

Year 12

ReadingPals

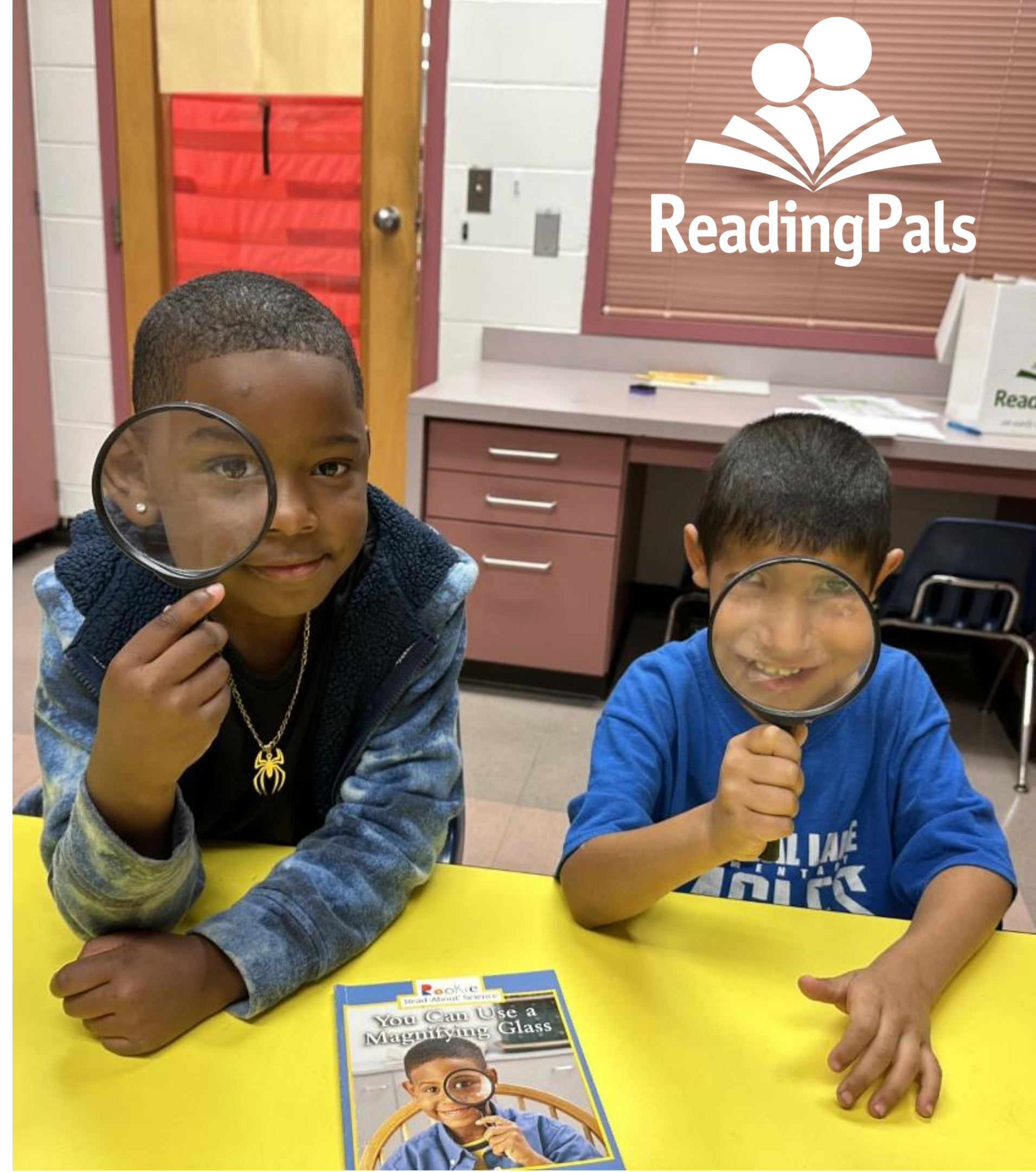
Statewide Volunteer Training Module:
The Science of Reading

November 9, 2023
11am-12pm ET



"A snapshot of the Science of Reading with practical tools"

Presenter: Coco Wangui Banks

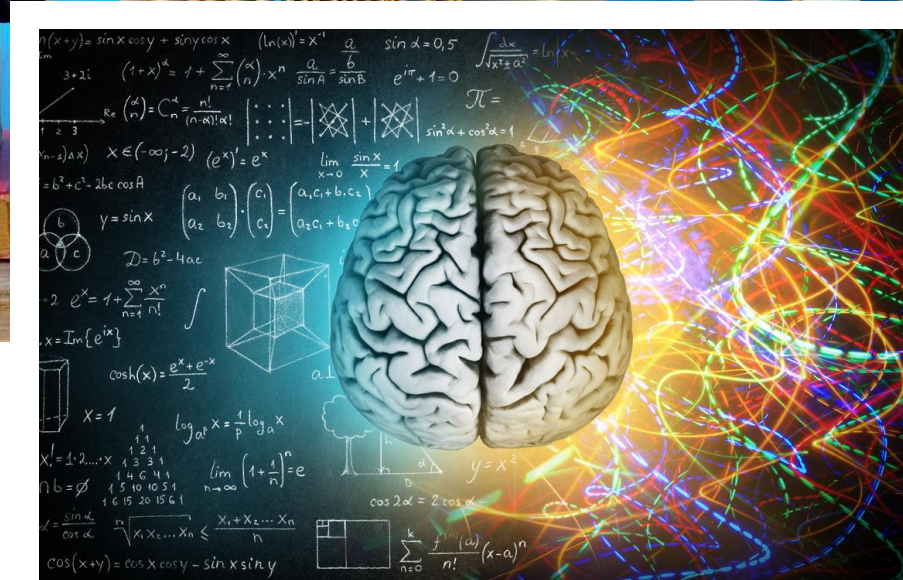




AGENDA

Agenda

- Welcome and Introduction
- The Science of Reading
- Phonemic and Phonological Awareness
- Phonics and decoding
- Fluency
- Comprehension
- Q&A and Conclusion



Introduction to The Science of Reading

- Define the Science of Reading.
- Discuss the evidence-based approach.
- Explain Scarborough's Reading Rope model.
- Introduce the Simple View of Reading.

What is the Science of Reading?

“The research that reading experts have conducted on how we learn to read. This body of knowledge, including research from the fields of education, linguistics, cognitive psychology, and neuroscience, has formed the basis of what we know to comprise effective reading instruction in that it is explicit, systematic, and offers many opportunities to respond.” (Lane, 2021)



The Reading Brain



"The brain processes every single letter and does not look at the whole word shape. Teaching letter to sound correspondence is therefore essential. It is the fastest way to acquire reading and comprehension."

Professor Stanislas Dehaene, Neuroscientist.

● Broca's Area

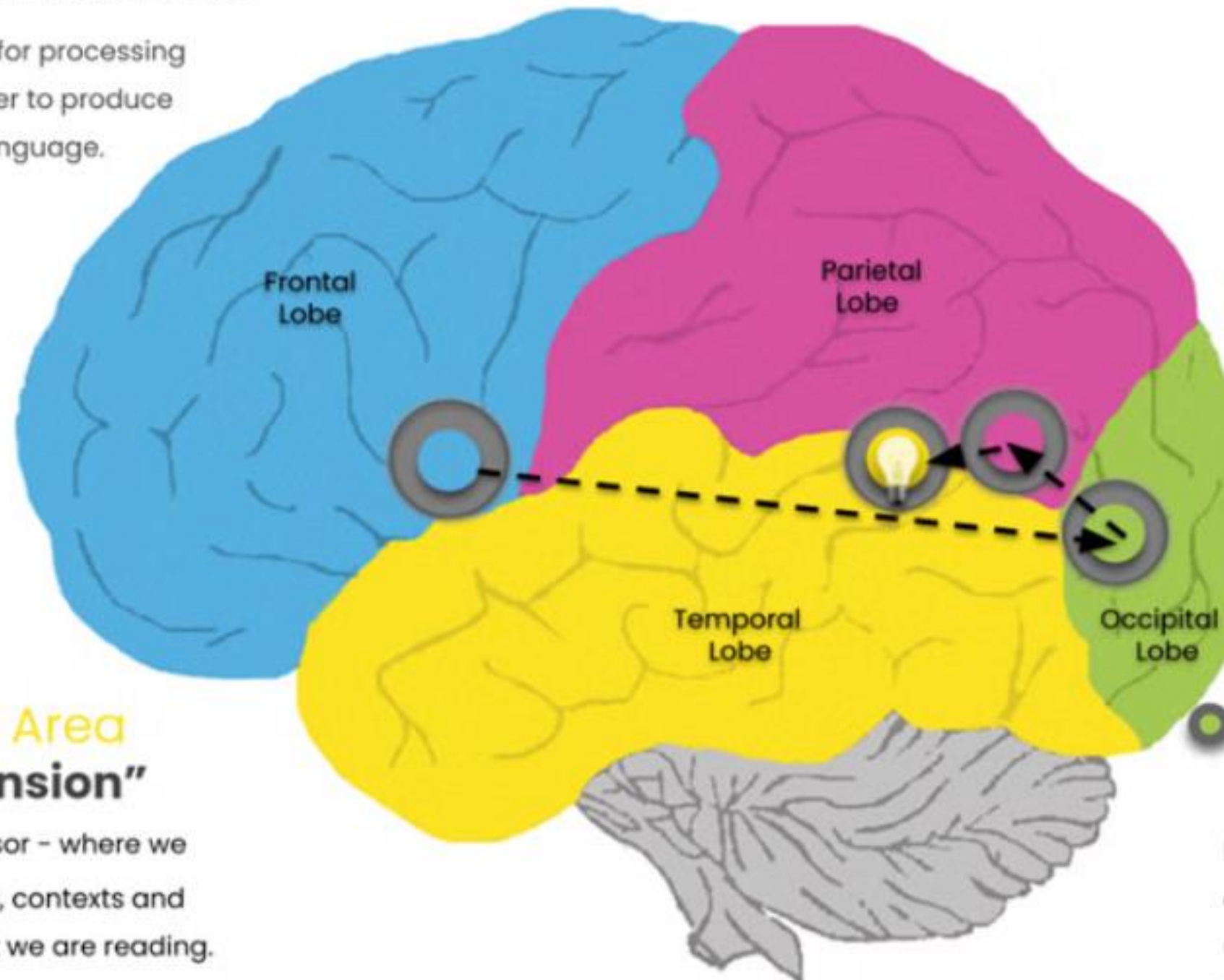
"Phonological Awareness"

Primarily responsible for processing speech sounds in order to produce spoken and written language.

● Angular Gyrus

"Phonics Chip"

Allows the reader to attach the sound (**phonological**) to the correct symbol (**grapheme**). This is where we connect the spoken word to the written word.



● Wernicke's Area

"Comprehension"

The meaning processor - where we store word meanings, contexts and connotations of what we are reading.

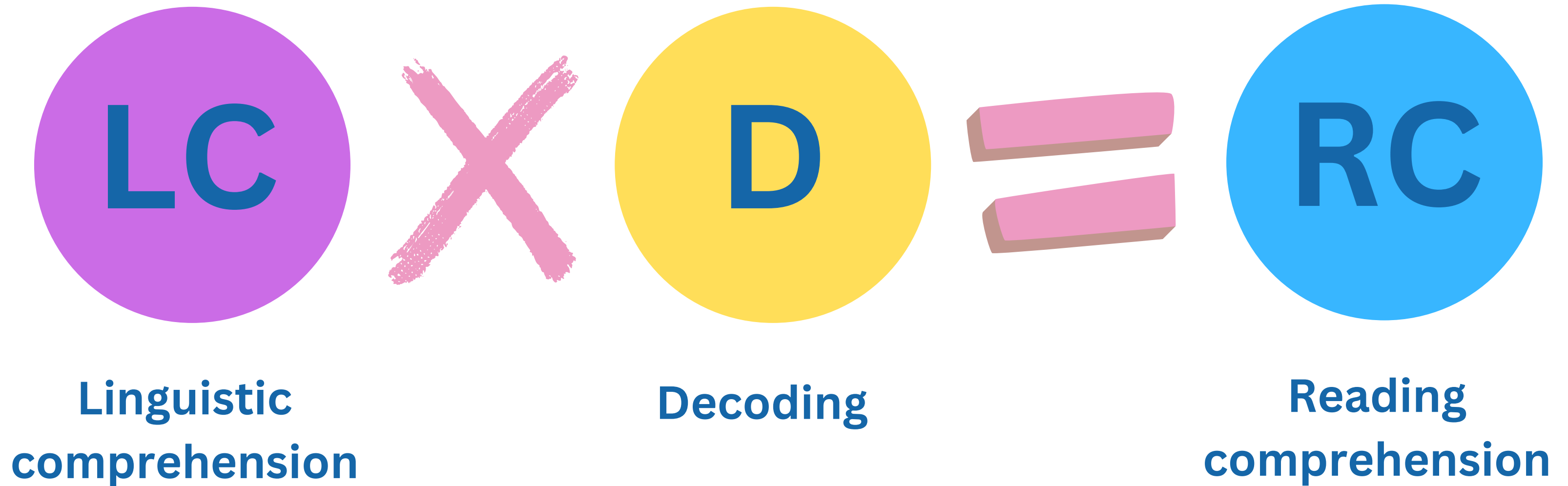
● Visual Word Form Area

"Letter Box"

Primarily responsible for the rapid, effortless recognition of graphemes, rime units, syllables and whole words. The '**orthographic processor**' develops progressively when learning to read in order to develop a sight word vocabulary.

The Simple View of Reading

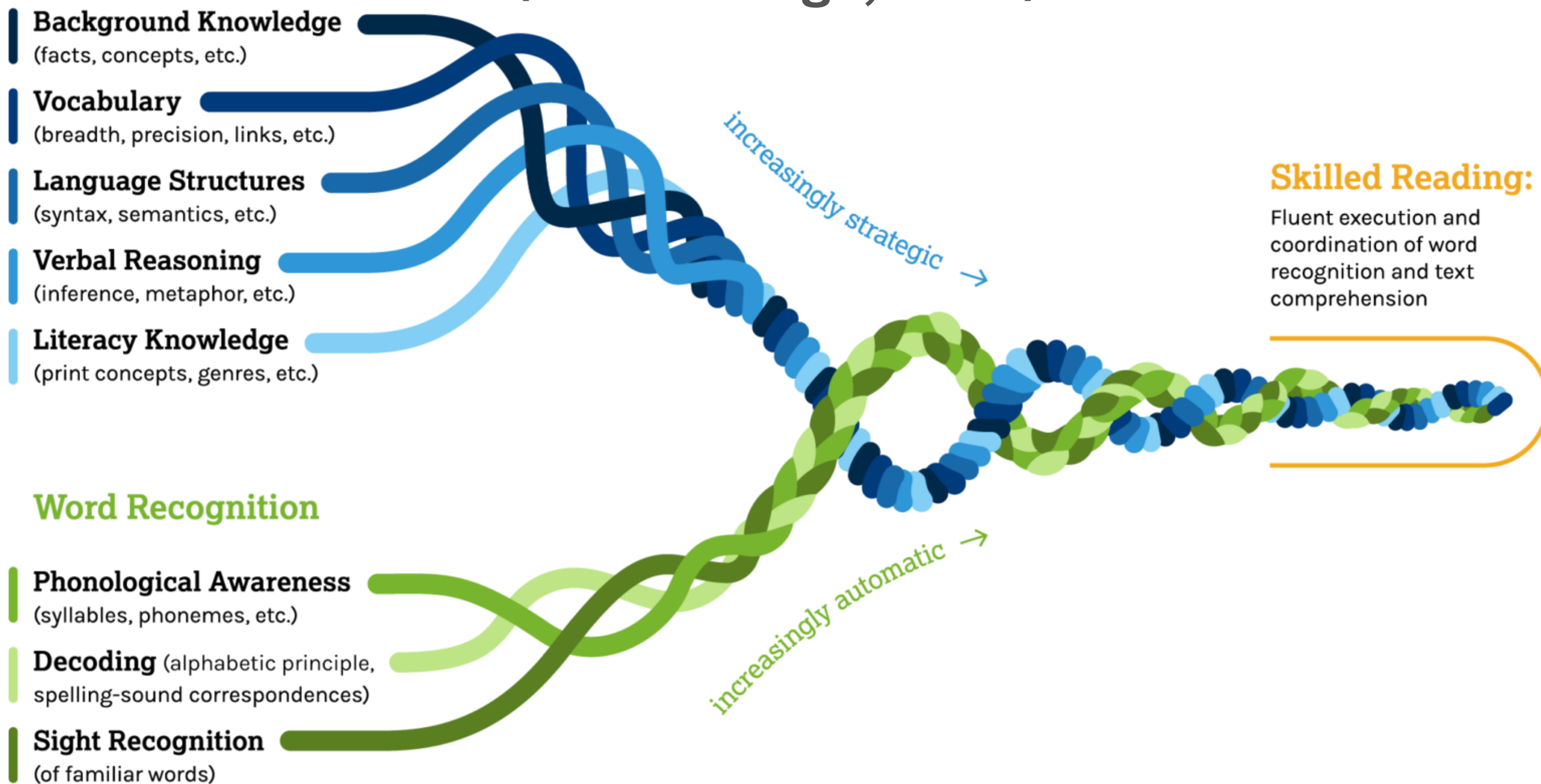
(Gough and Tunmer,
1986)



The Reading Rope

Language Comprehension

(Scarborough, 2001)



Scarborough's Reading Rope

Language Comprehension **LC**

Background Knowledge
facts, concepts, etc.

Vocabulary
breadth, precision, links, etc.

Language Structures
syntax, semantics, etc.

Verbal Reasoning
inference, metaphor, etc.

Literacy Knowledge
print concepts, genres, etc.

Word Recognition **D**

Phonological Awareness
syllables, phonemes, etc.

Decoding
alphabetic principle,
letter-sound correspondences

Sight Recognition
of familiar words

INCREASINGLY STRATEGIC

Skilled Reading **RC**

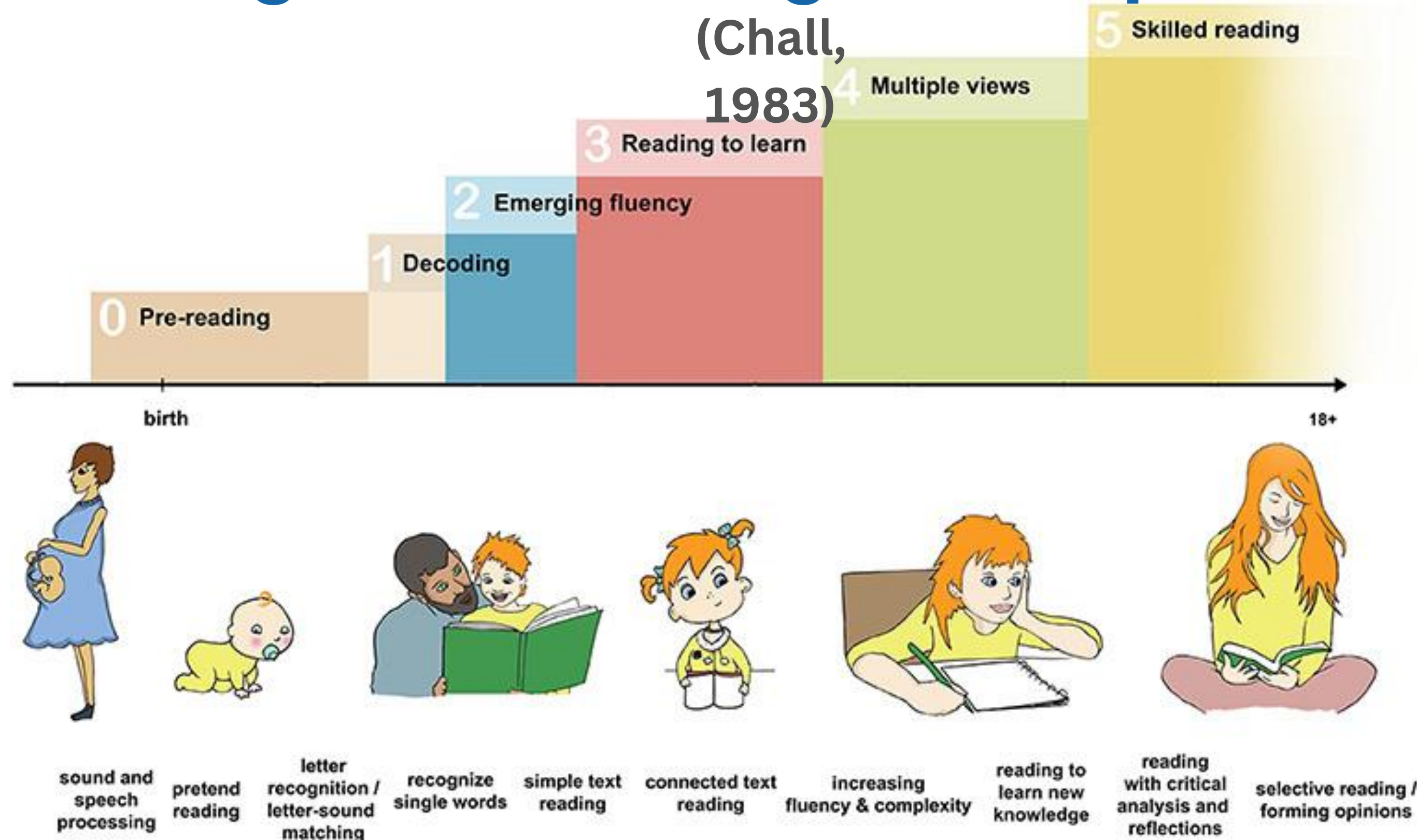
INCREASINGLY AUTOMATIC

LC × **D** = **RC** Fluent word recognition and comprehension.

This interpretation of the Reading Rope incorporates Gough & Tunmer's (1986) Simple View of Reading.

Stages of Reading Development

(Chall,
1983)





Phonemic and Phonological Awareness

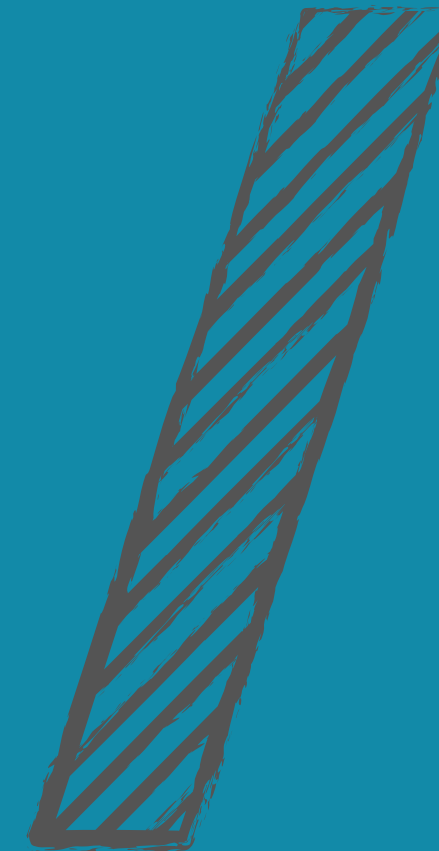
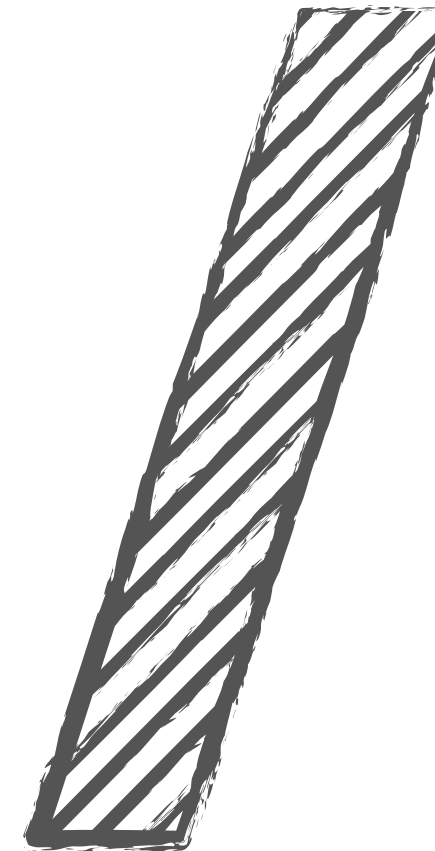
- The importance of phonological awareness to beginning reading success
- Documented effective principles that should guide phonological awareness instruction

What is phonemic awareness?

It is “the ability to notice, think about and work with the individual sounds in words” (Partnership for Reading, 2003).

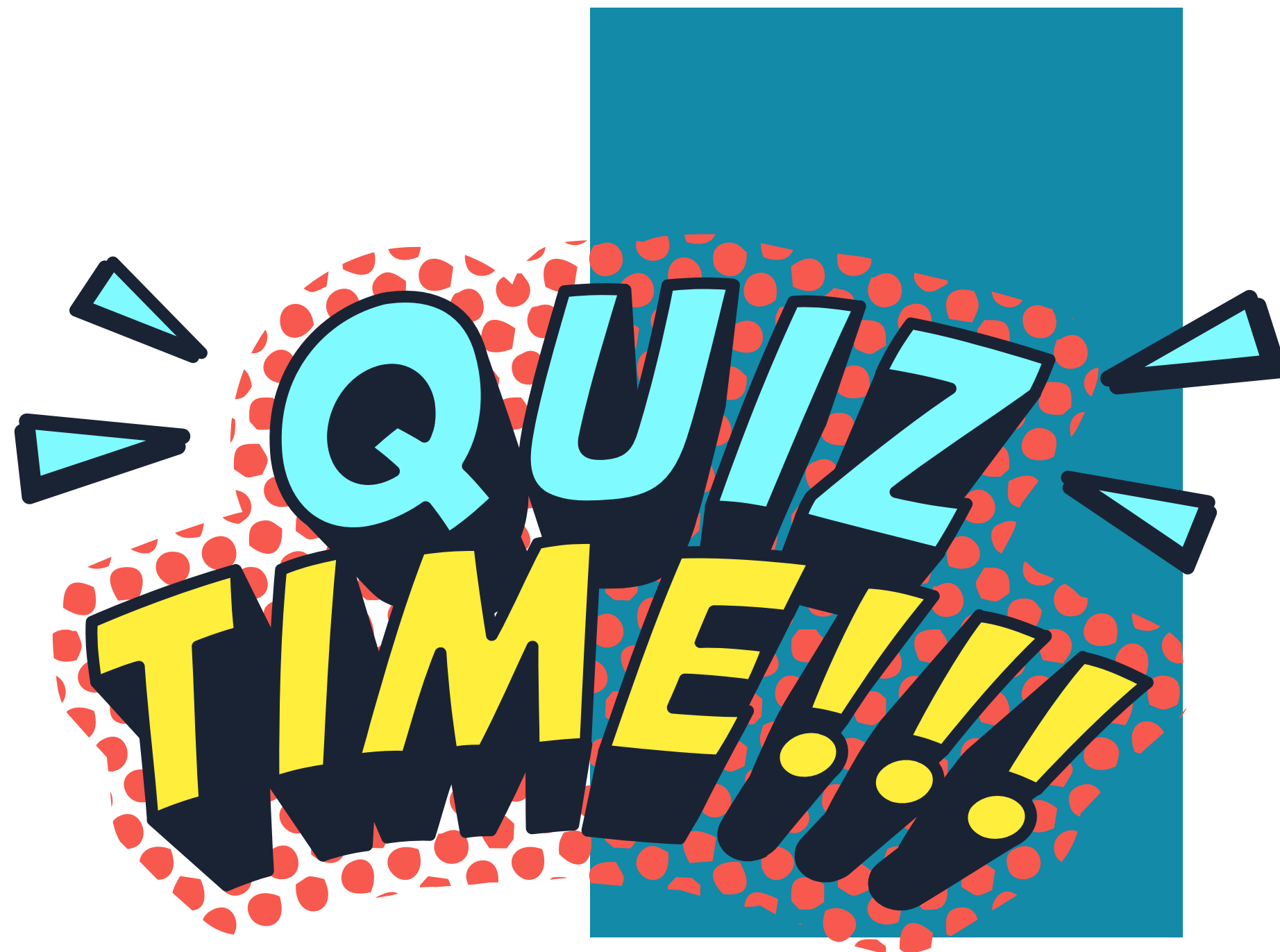
A phoneme is a speech sound, not an alphabet letter. Although there is an important connection between the two. Speech sounds in print are represented by using virgules //.

Educators’ own phonemic awareness skills will affect their ability to competently assess and teach these skills to their students.



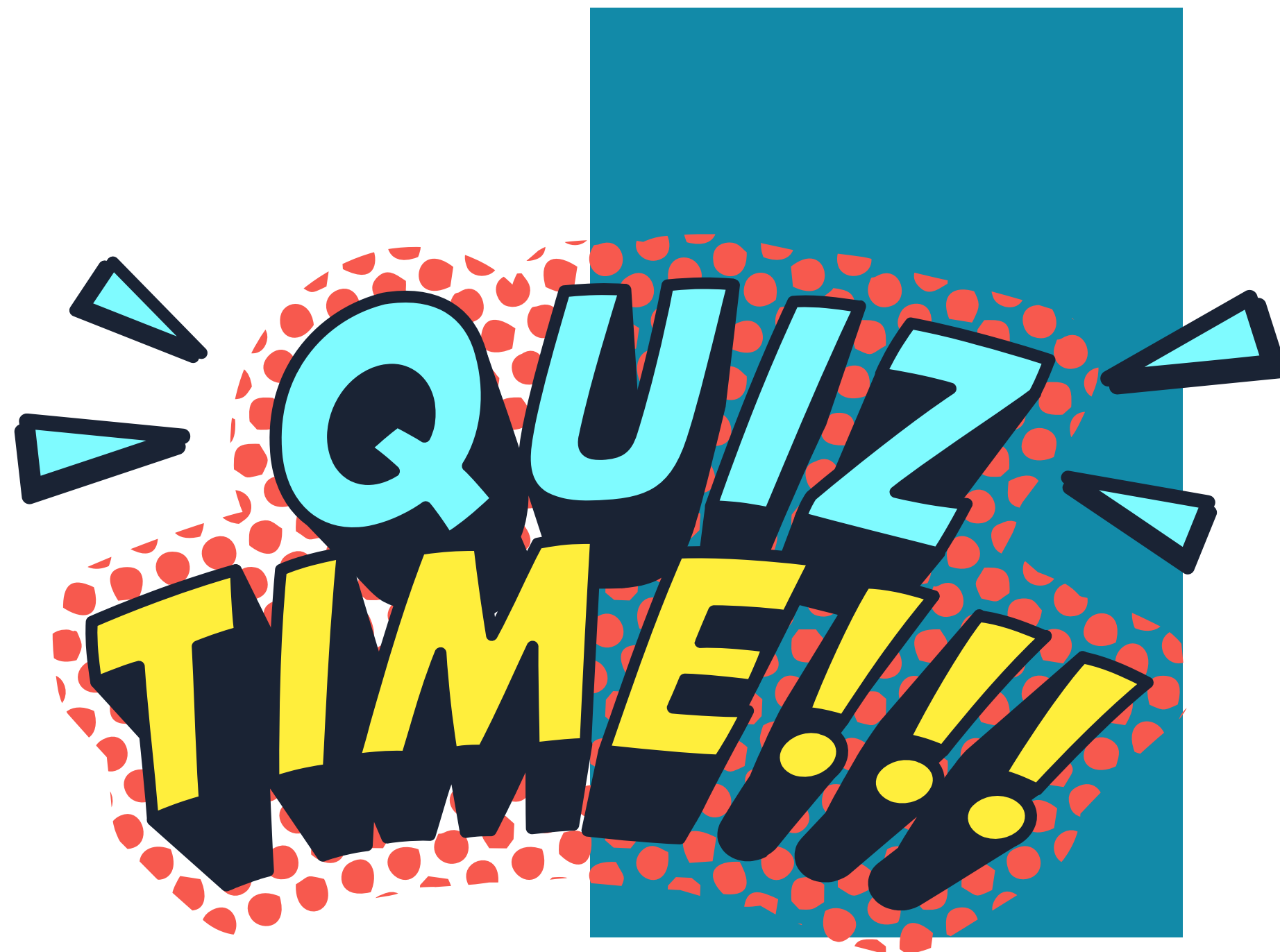
How many sounds are in each
of these words?

chop



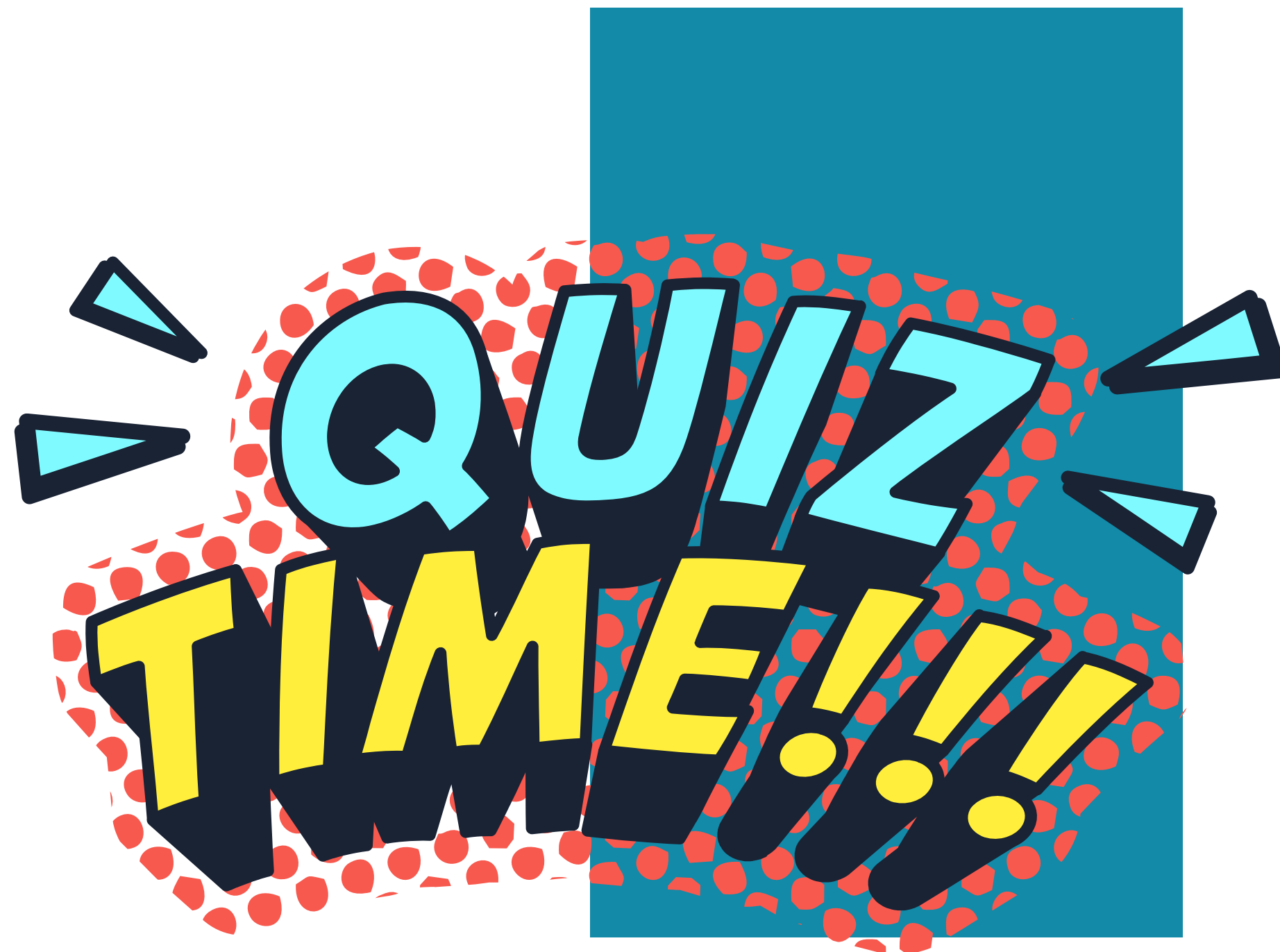
How many sounds are in each
of these words?

think



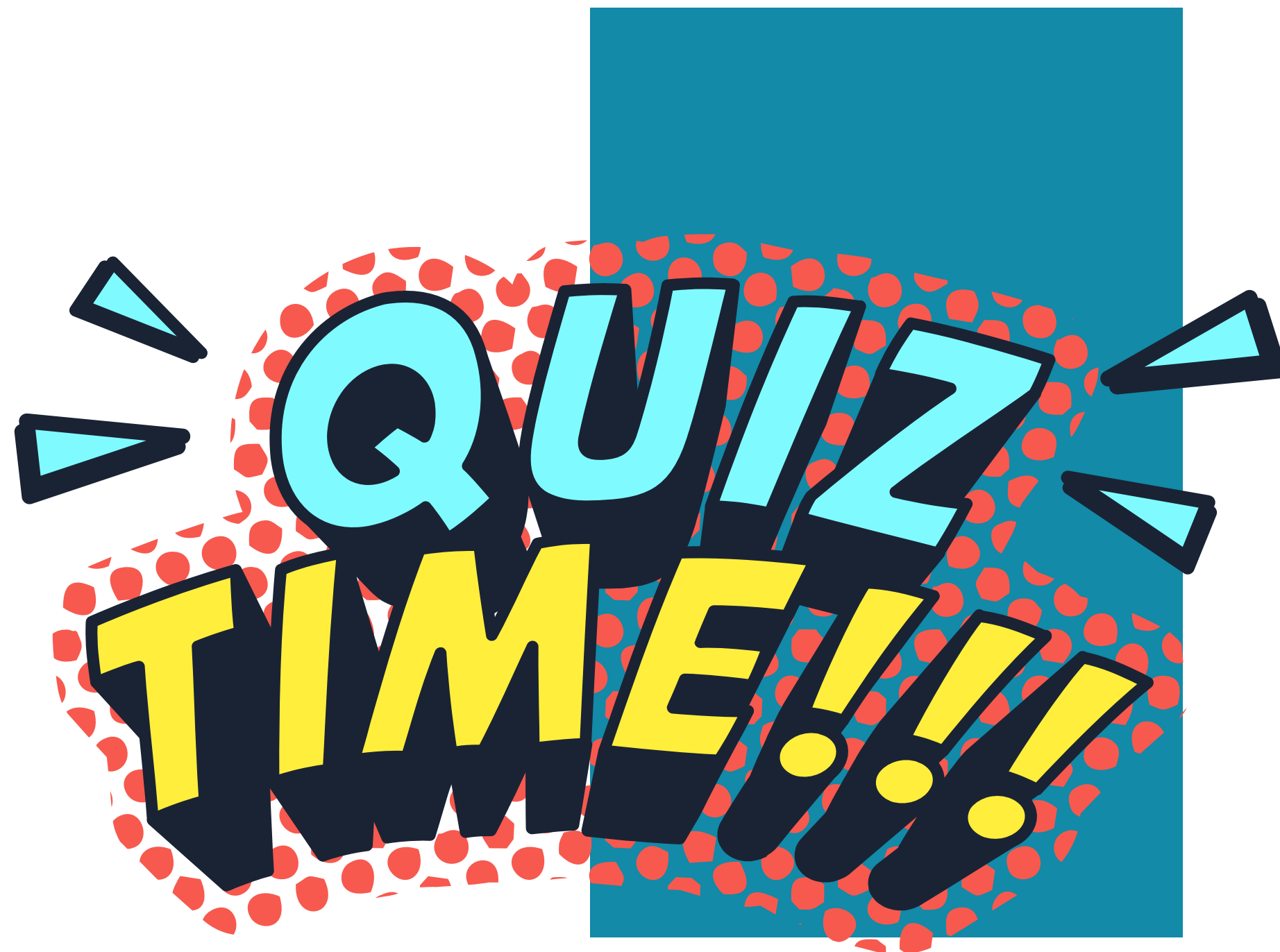
How many sounds are in each
of these words?

judge



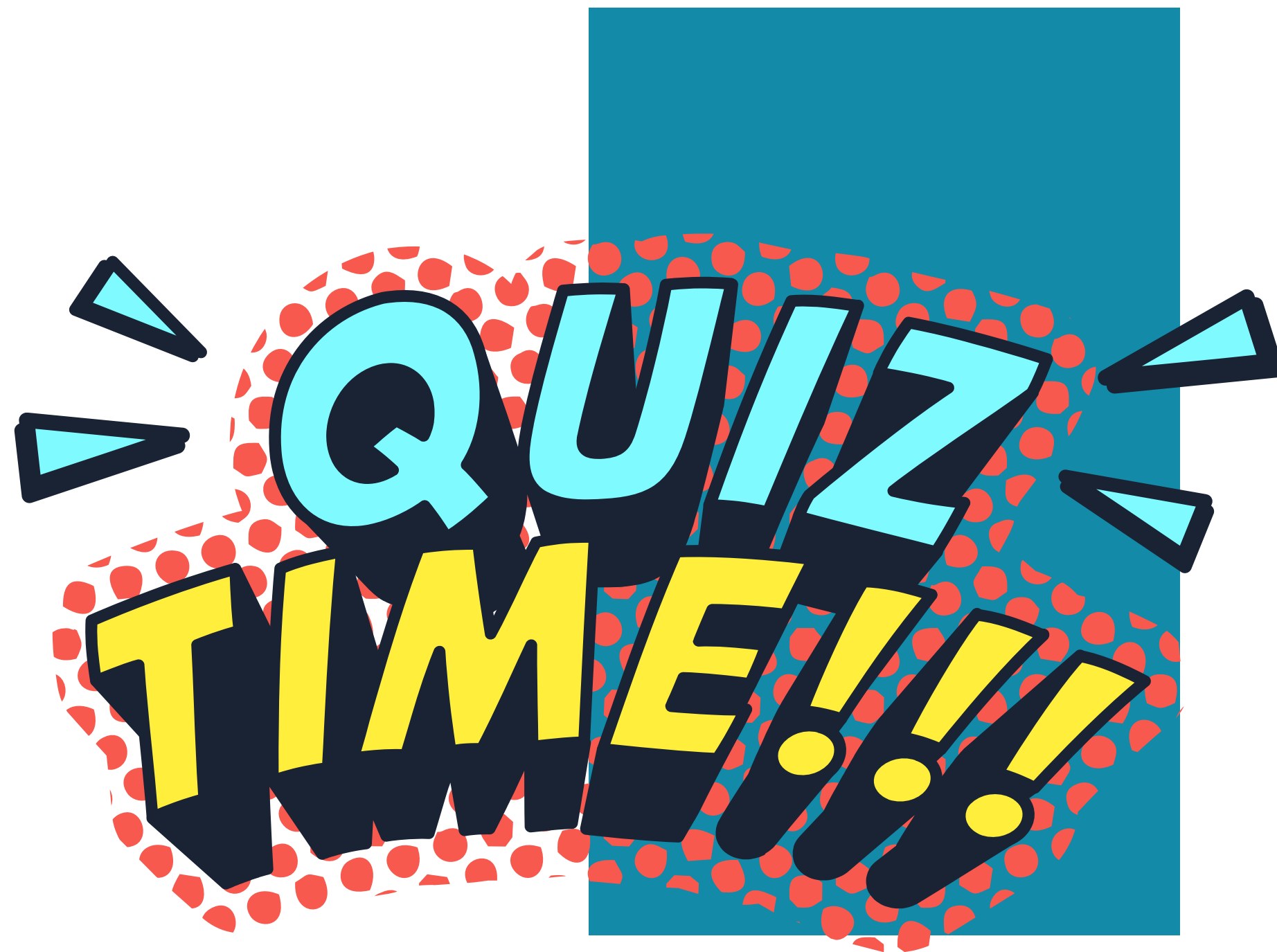
How many sounds are in each
of these words?

flash



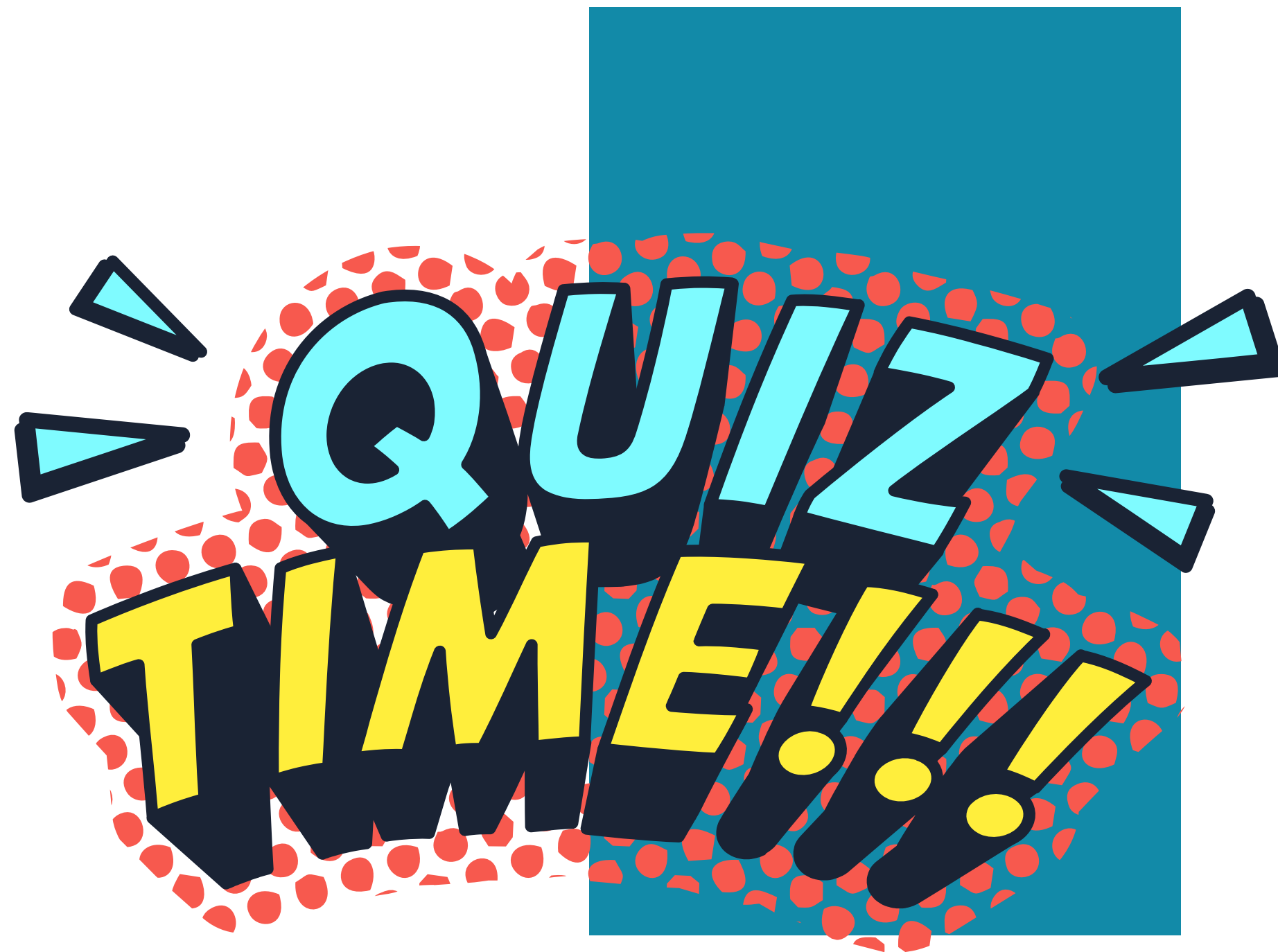
How many sounds are in each
of these words?

stripe



How many sounds are in each
of these words?

eight



Vocalization

- Voiced_ Vocal cords are activated during the sound production.
- Unvoiced_ Vocal cords are not activated during the sound production

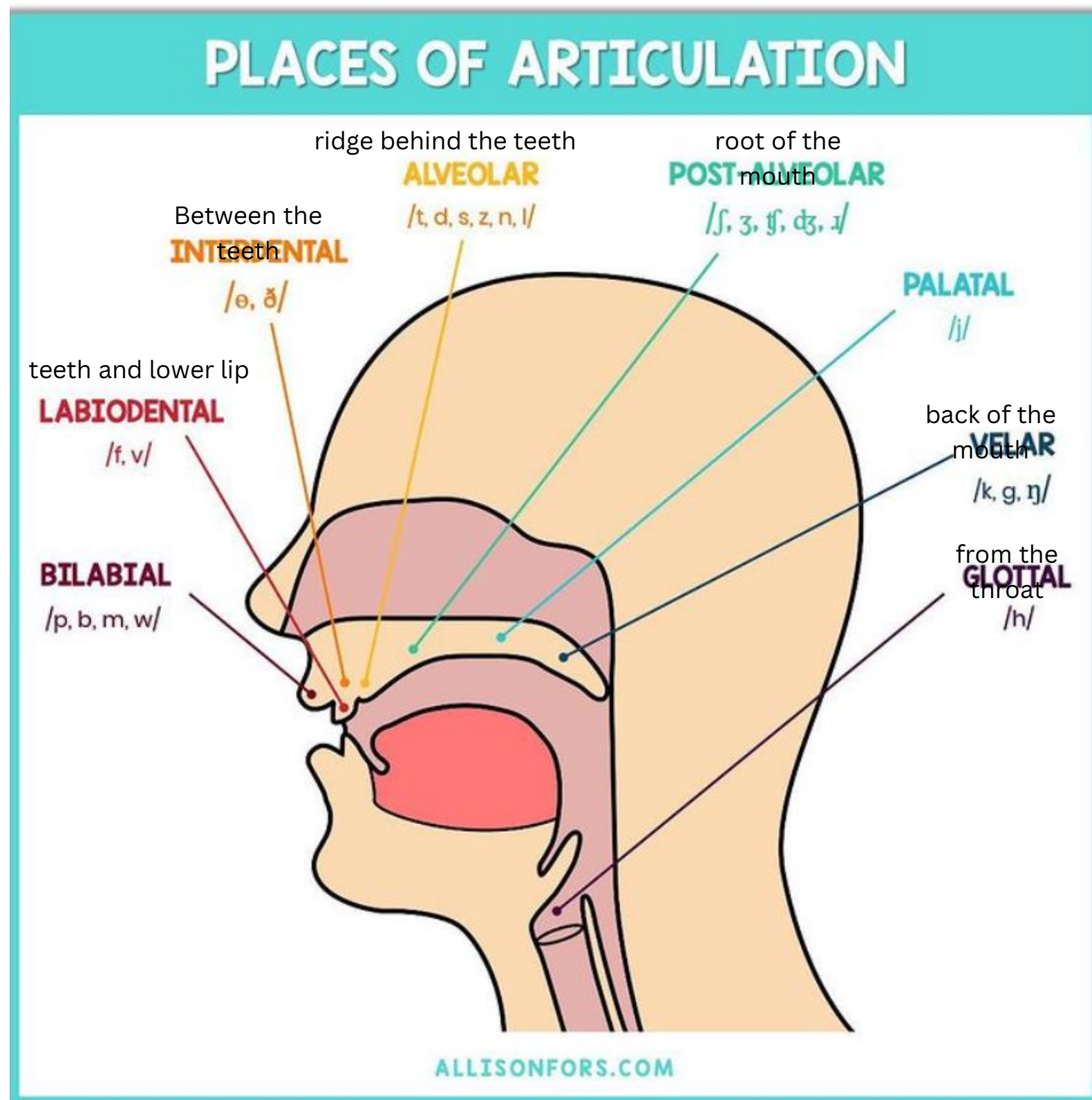


Vowels and consonants

- Vowels are open and voiced.*
- Consonants close the mouth. Their sound is blocked or partially blocked by the tongue, teeth or lips.*



Places of articulation_ Where is the obstruction?



- Both lips_ /m/ /b/ /p/
- Teeth and lower lip_ /f/ /v/
- Between the teeth_ /θ/ /ð/
- Ridge behind the teeth_ /d/ /l/ /n/ /r/ /s/ /t/ /z/
- Root of the mouth /ch/ /j/ /sh/ /y/ /zh/
- Back of the mouth /g/ /k/ /ng/ /w/
- From the throat /h/ /hw/

Categorizing consonants

- Continuant : the sound is a prolonged speech sound
- Clipped: the sound is not prolonged



Categorizing consonants

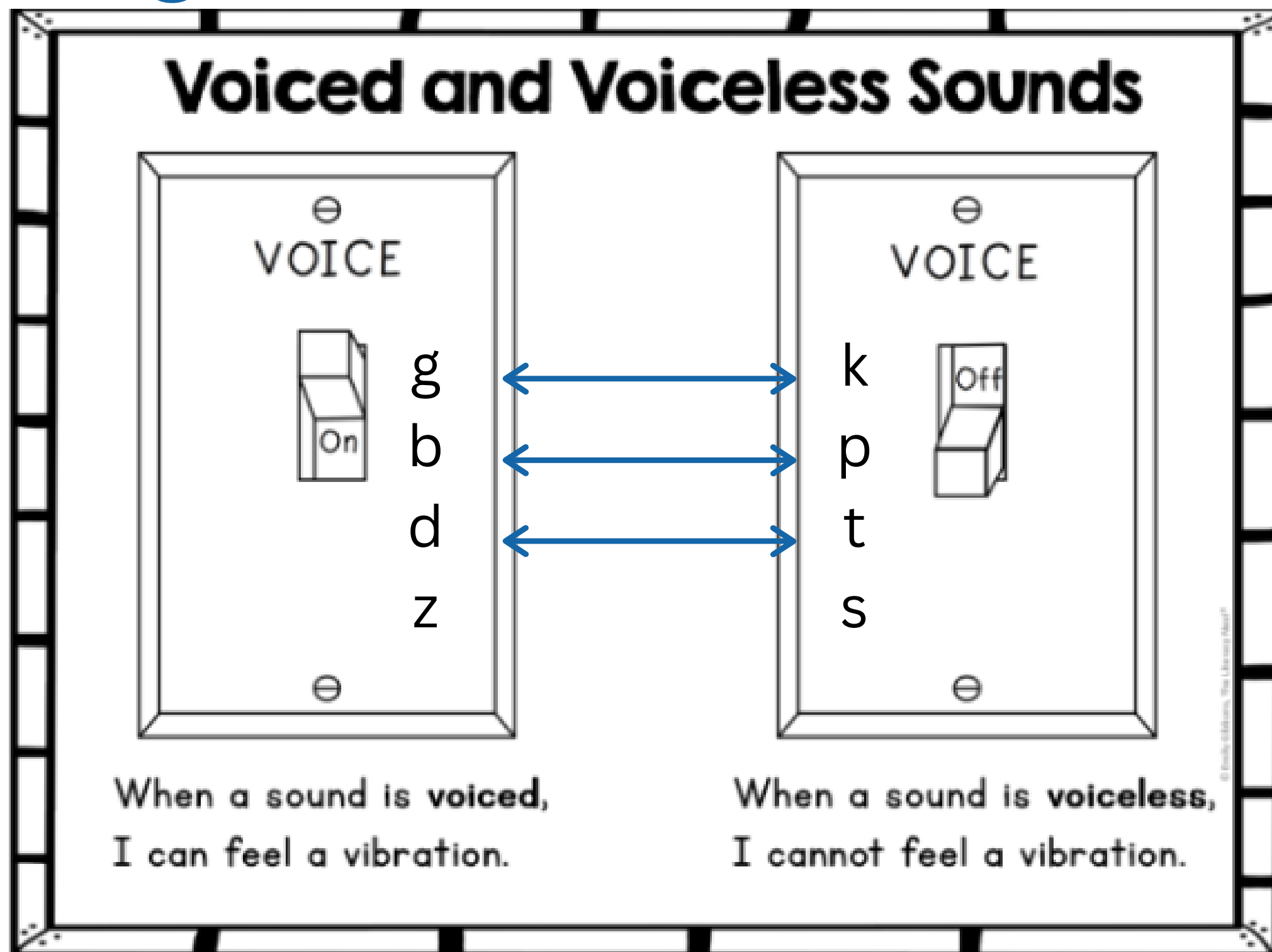
- Blocked and Continuant : the steady position of the tongue, teeth or lips during the entire production of a sound.
- Partially blocked and clipped: a released position of the tongue or lips during the production of a sound.
- Unblocked and aspirated: no obstruction by the tongue, teeth or lips during the production of the sound.



Consonant phonemes



Consonant phonemes: Cognates

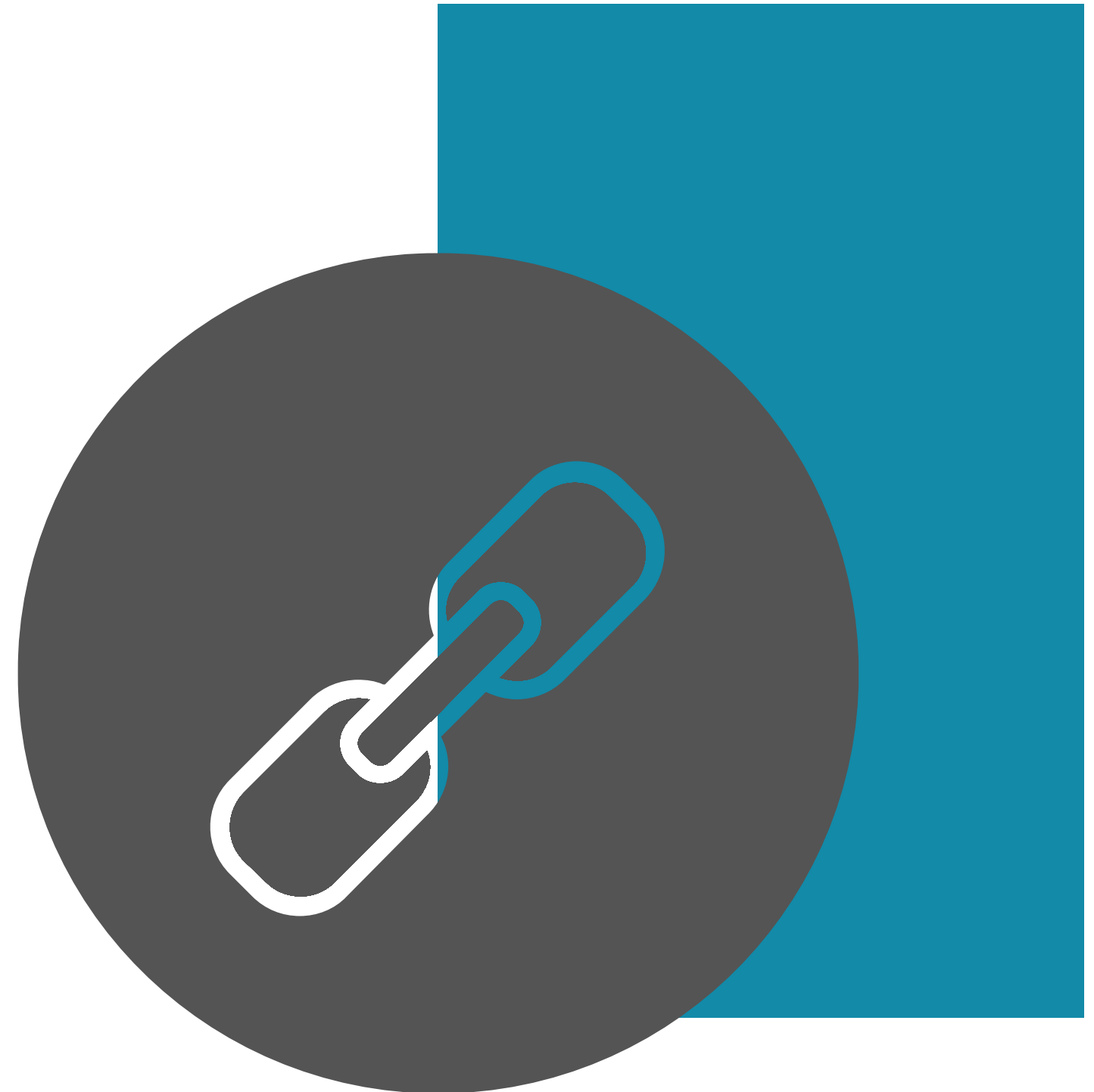


Coarticulation

Phenomenon of word pronunciation in which adjacent sounds often are spoken in such a way that one phoneme seems to overlap, is changed by, and/or modifies another.

pits_

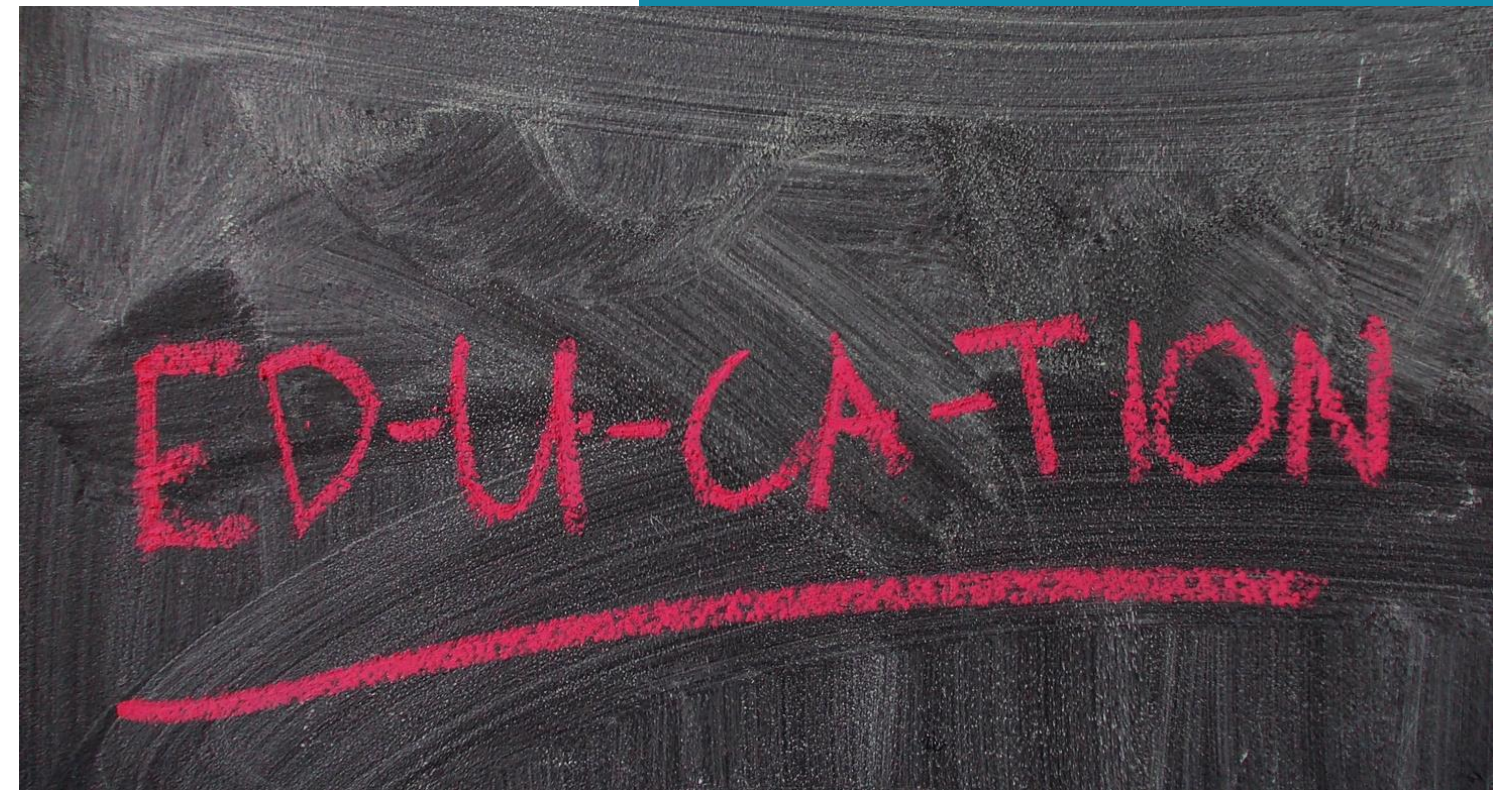
hugs_



What is phonological awareness?

“Phonological awareness is the ability to recognize and manipulate the spoken parts of words, including syllables, onset-rime, and phonemes.”

- syllables_ sim - ple
- onset-rime_ /b/ /room/
- phonemes_ /j/ /u/ /m/ /p/



Phonological Awareness Components on the linguistic hierarchy

Phonemes /d/ /o/ /g/, /k/ /a/ /t/

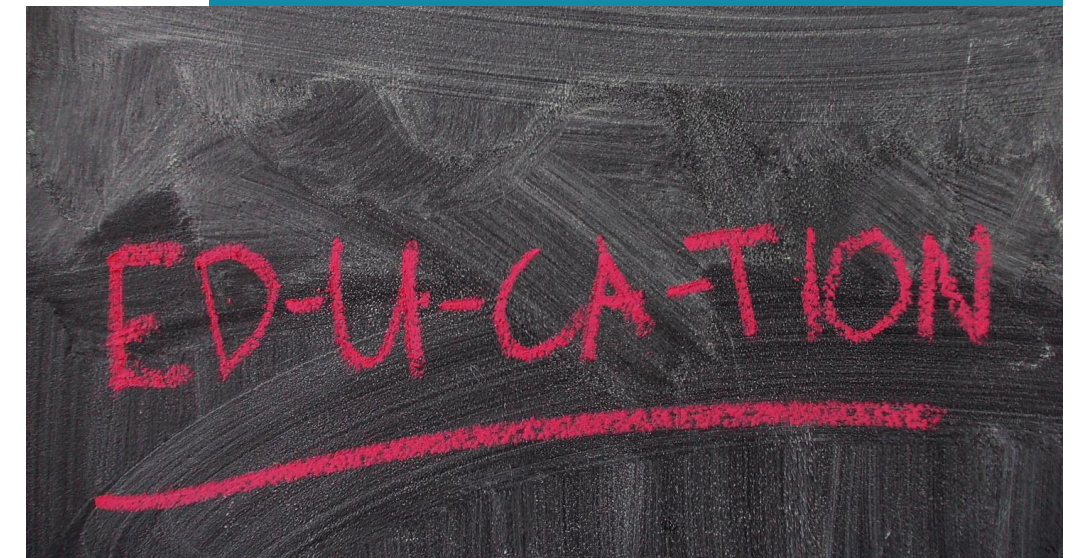
Onset-rime h-orse, g-ame, r-ain, sh-ip

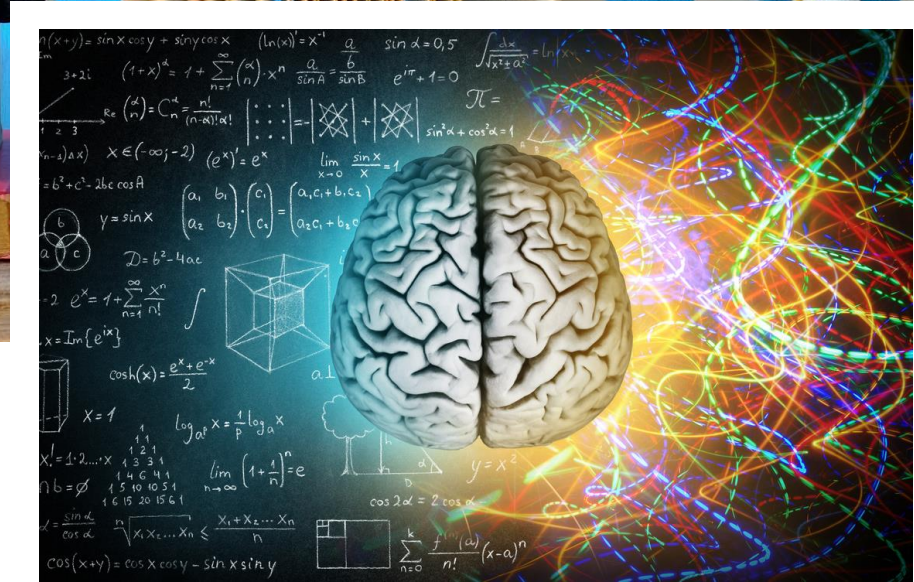
Syllables hot - dog, coo - kie, Sep-tem-ber, moose

Word Boundaries I - like - running - and - jumping

Resources / Programs

- Heggerty (from preK)
- Equipped for reading success by Kilpatrick (from 1st grade)
- Phonological Awareness Assessment tools and Strategies by Zgonc (from preschool)
- Reading Rockets website
- Florida Center for Reading Research





Phonics and decoding

- The importance of phonics instruction.
- Effective multisensory phonics strategies.
- Practical activities.

Phonics

- graphemes_ letters or letter combinations in written language
- phonemes_ the approximately 44 sounds in English spoken language
- phonology_ how letters represent sounds
- orthography_ words in print



Phonics

- decoding_ reading a word
- encoding_ spelling a word

hat /h/ /a/ /t/



Letter card dialogues

Find the letter that says /i/, name it, and place it.

Find the letter that says /t/, name it, and place it after the letter i.

What does it say?

If that says in, make it say tin.

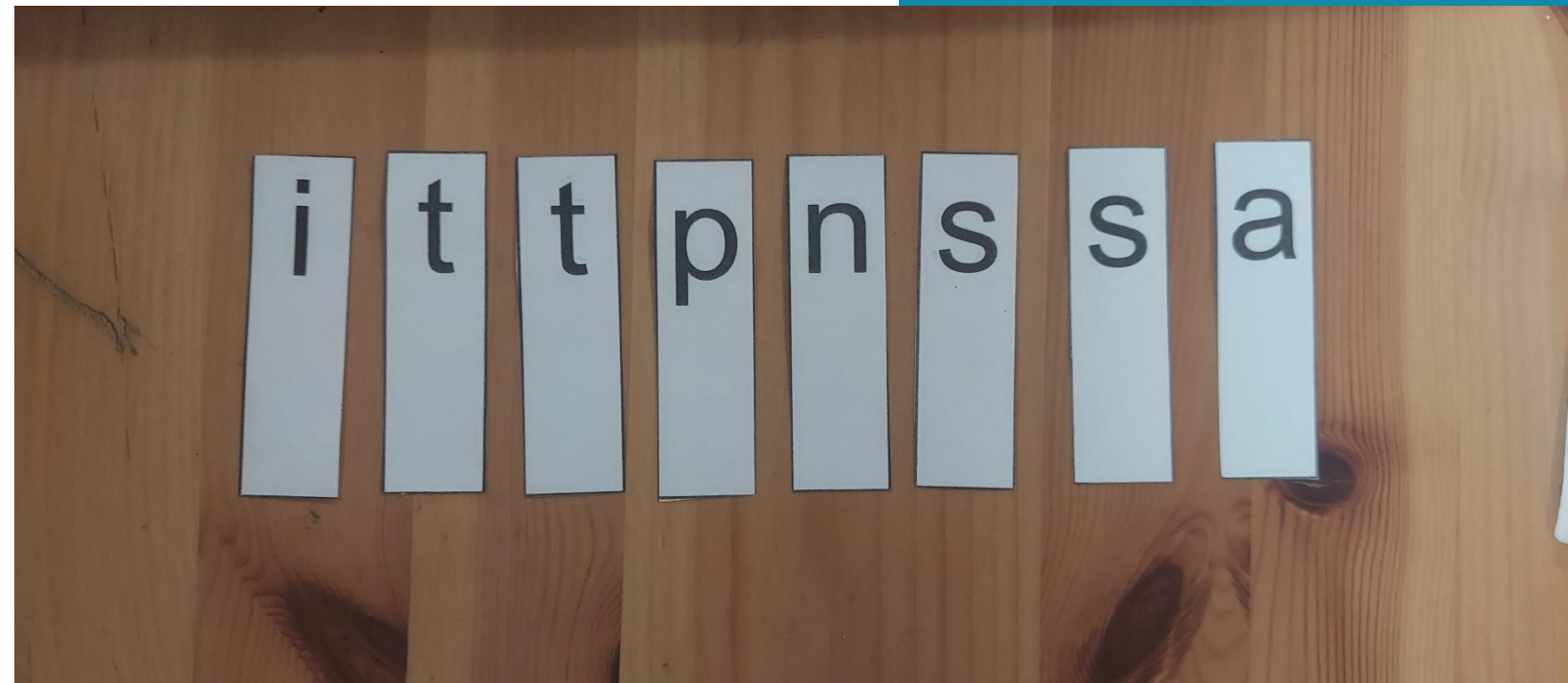
If that says tin, make it say tip.

If that says tip, make it say nip.

If that says nip, make it say nap.

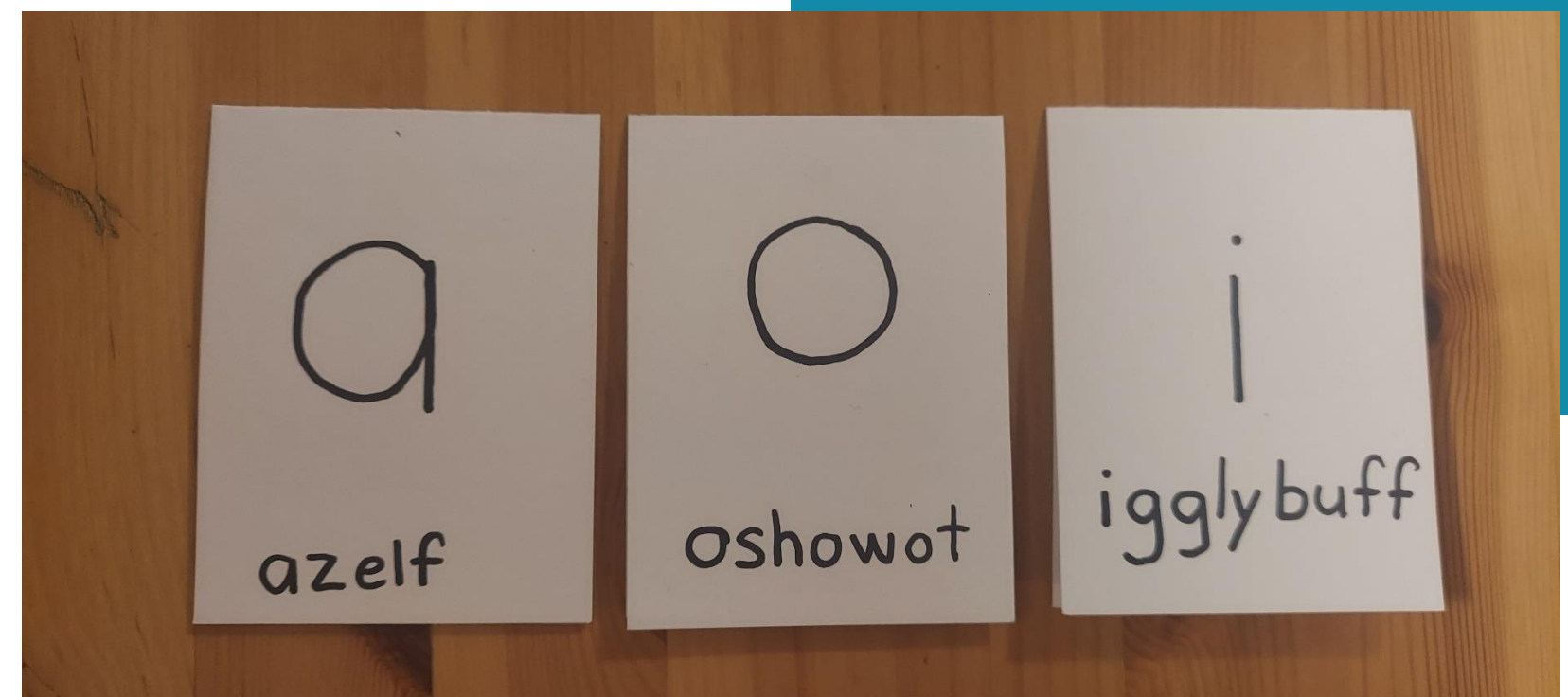
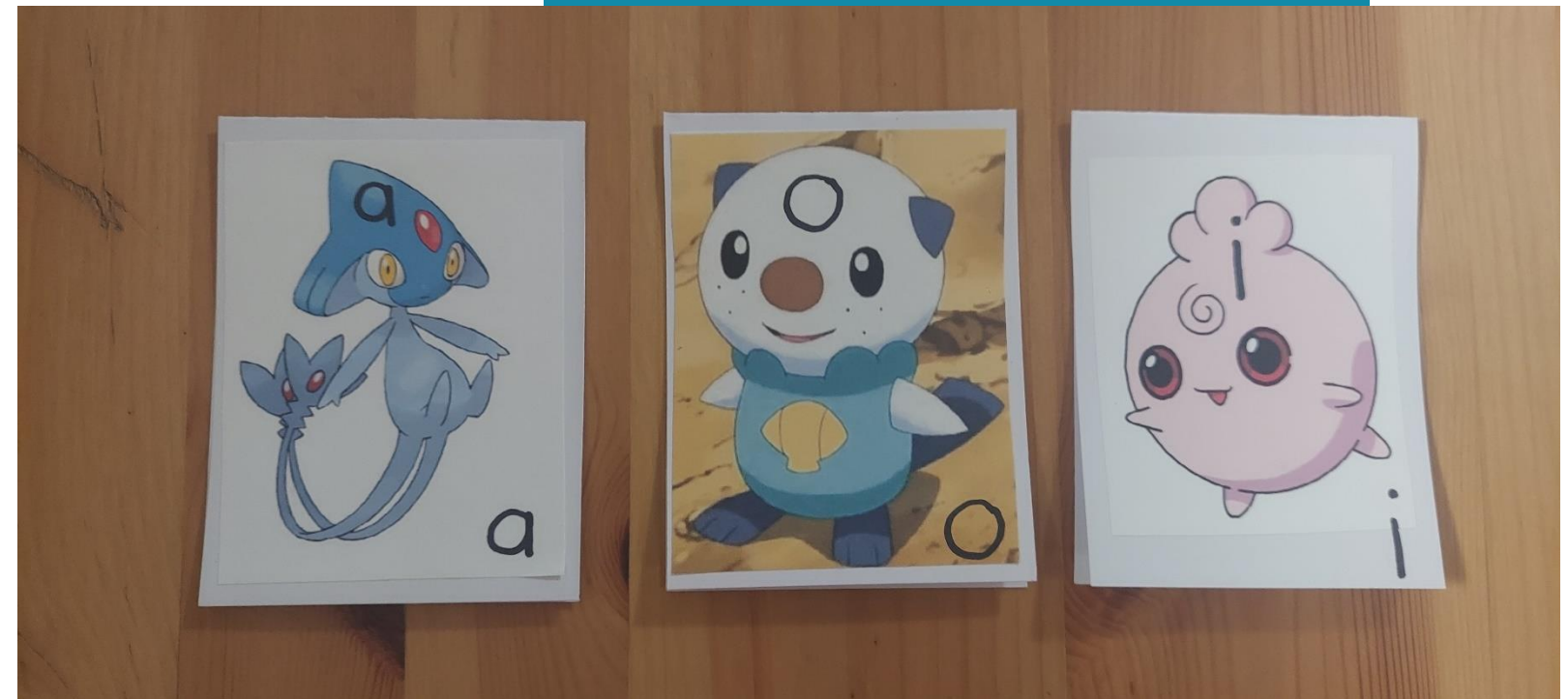
If that says nap, make it say snap.

If that says snap, make it say snip.



Review short vowel sounds

- Find out what your students like, make the vowel cards interesting to them
- T: “Remember that vowels are open and voiced”
- S: “A says /a/ like azelf, O says /o/ like Oshowot, I says /i/ like igglybuff”



Backing up procedure

- Find the vowel in the syllable.
- Is this a closed or an open syllable?
- If it is a closed syllable, the vowel will be short.
If the syllable is open, the vowel will be long.
- Sound out the vowel and each consecutive consonant.
- Add the sounds before the vowel to sound the word.

plump

stint



Spelling

The steps in teaching spelling are as follows:

- T: “Watch my mouth and repeat jug”
- Student repeats
- T: “Segment jug”
- Student segments the word /j/ /u/ /g/
- T: “Name the letters as you write jug”
- Student writes and names the letters
- T: “Check for spelling”



II. Spelling

You can go to [Magicschool.ai](https://magicschool.ai) to create a list of words to dictate using the sounds you taught your student. Type in “Please give me a word list that combines the following letters: c o a d g m l h t i j k p ch u b r f n e s sh th w wh y v x z”

dog / cat / hat / log / jam / pig / hut / bug / mat /
jug / fox / pen / web / hit / gum / rod / fan / vex/
zip



IV. Nonphonetic words

Point out the letter “that’s not behaving as it should”.

heart





Fluency

- Fluency and its role in reading.
- Strategies for improving reading fluency.
- Practice fluency-building activities

Fluency

Fluency is “the ability to read a text accurately and quickly, recognize words, and gain meaning from text” (Partnership for Reading, p. 22, 2003).

Effortful accuracy ---- Reliable accuracy ----- Word automaticity ---- Basic reading fluency

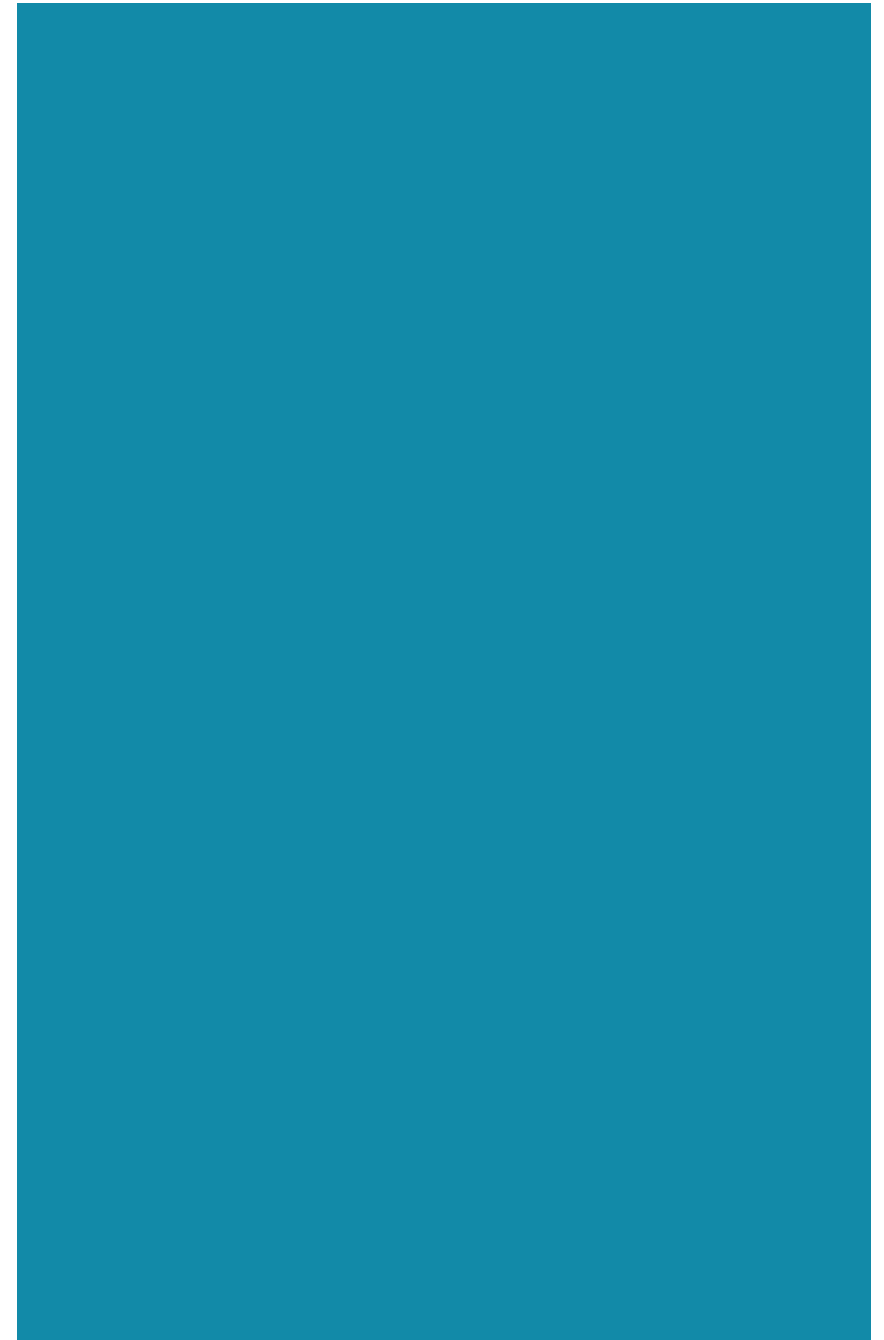


Goal of fluency practice

Fluency practice leads students to:

Decoding effortlessly

Attending to meaning

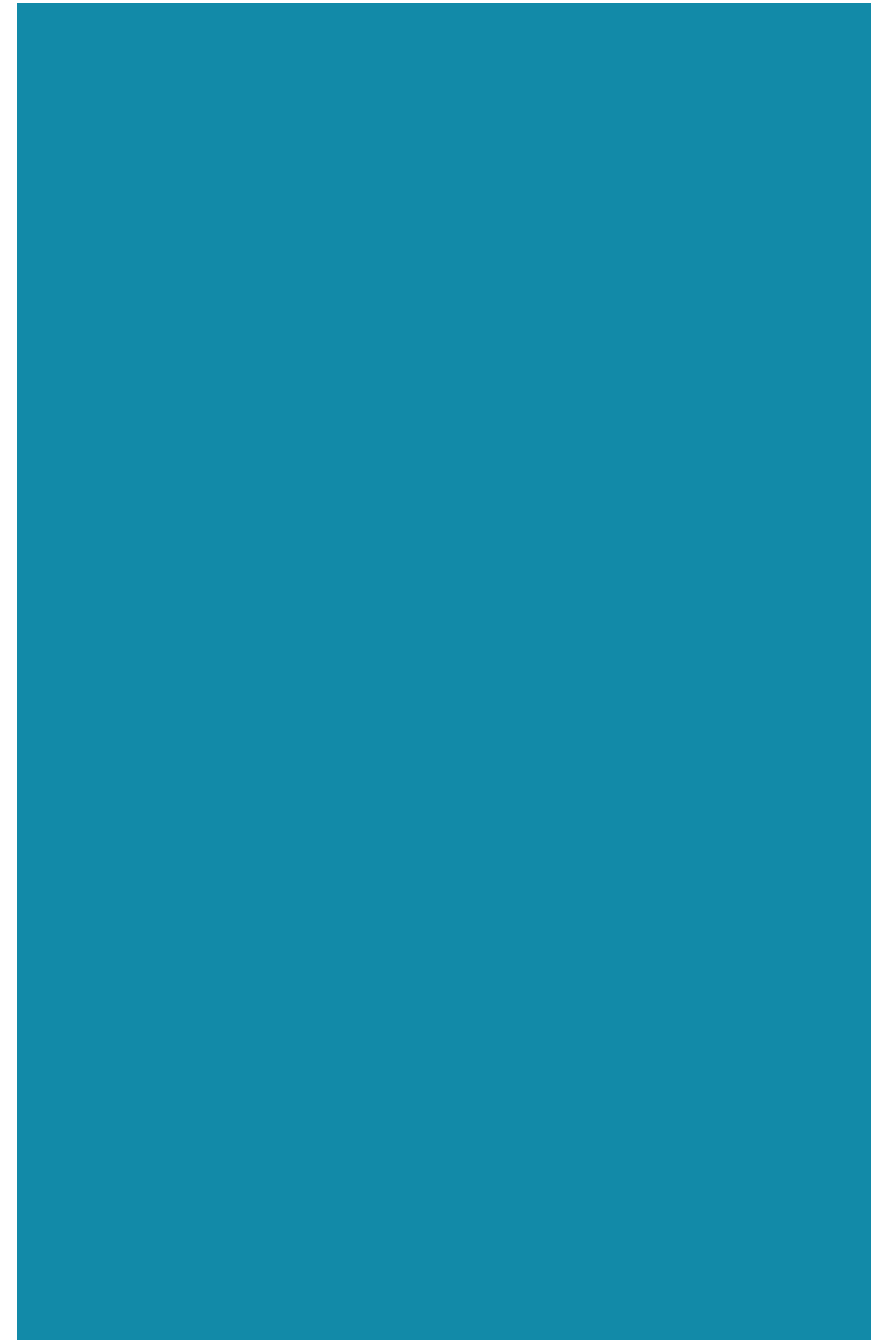


Important skills for Fluent Reading

Accurate decoding

Instant word recognition

Prosody



Fluency instruction

Repeated readings

Same text

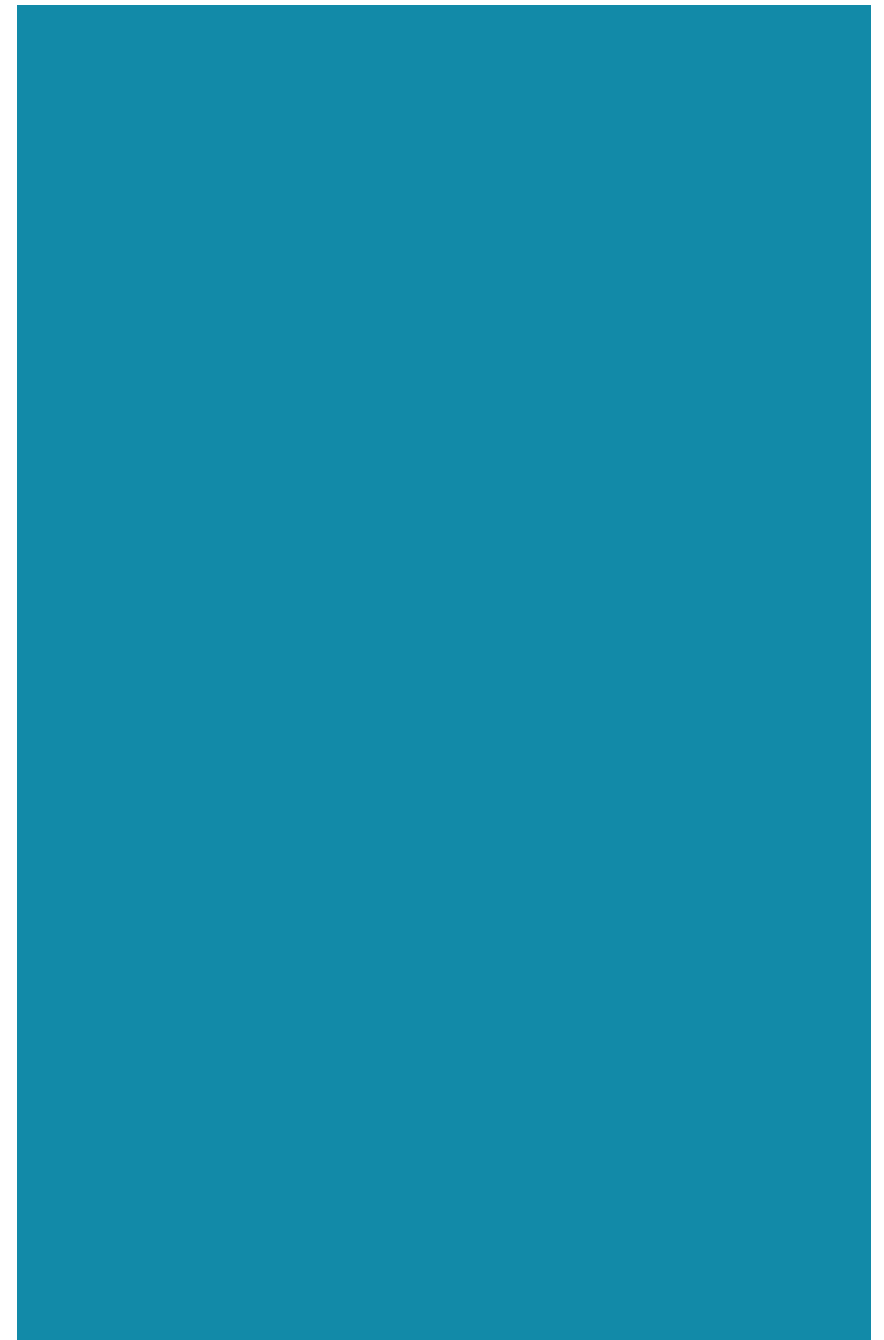


Reading with a different focus

First reading: accuracy / check for comprehension

Second reading: attention to punctuation and intonation

Third reading: Read with attention to phrasing



Practice punctuation with the alphabet

ABCD? EFG. HI? JKL. MN! OPQR. STU? VWXY. Z!

ABC. DEF! G,HIJ? KLMN. OP! Q,RST. UV? WXYZ!

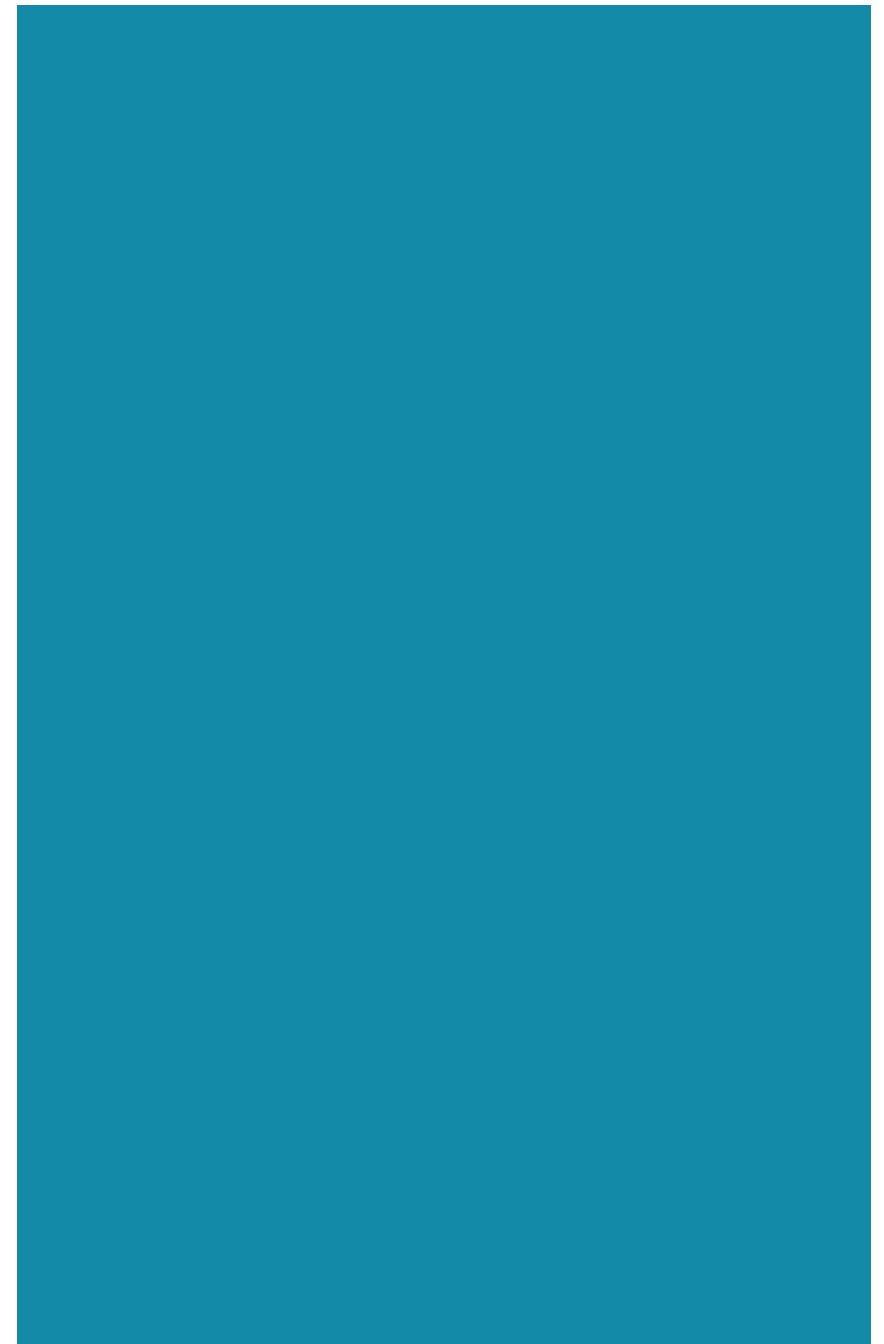


Reading with emphasis

Birds fly.

Birds fly!

Birds fly?



Practice phrasing

ABCDE FGHI KLMN OPQ
RSTUVW XYZ

AB CDEF GHIJ KLMN ST
UVWX YZ



Rapid Word Charts

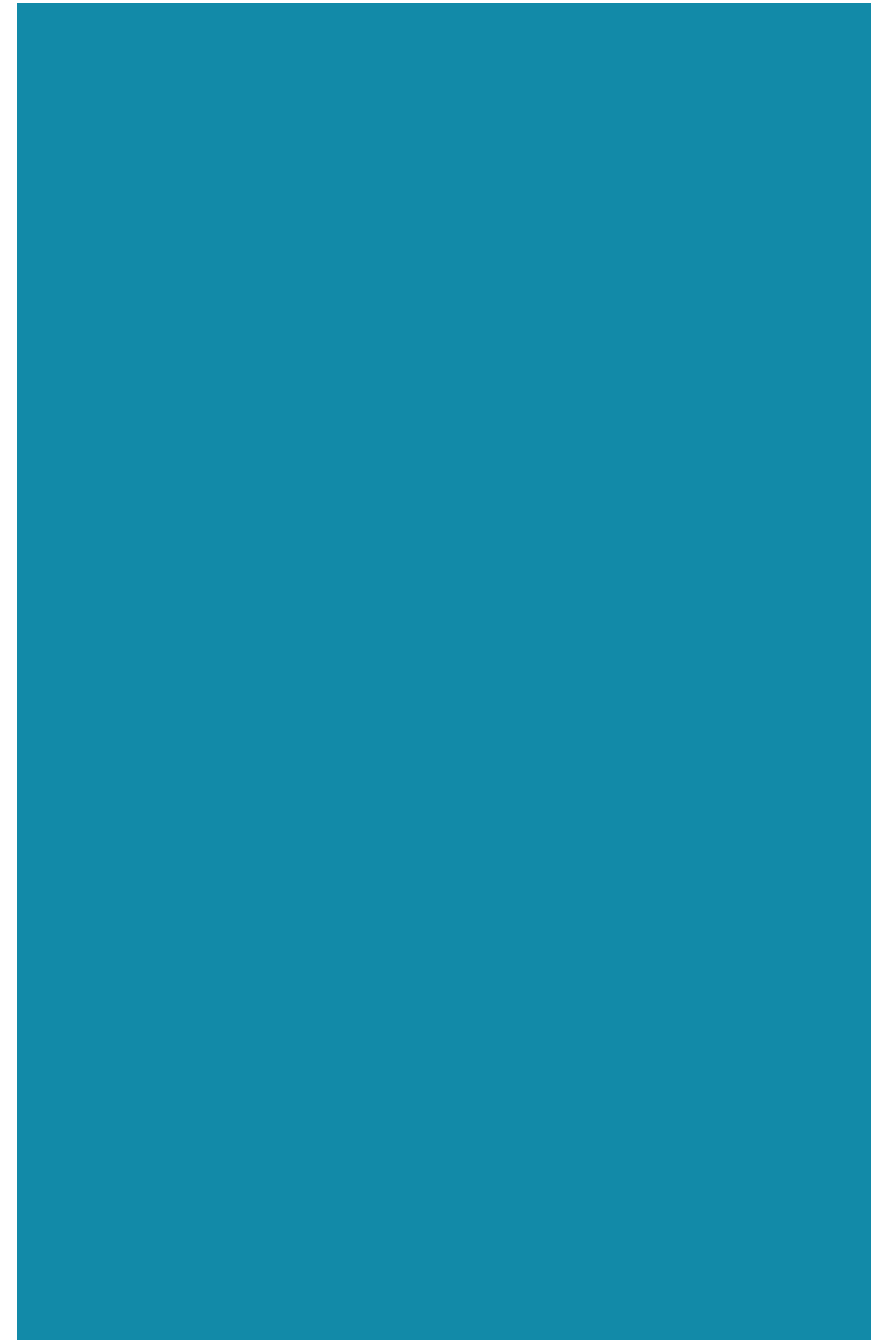
Rapid Word Chart

first	under	sometimes	right	food
your	ground	these	under	your
food	sometimes	ground	first	right
your	these	under	right	sometimes
ground	your	food	these	first

Comprehension check

Simple questions: Explicit / Answers found directly in the text (Who, When, Where, What)

Complex questions: Implicit / Information from the passage + background knowledge (How, Why)



Framework for a comprehension lesson

- 1 Activate background knowledge
- 2 Vocabulary
- 3 Give brief introduction or hook about text
- 4 Retell the story
- 5 Identify the text structure of the passage
- 6 Compose the main idea using a sentence stem
- 7 Use the main idea to compose a summary
- 8 Inference



Q & A

