves *adding* elements to a sentence in order to expand meaning. For instance, “*The car has a dent in it.*” can become “*The red car that is parked on the sidewalk has a large dent on the bonnet.*”

Vertical - involves *selecting* a more specific or apt word in order to convey more exact or deeper meaning. For instance, “*The red sedan that is perched on the sidewalk has a large dent on the bonnet.*”

Conventional (Rhetorical) - involves some conventional stylistic element of which the audience is familiar. For instance, “*Aghast! You won't believe what I saw. I just saw a red sedan perched on the sidewalk in front of Gary's house. It has a large dent in its bonnet, probably from hitting a tree or something.*”

A sentence expresses a **sense** and a **meaning**. In concrete sentences, the sense is often clear enough; however, the meaning is caught up in the speaker and listener's assessment of the context and intention of the utterance. Consequently, one requires much more than formal proficiency to understand a sentence. That said, an understanding of grammatical convention doesn't hurt. For further insights, please visit: <https://www.theliteracybug.com/commanding-sentences>. Please explore and enjoy

For more details ... a related presentation



The Sentence

Types, Features and Structures

1



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<http://bit.ly/2-The-Sentence>



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CONCLUSION





We want learners to rapidly and unconsciously see language through the code ...

... and to use code-based skills to be able to read and access new words and language.

... we want fluency to reach such a stage so learners can attend to the often more difficult tasks of composing and comprehending messages.



Monitoring Growth in Key Areas



1. Oral Language (including syntactic competence)
2. Cognitive capacity (e.g. memory, sequencing)
3. Phonological processing and phonemic awareness
4. Alphabetic knowledge
5. Decoding (reading) skills
6. Encoding (spelling) skills
7. Vocabulary development
8. Fluency (reading connected text)
9. Comprehension

Foundation of literacy (sounds, words, discourse)

Ability to process information and learn

Ability to detect patterns in spoken words, including the ability to detect individual sounds

Grasp the concepts that letters represent sounds

Ability to “read” an increasing corpus of words

Ability to spell an increasing corpus of word

Develop breadth and depth of vocabulary

Read with accuracy, speed and expressiveness

Ability to understand and interpret written material



We should be compelled to ...



- (a) **talk** regularly with learners (for oral language development, for shaping discourse, and for fostering verbal reasoning);
- (b) **read** to learners, read with learners, and help learners read on their own;
- (c) **write** for learners (e.g. from dictation), write with learners (e.g. joint construction), and help learners write on their own;
- (d) help learners **develop skills** (phonological awareness, decoding/spelling vocabulary, grammar, fluency, etc);
- (e) help them **build knowledge** and the strategies to build knowledge; and
- (f) help learners be active in the ways that language and literacy are used as tools for **understanding and action**.

Pinnell, G. S., & Fountas, I. C. (1997). Help America Read: A Handbook for Volunteers. Portsmouth: Heinemann.



Objectives (revisited).

- To illustrate why learners must develop an understanding of patterns in their own speech (e.g. phonemic awareness) in order to reliably recognise sound-letter patterns and understand how words work;
- To outline key elements of “the code”, such as phonemic *awareness*, phonemic *knowledge*, letter-sound correspondence, orthographic patterns, morphological patterns and automatic word recognition and construction skills;
- To emphasise the ultimate goal: for learners to execute the code and word recognition with sufficient automaticity so as to facilitate more complex acts of comprehension and composition; and
- To understand that language skills, such as vocabulary and syntactic competence, become stronger predictors of reading comprehension as word reading skills are consolidated.



Slides Available for Download at:

<https://www.theliteracybug.com/s/Mastering-the-Code.pdf>



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