

Purpose

Understand why we use
Science of Reading as
our foundational
philosophy



The Science of Reading

**Body of research that
investigates how children
learn to read and what
instructional approaches are
most effective**

The Science of Reading

**Reading is
essential**



**Reading must
be taught**



**All children are
capable of
reading**



Reading is Essential

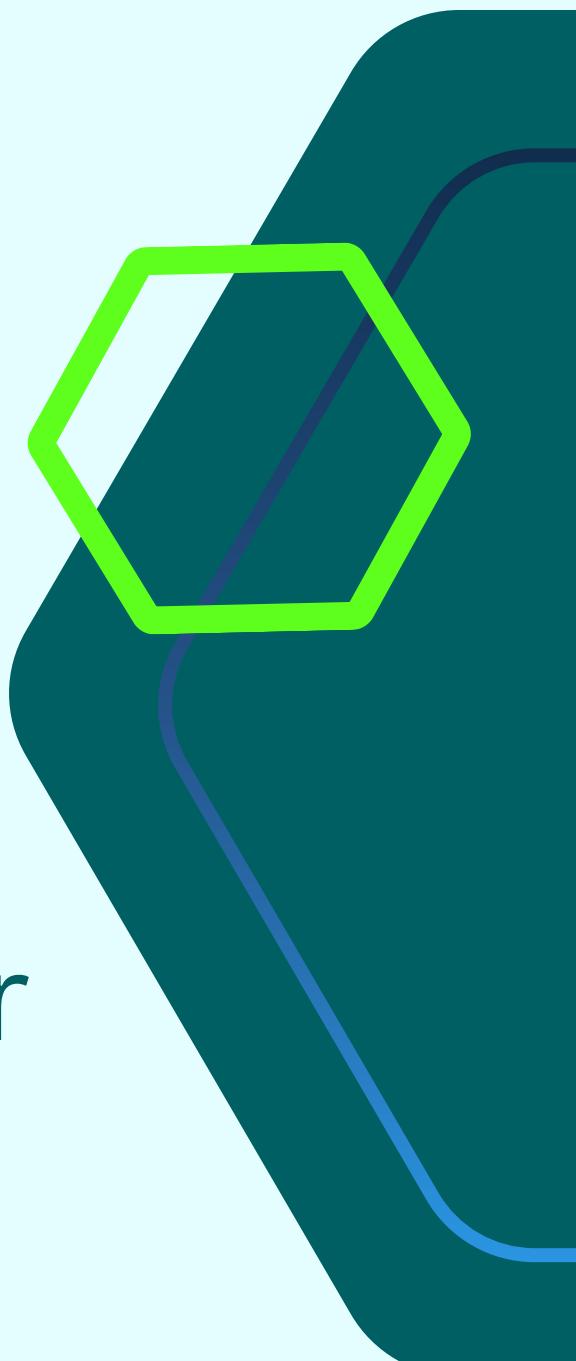


What was your own reading journey?

How hard was it to learn to read?

What was your reading identity growing up?

How did that feeling impact you in other aspects of your life?



Reading is Essential



Children
must read
to learn



Adults
must read
to live

Reading is Essential



28% of Oregon 4th graders were at or above grade level in reading



56% of Oregon 4th graders were at or above “Basic” in reading



16% of Oregon 4th graders were below “Basic” in reading

Reading is Essential



72% of Oregon 4th graders are not reading on grade level



Reading is Essential

This number has been statistically
the same since 1998



Reading is Essential



**Children who are not
proficient readers in 3rd
grade are 4x more likely to
not graduate high school**



Reading is Essential

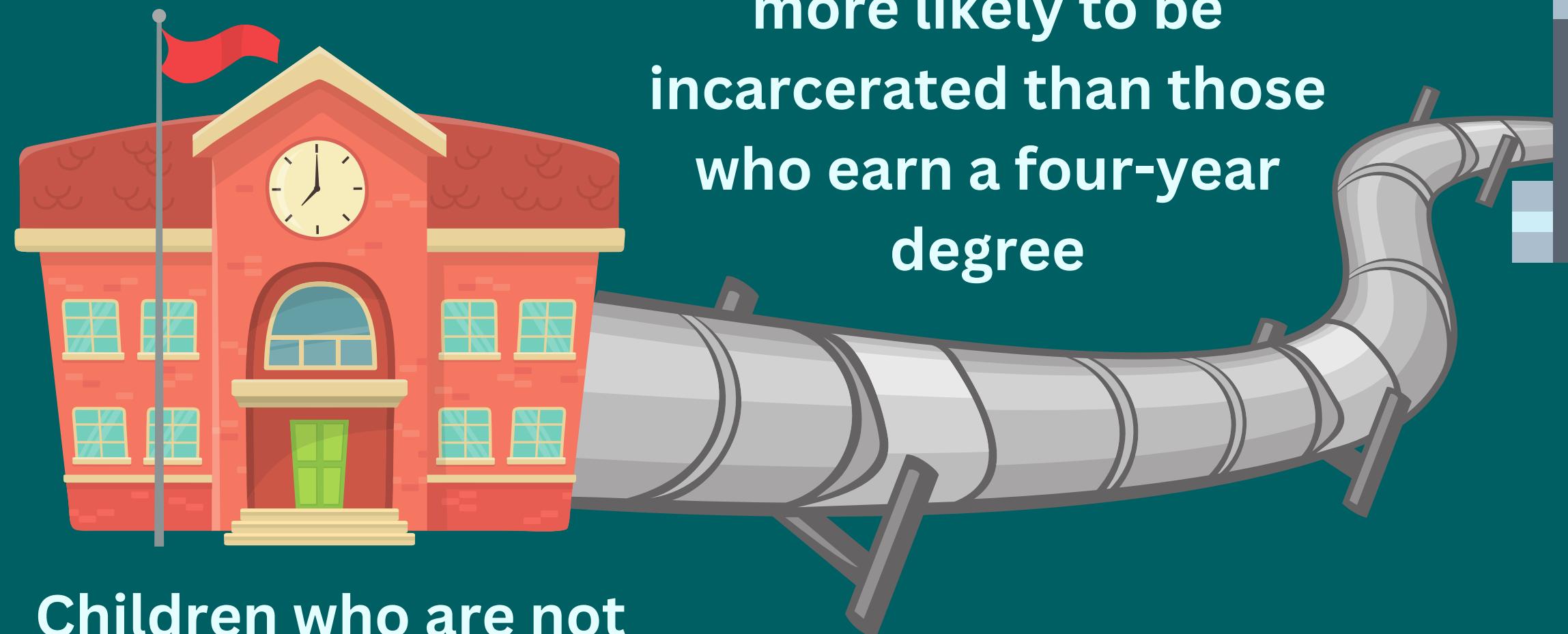
Students who drop out of high school are 63% more likely to be incarcerated than those who earn a four-year degree



Children who are not proficient readers in 3rd grade are 4x more likely to not graduate high school



Reading is Essential



Children who are not proficient readers in 3rd grade are 4x more likely to not graduate high school

Students who drop out of high school are 63% more likely to be incarcerated than those who earn a four-year degree



70% of incarcerated adults cannot read above a 4th grade level



Reading must be taught

Simple View of Reading



Simple View of Reading

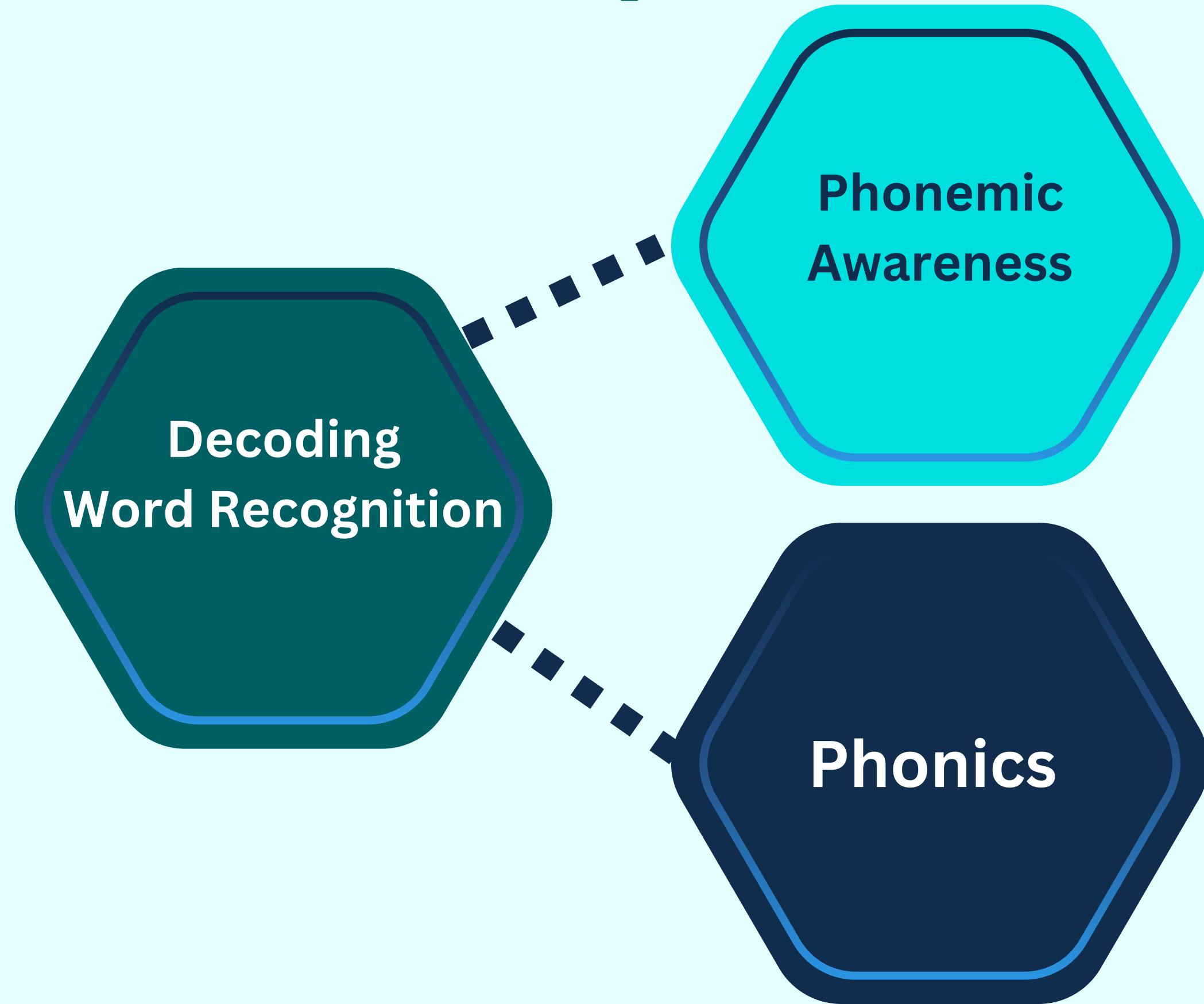
Σας ευχαριστώ

- When we do not have decoding skills, letters and groups of letters hold no meaning
- While we might be able to memorize this exact phrase, we would not be able to generalize

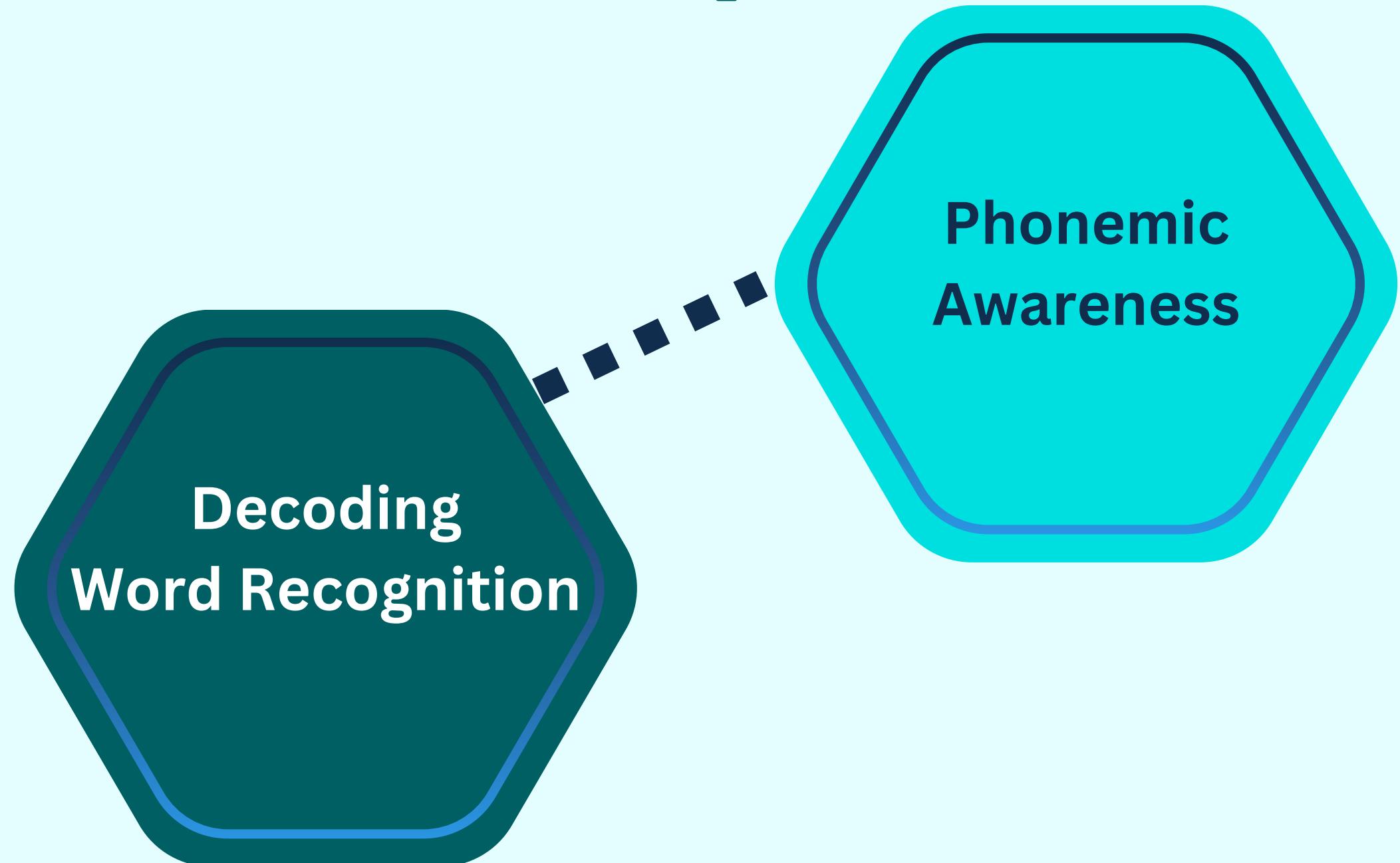


Decoding
Word Recognition

Simple View of Reading

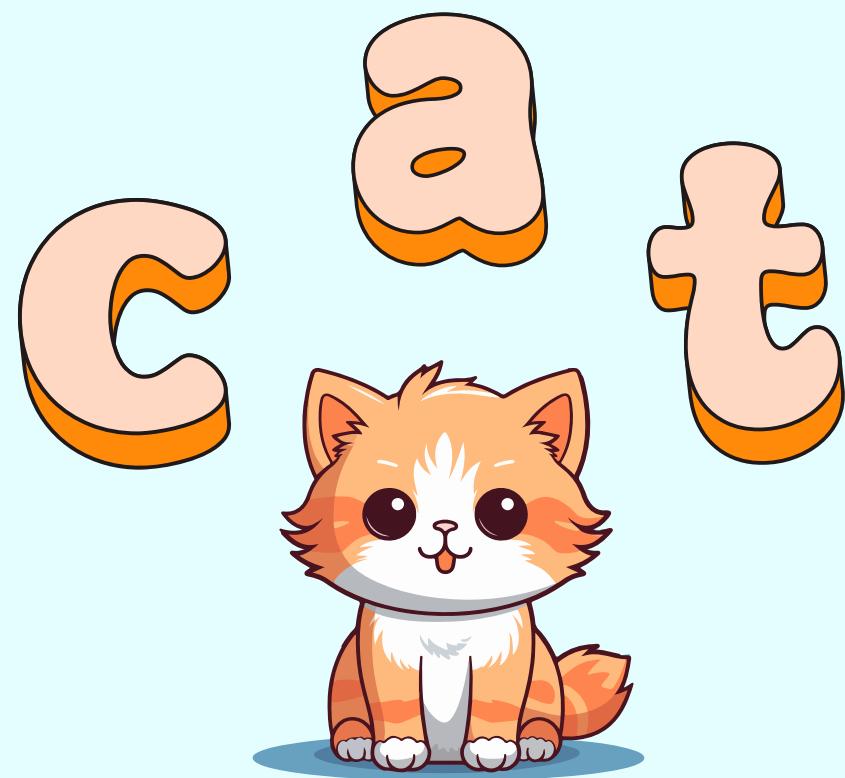
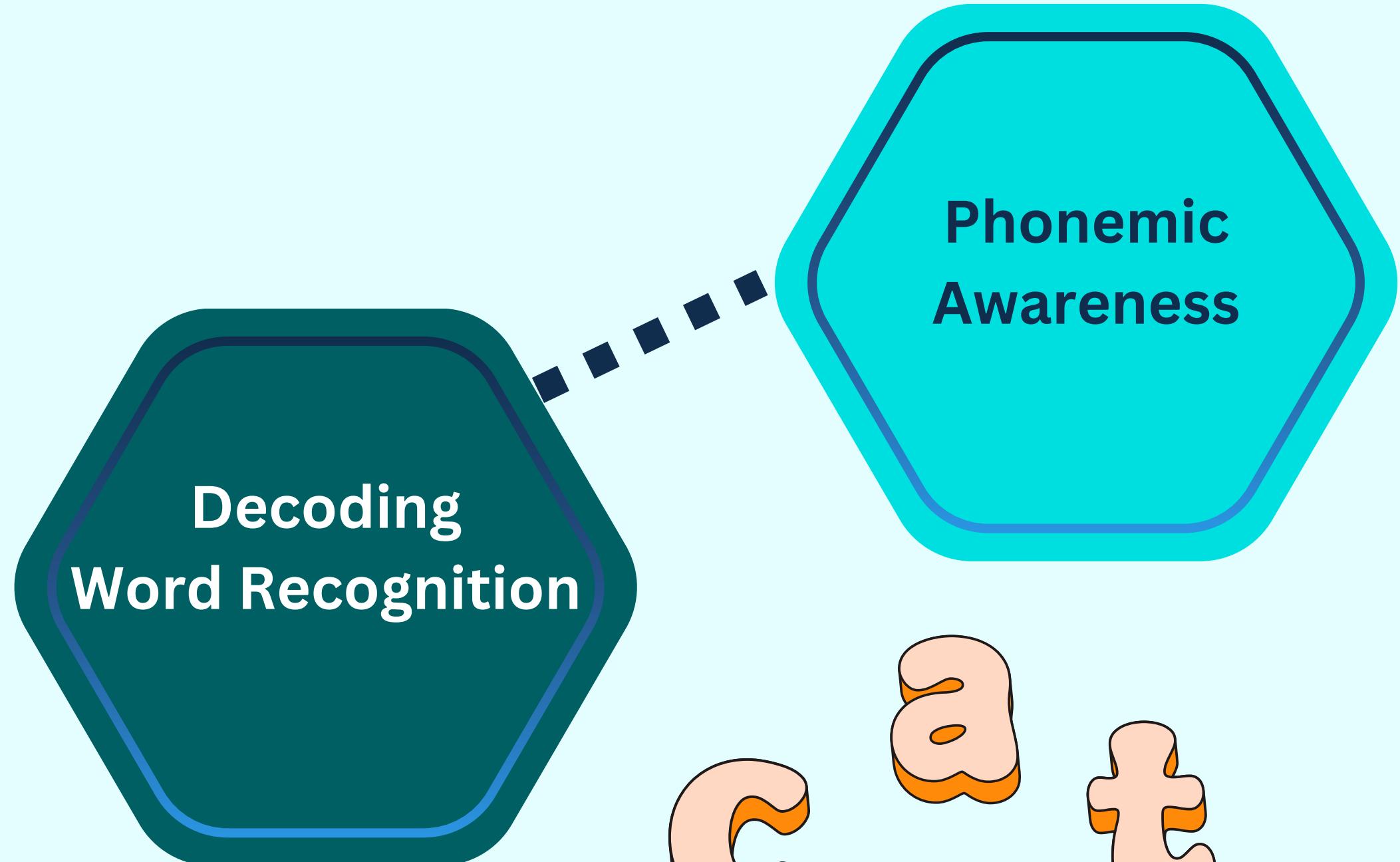


Simple View of Reading



- Knowledge that speech is composed of syllables and phonemes
- Speech is innate
- Reading is not

Simple View of Reading



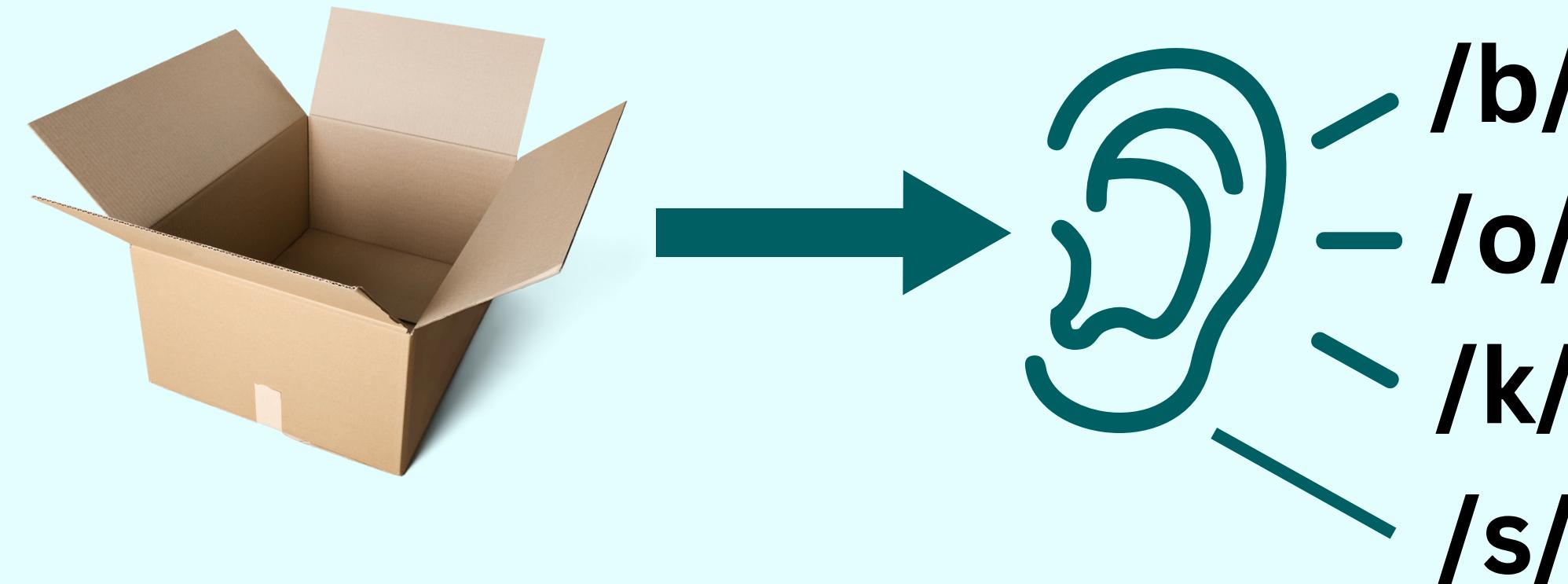
- Spoken language does not require a knowledge of phonemes
- Learning to read changes the representation of speech

Simple View of Reading

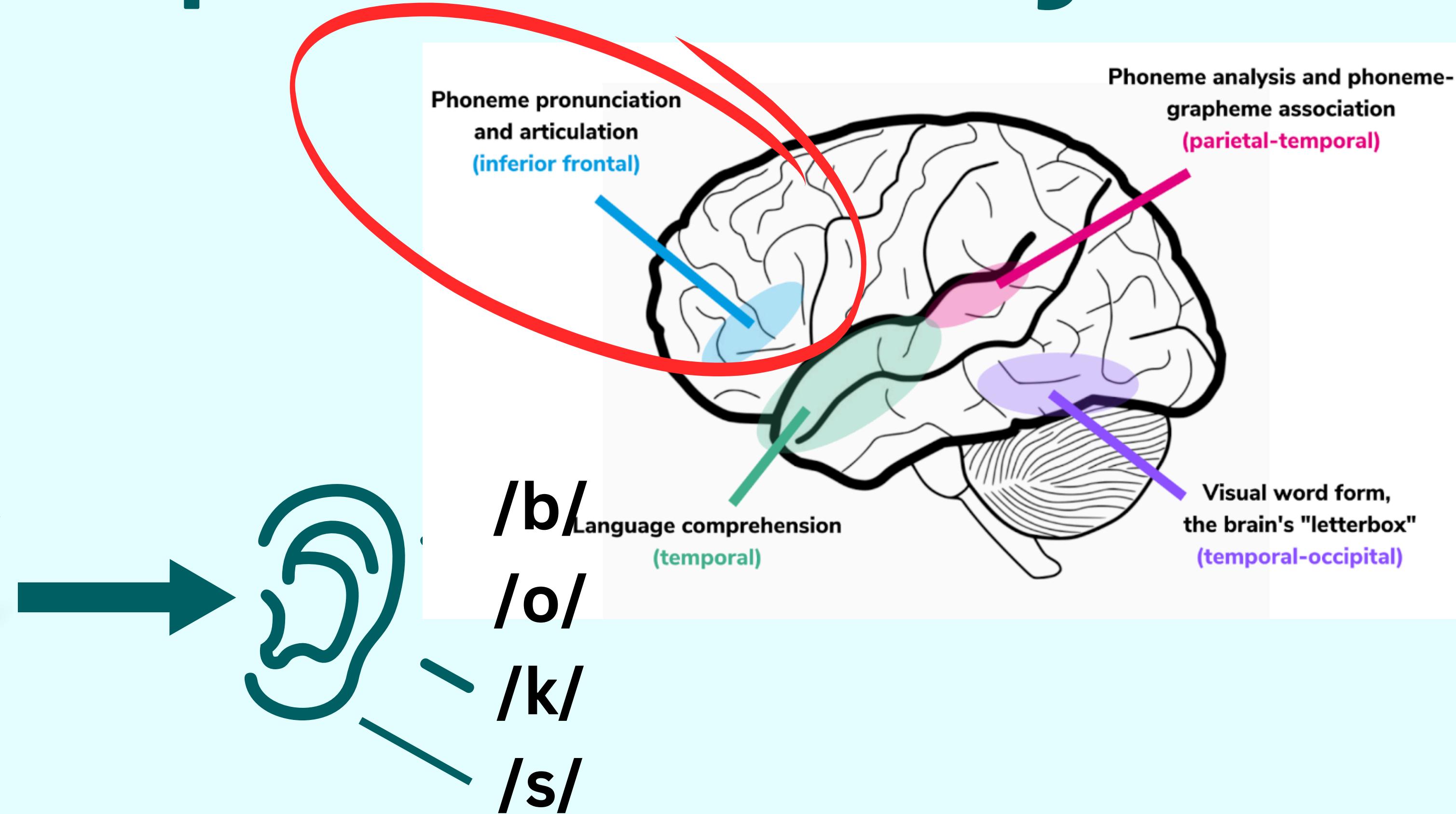
We must build a
brain that can
read



Circuits for reading
have to be built



Simple View of Reading

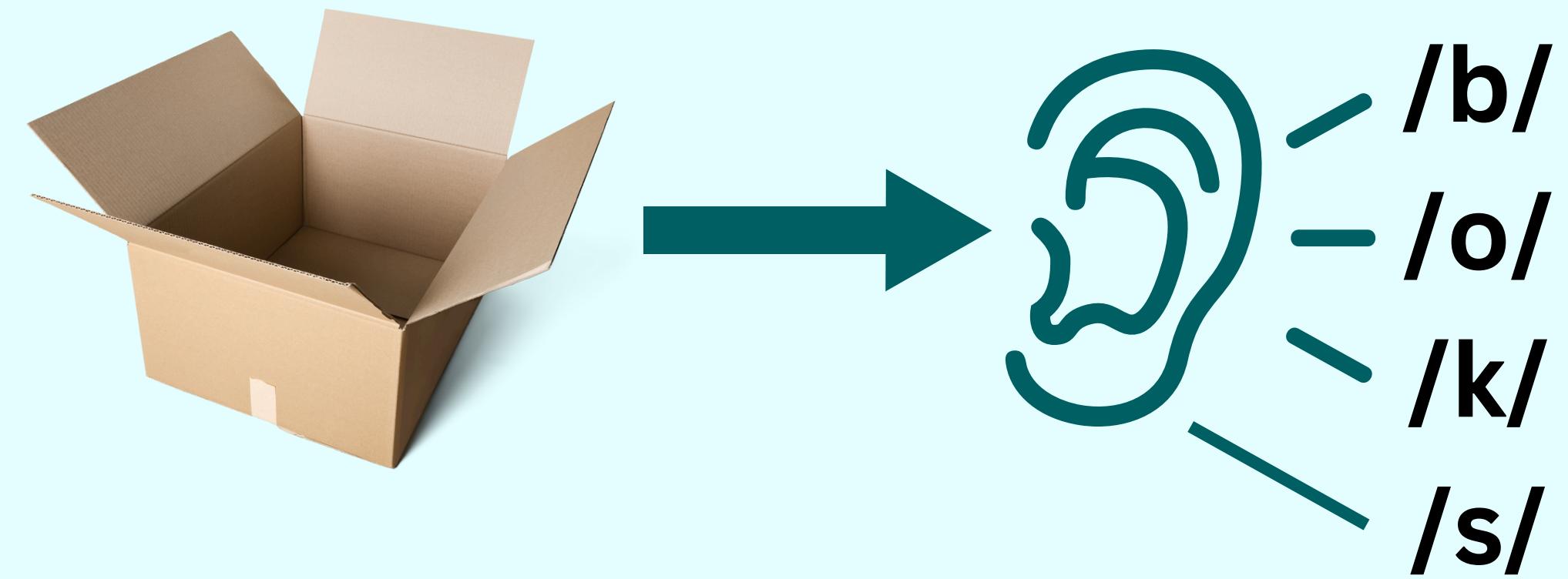


Simple View of Reading

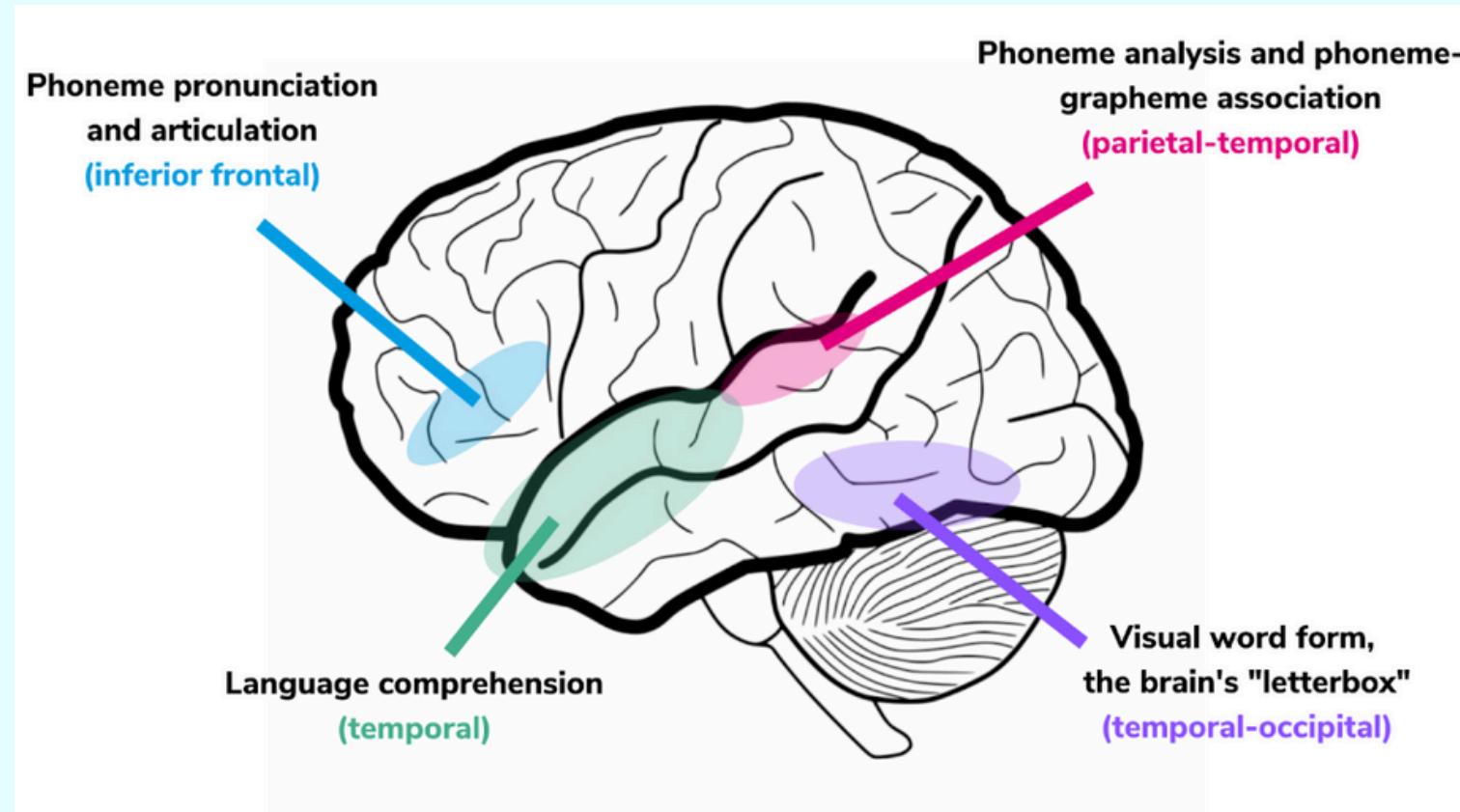
Learning to read changes the way that speech is processed in the brain

After learning to read, our brains automatically break up speech sound into phonemes

After learning to read, activation levels in the superior temporal region are increased when children listen to spoken language



Simple View of Reading



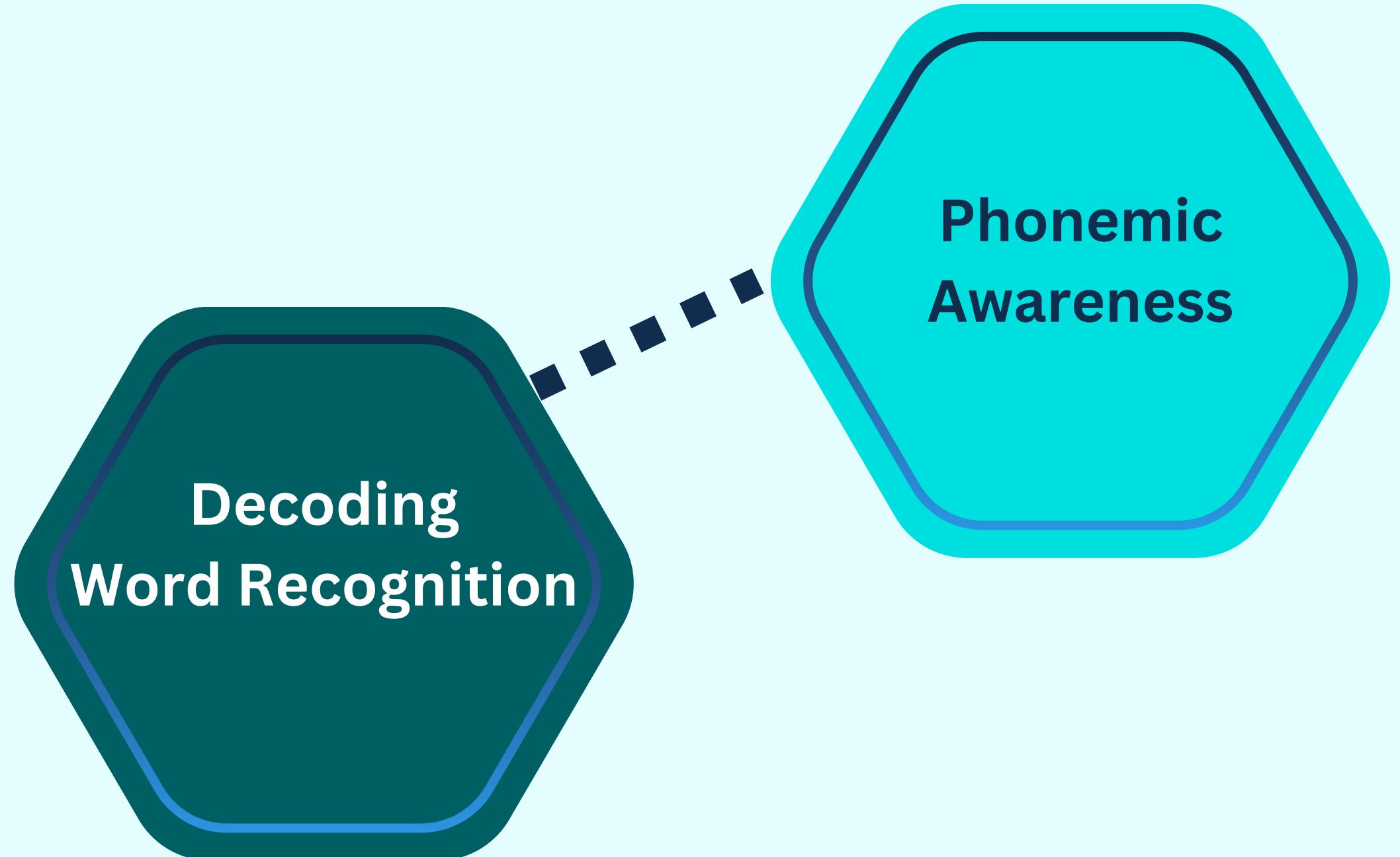
How to
strengthen:

Word games
Singing
Rhyming
Blending

Segmenting
Auditory Practice

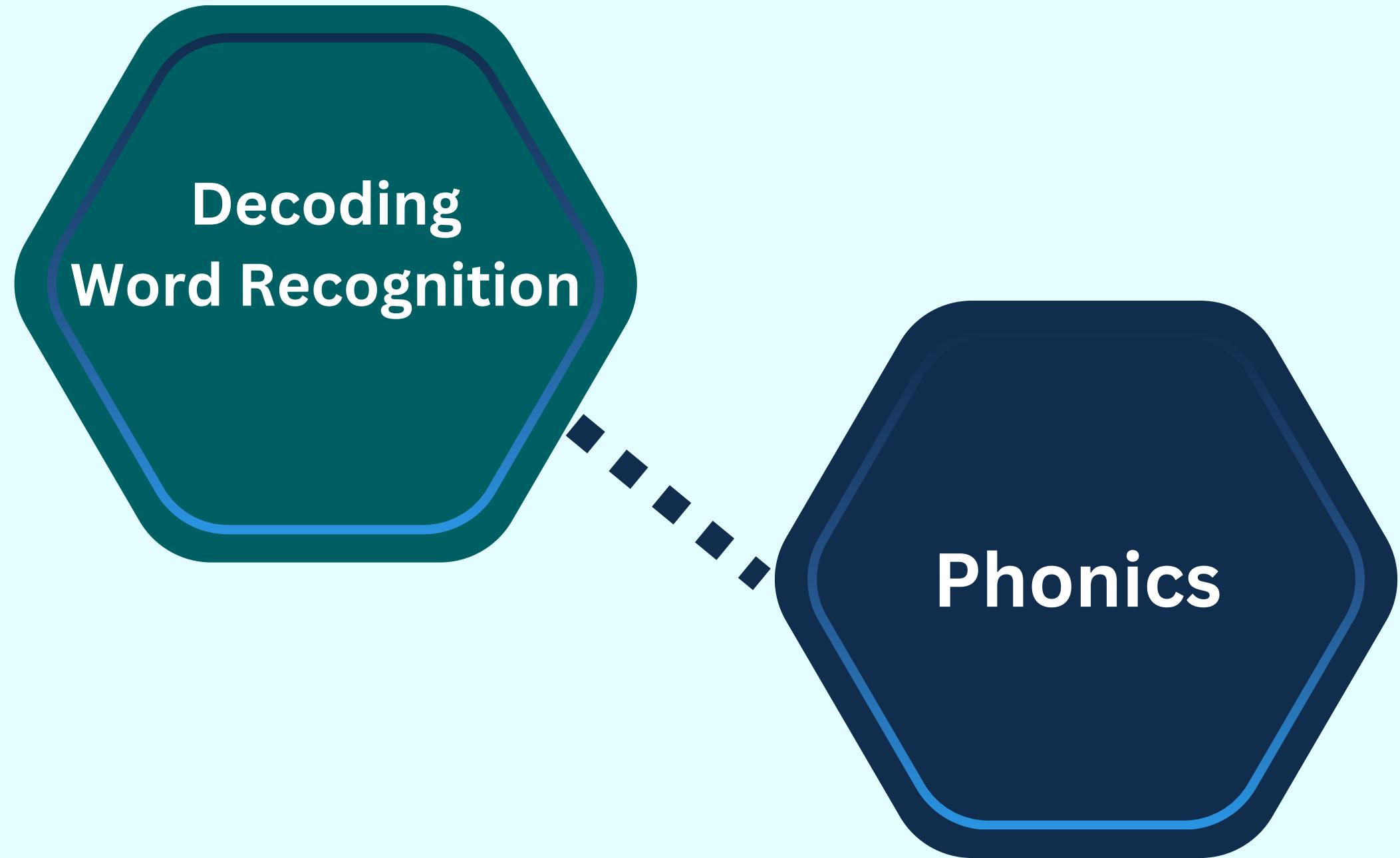


Simple View of Reading



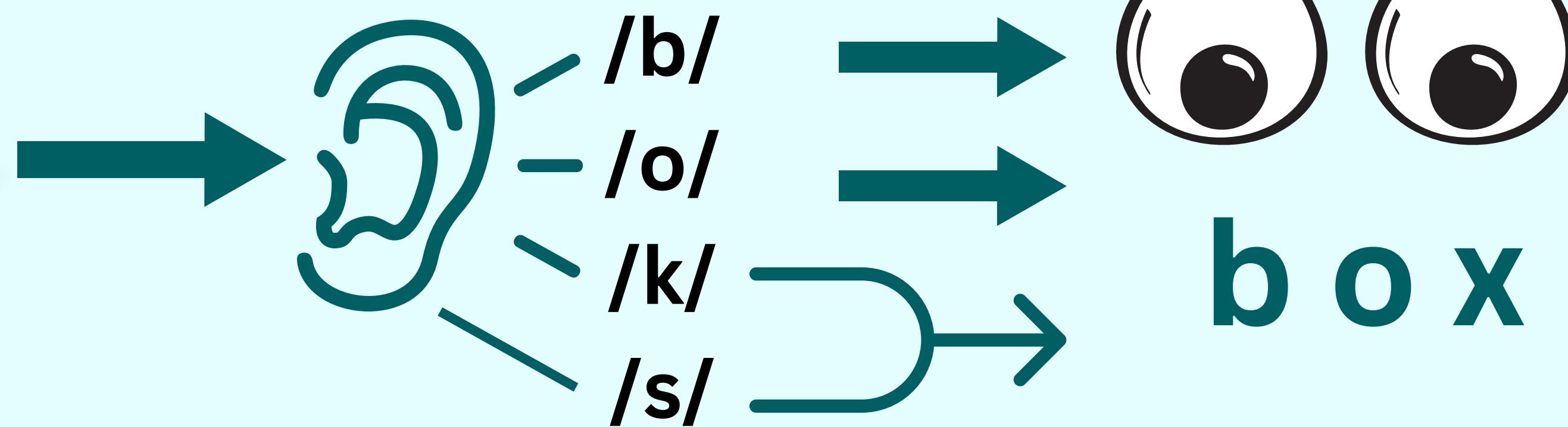
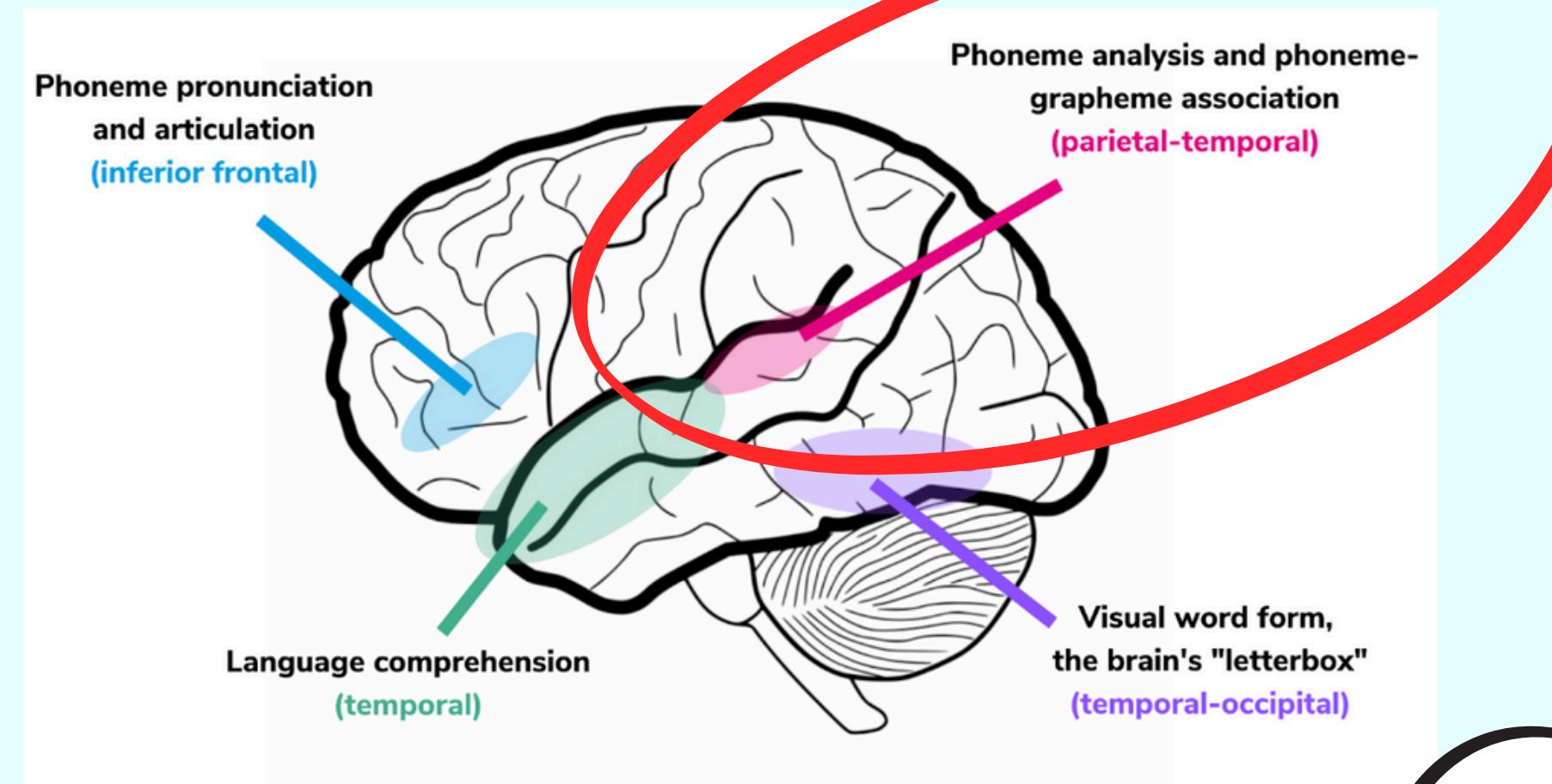
- **Phonemic awareness** does not end after students know their sounds
- Becomes dependent on knowledge of phonics and spelling

Simple View of Reading

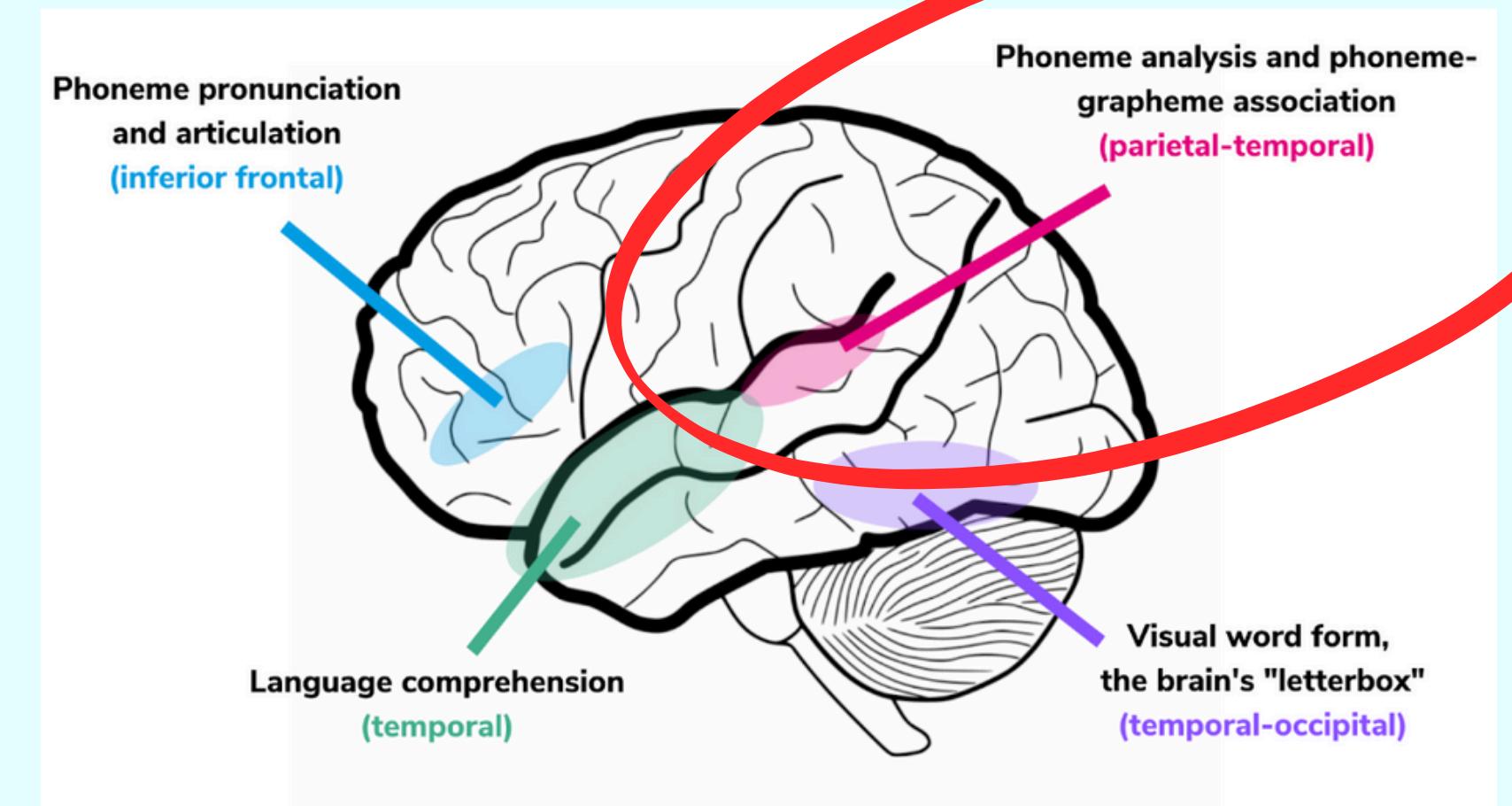


**Knowing the
relationship between
sounds and letters**

Simple View of Reading



Simple View of Reading

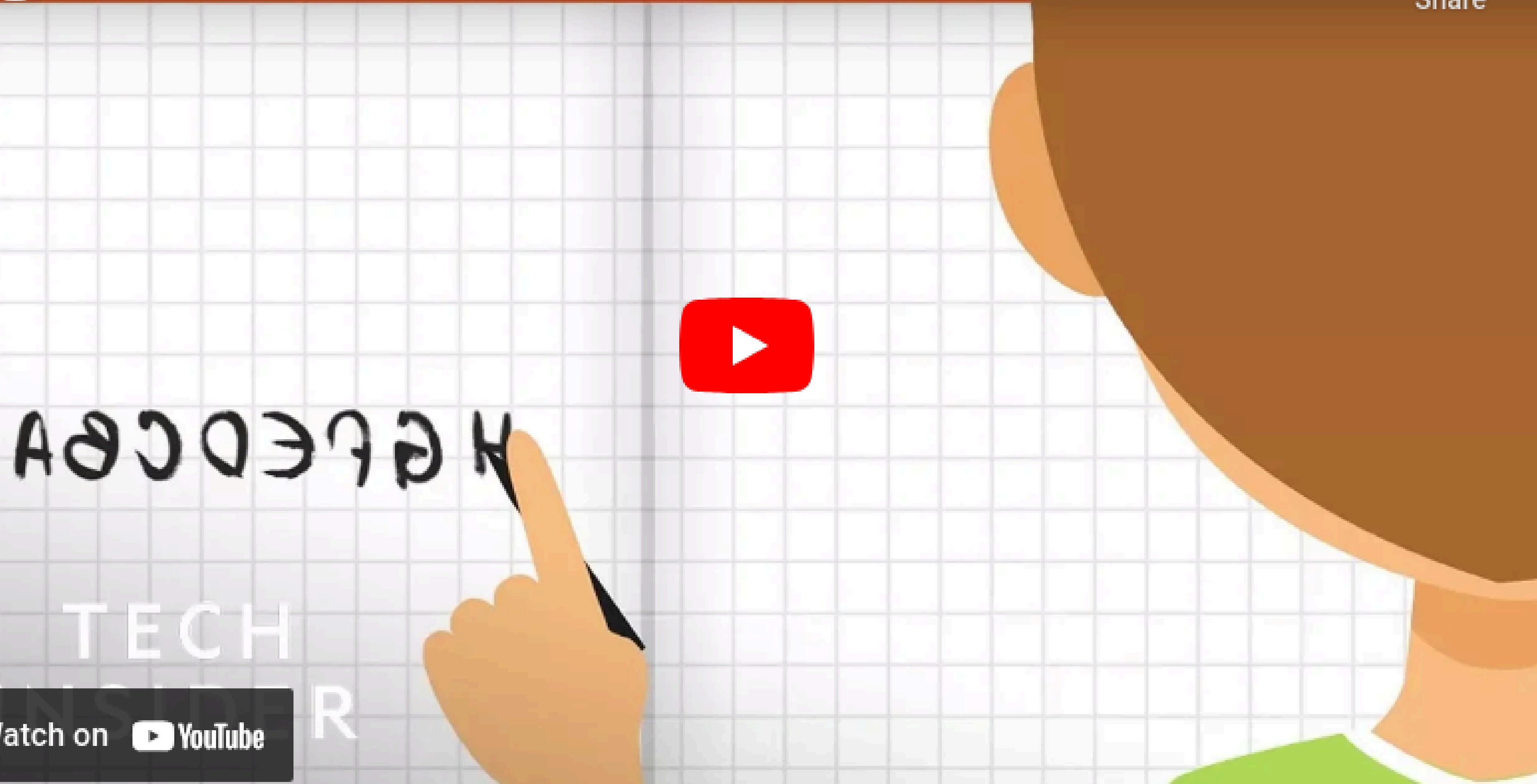


A note about “b” and “d” and mirror writing

Why Kids Write Their Letters Backwards



Share



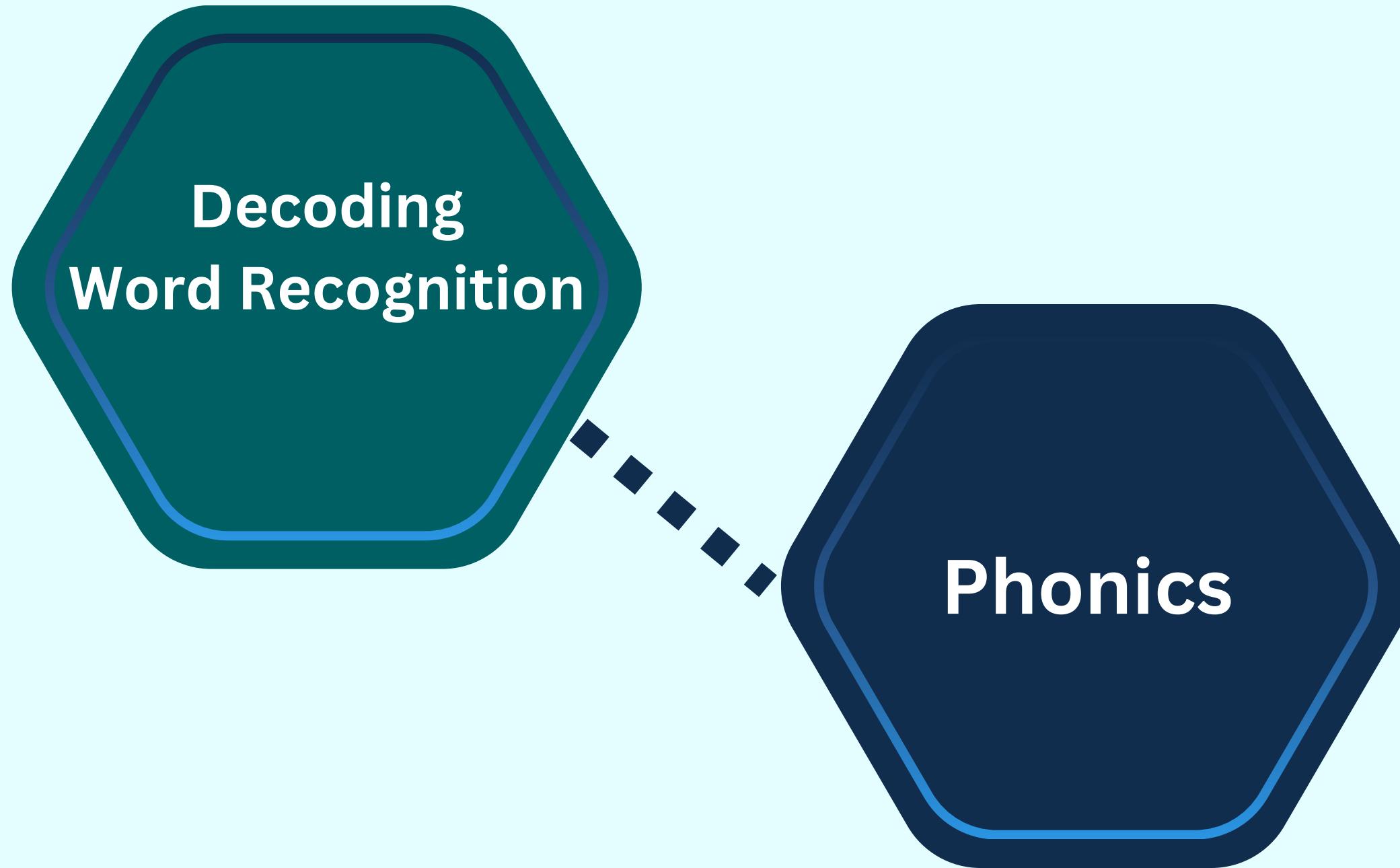








Simple View of Reading



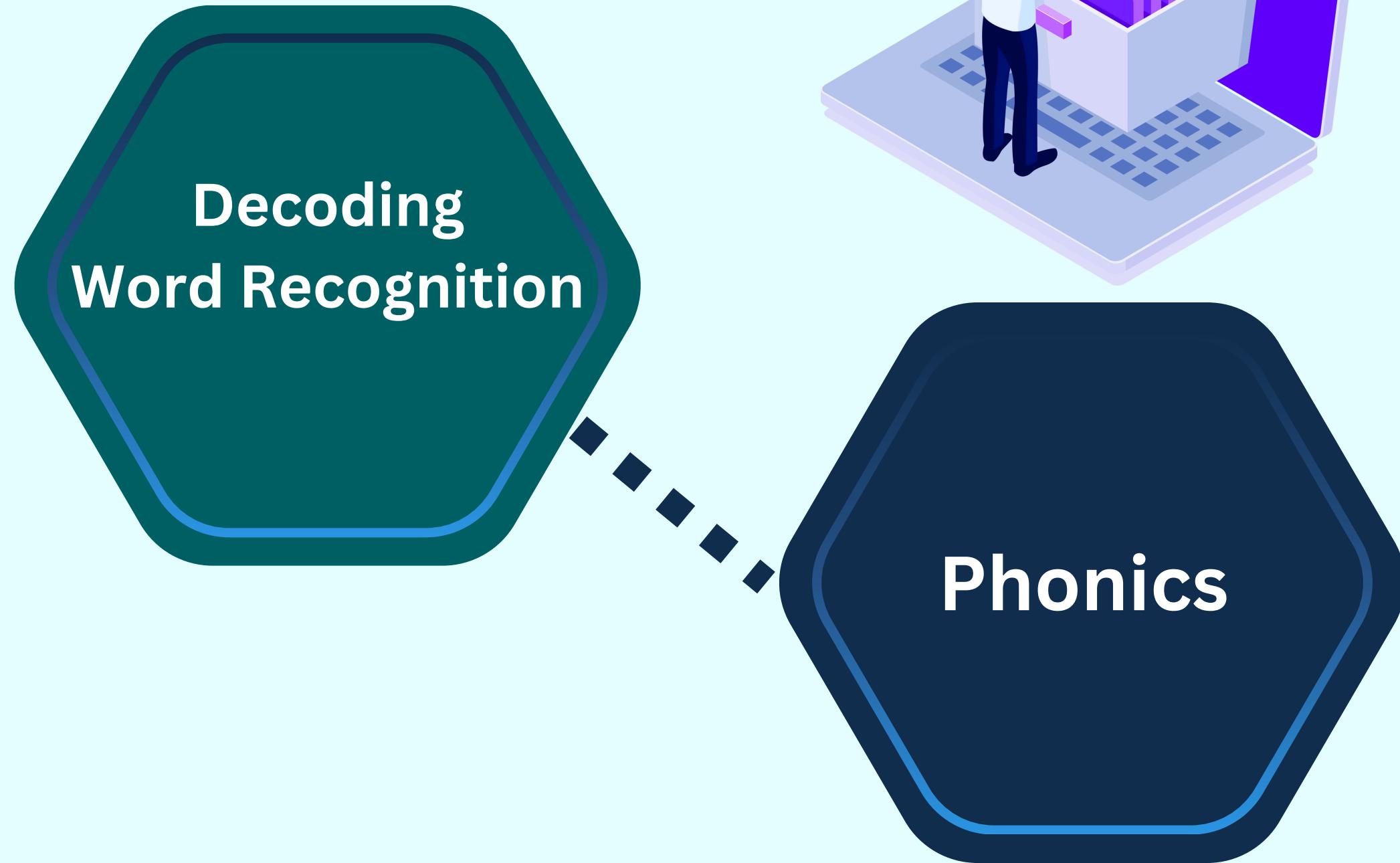
**Knowing the
relationship between
sounds and letters**

**English has a deep
orthography**

Simple View of Reading

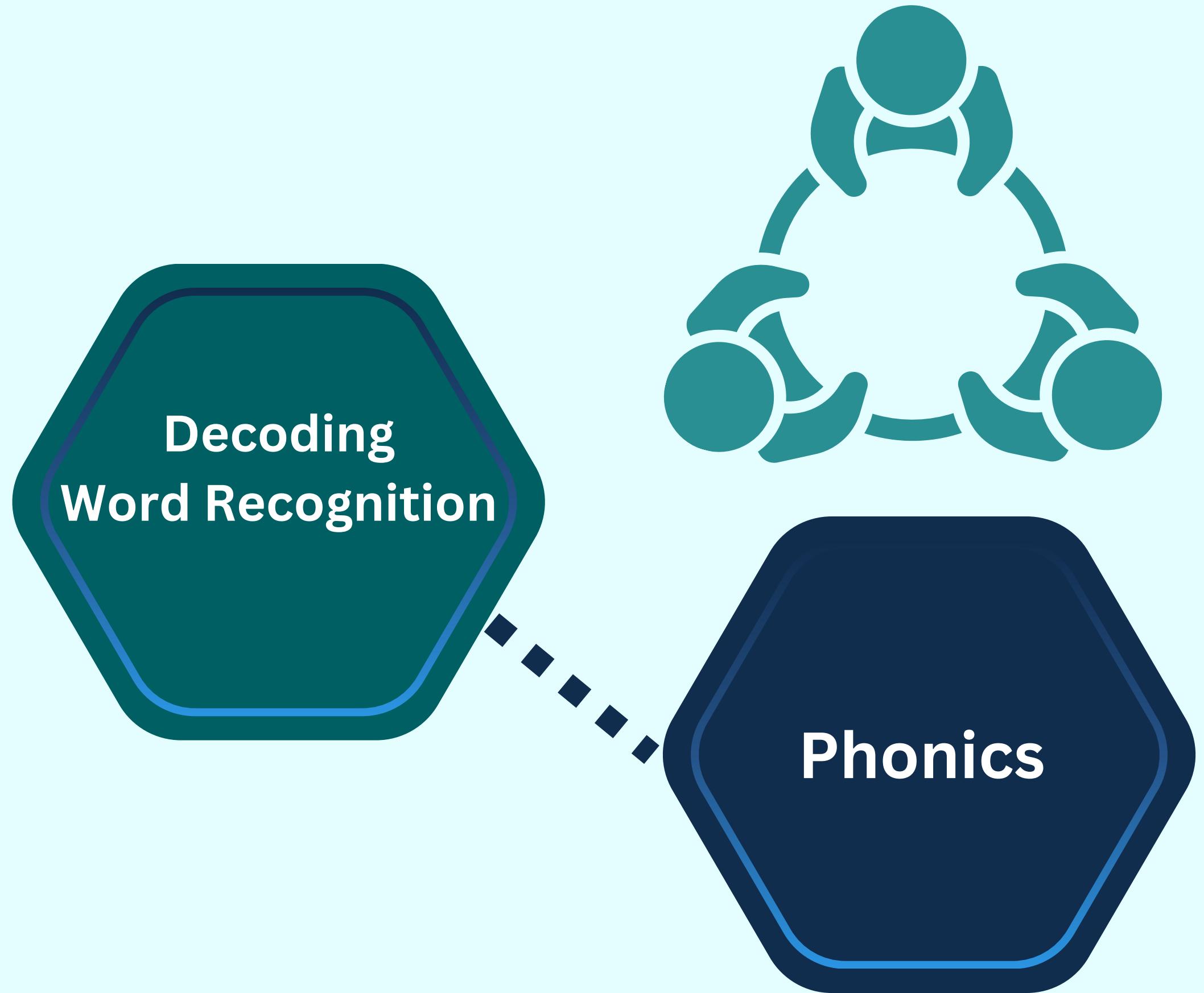
Video

Simple View of Reading



- 86% of words have regular spellings or are regular except one sound exception
- Our job is to set up an efficient orthographic filing system

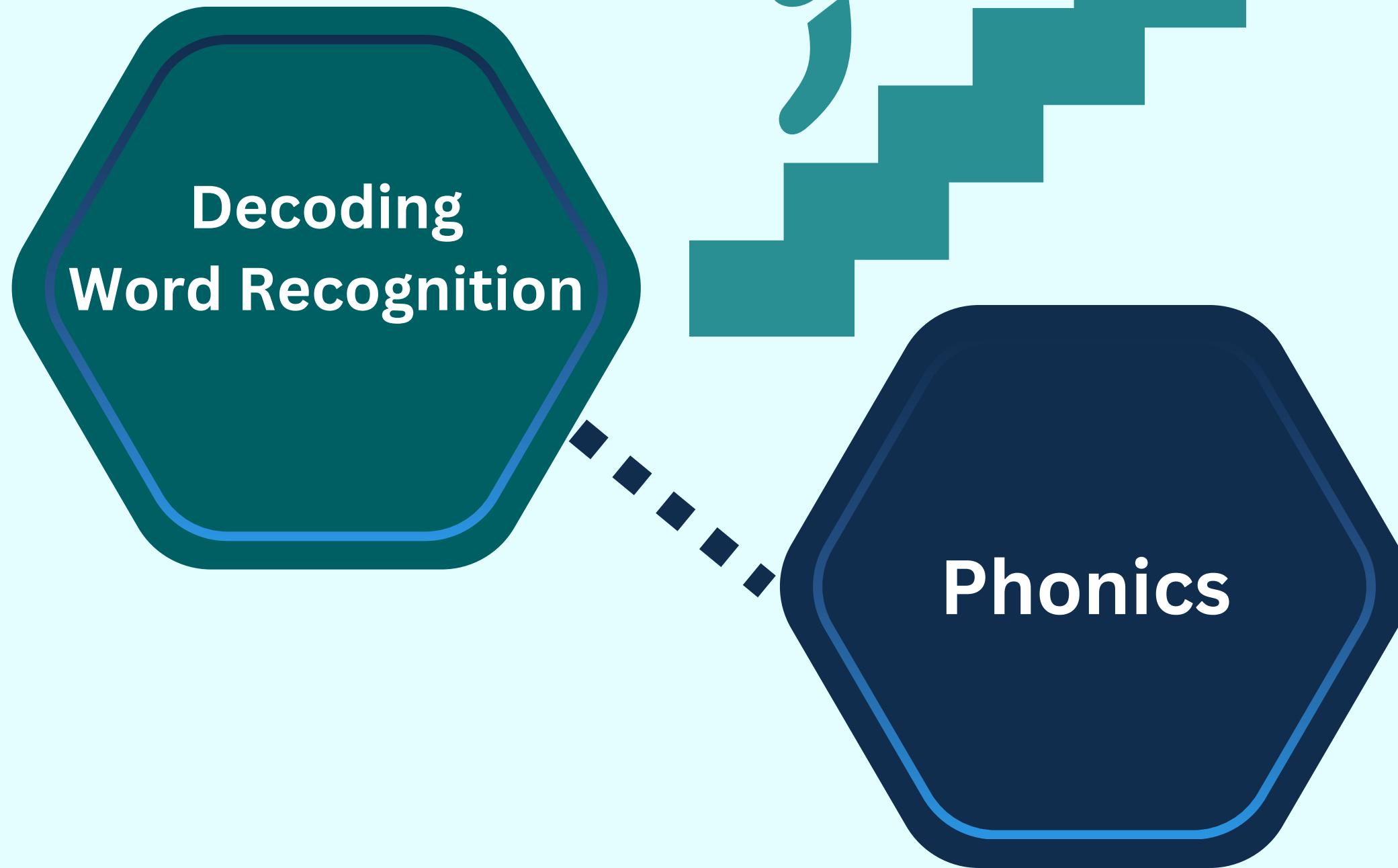
Simple View of Reading



- High quality phonics instruction can often make the biggest difference for struggling readers
- 1:1 and small group is the best way to teach it!

Simple View of Reading

How to teach



Systematic

- Consistent instructional routines

Sequential

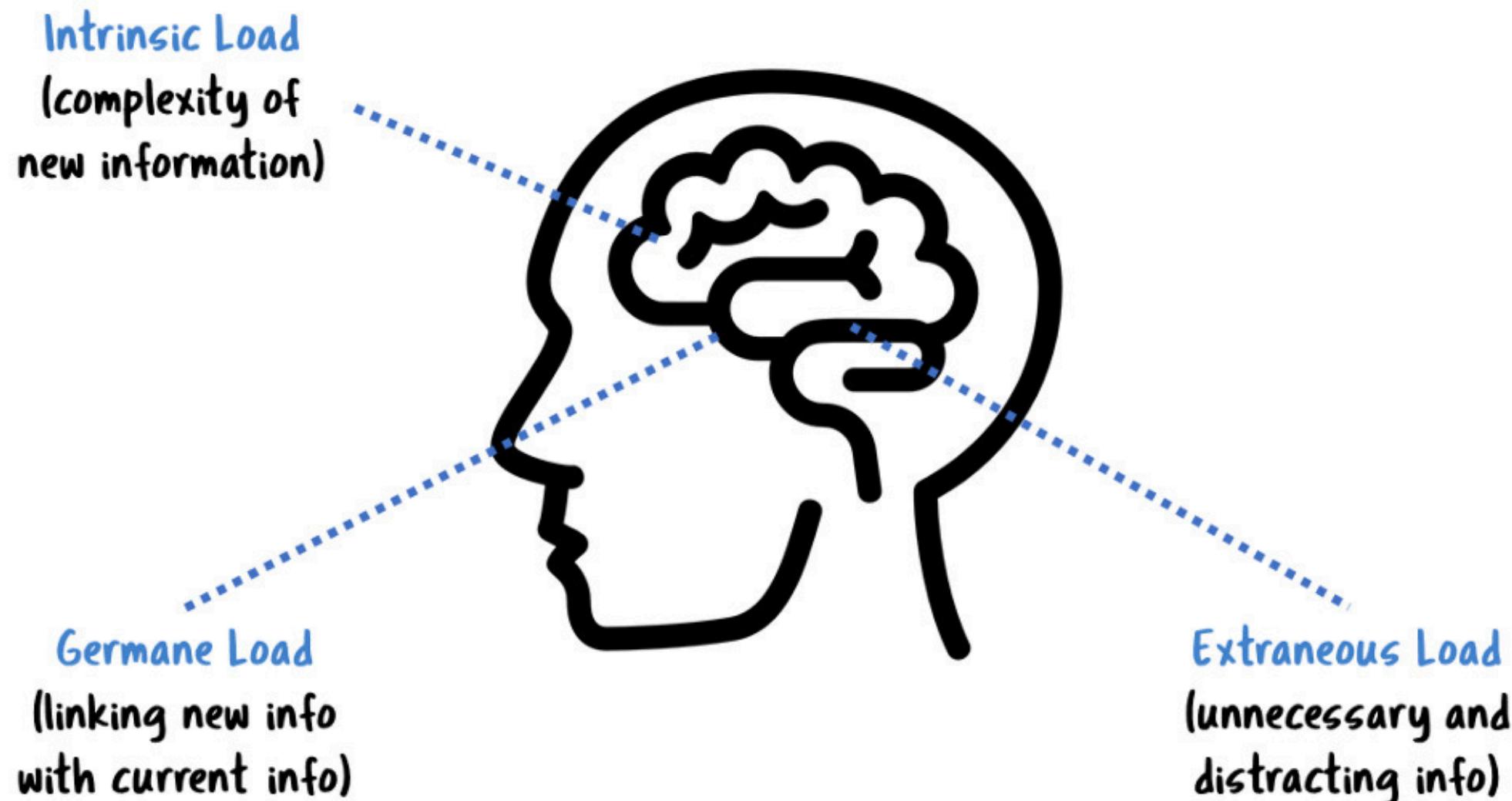
- From easiest to hardest
- Foundational skills are taught to support higher level skills

Explicit

- Skills are modeled and practiced to mastery and automaticity

Simple View of Reading

Cognitive Load Theory



Systematic

- Consistent instructional routines

Working Memory

- Interrupted by uncertainty, randomness, and confusion

Long Term Memory

- Interrupted by inconsistency and irregularity

Reading must be taught

Simple View of Reading



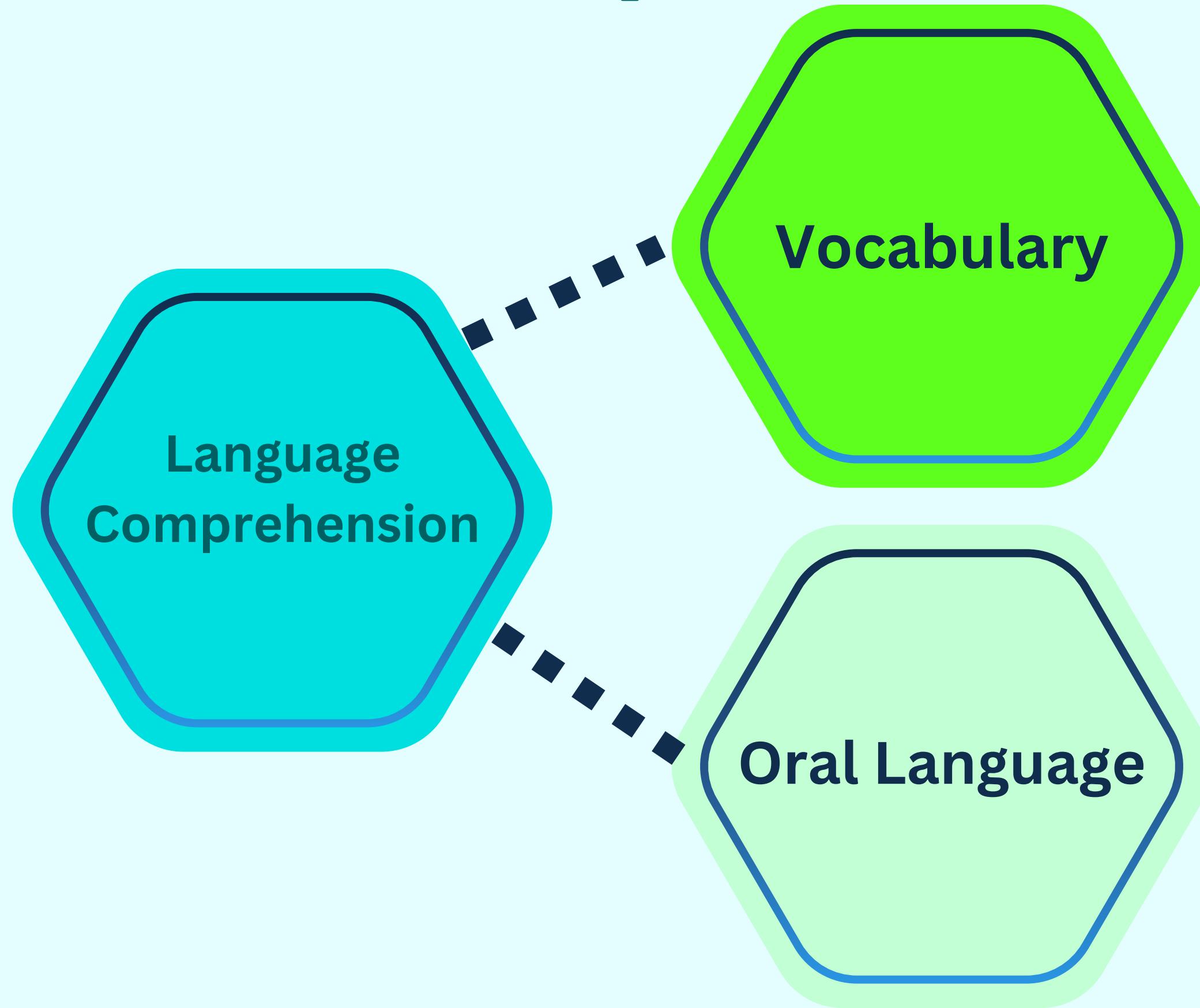
Simple View of Reading



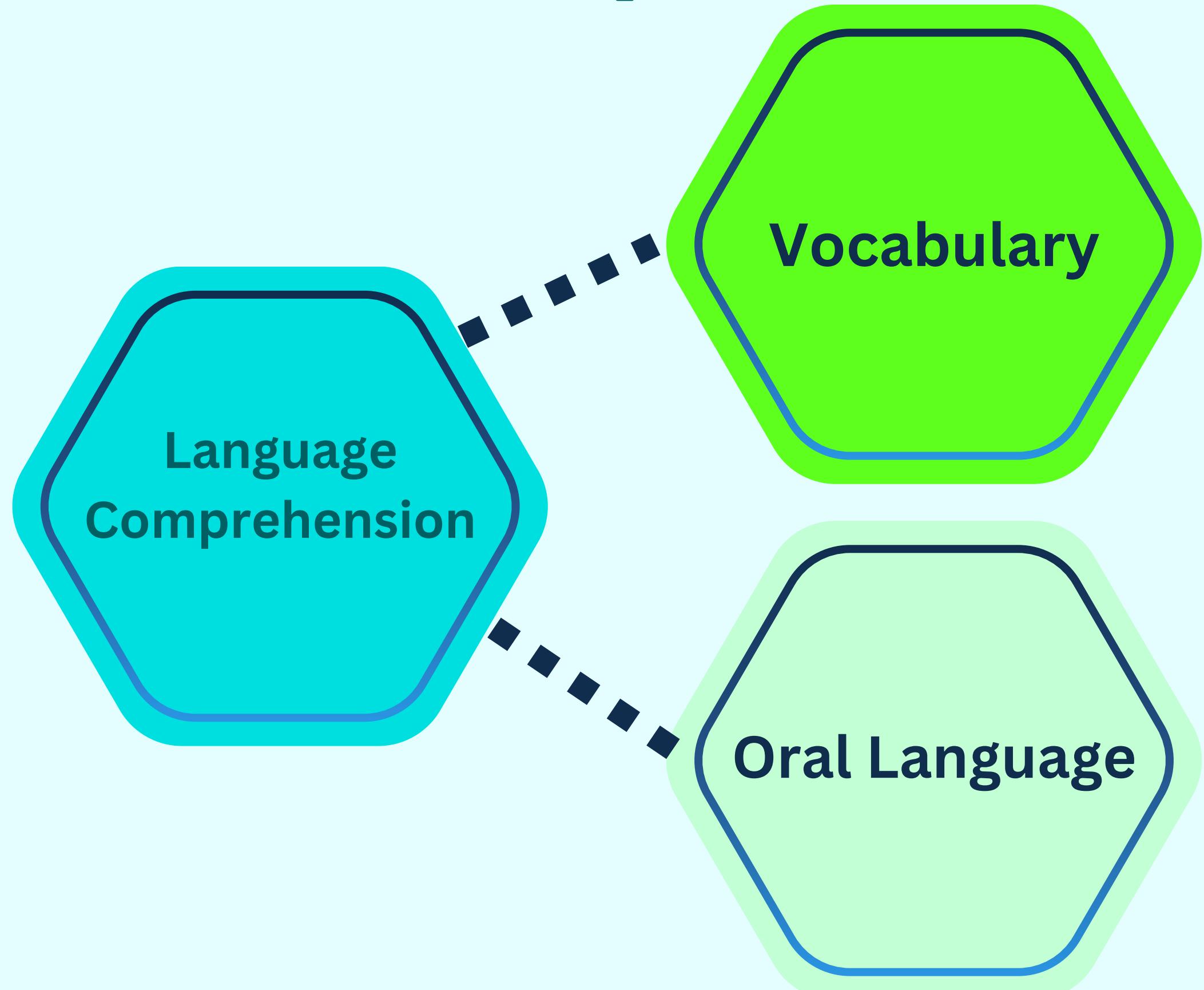
Language
Comprehension

The snables tramped the
mengs to the dwip. The
dwip fropped. The mengs
clambed a sib boogle. The
snables gicked and
gicked.

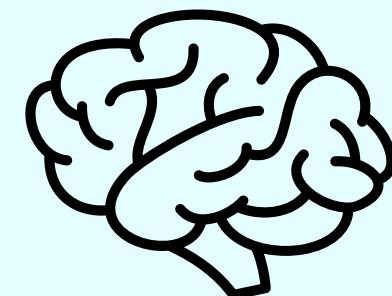
Simple View of Reading



Simple View of Reading



car
cap
call
can
cap
cab
pat
sat
mat

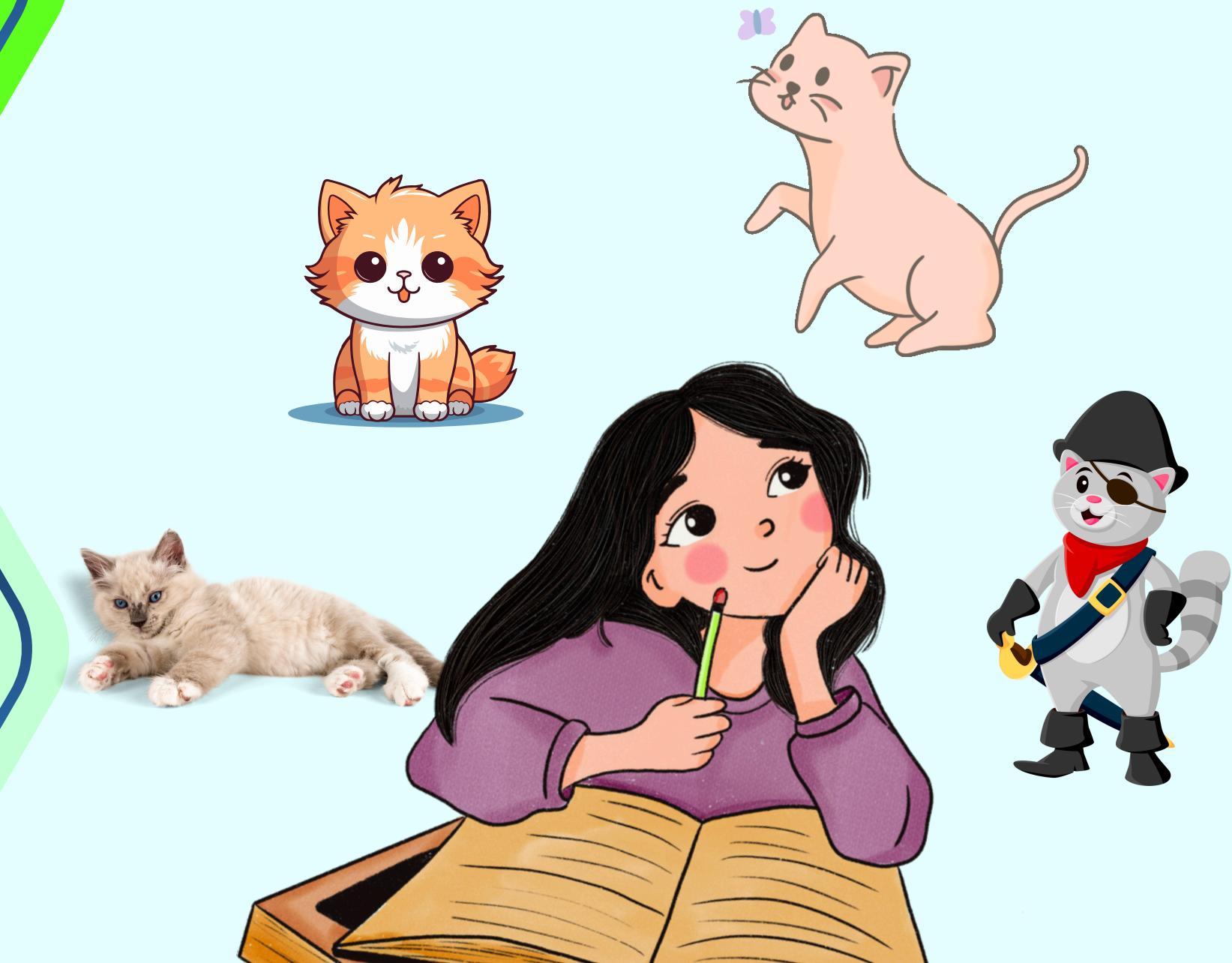
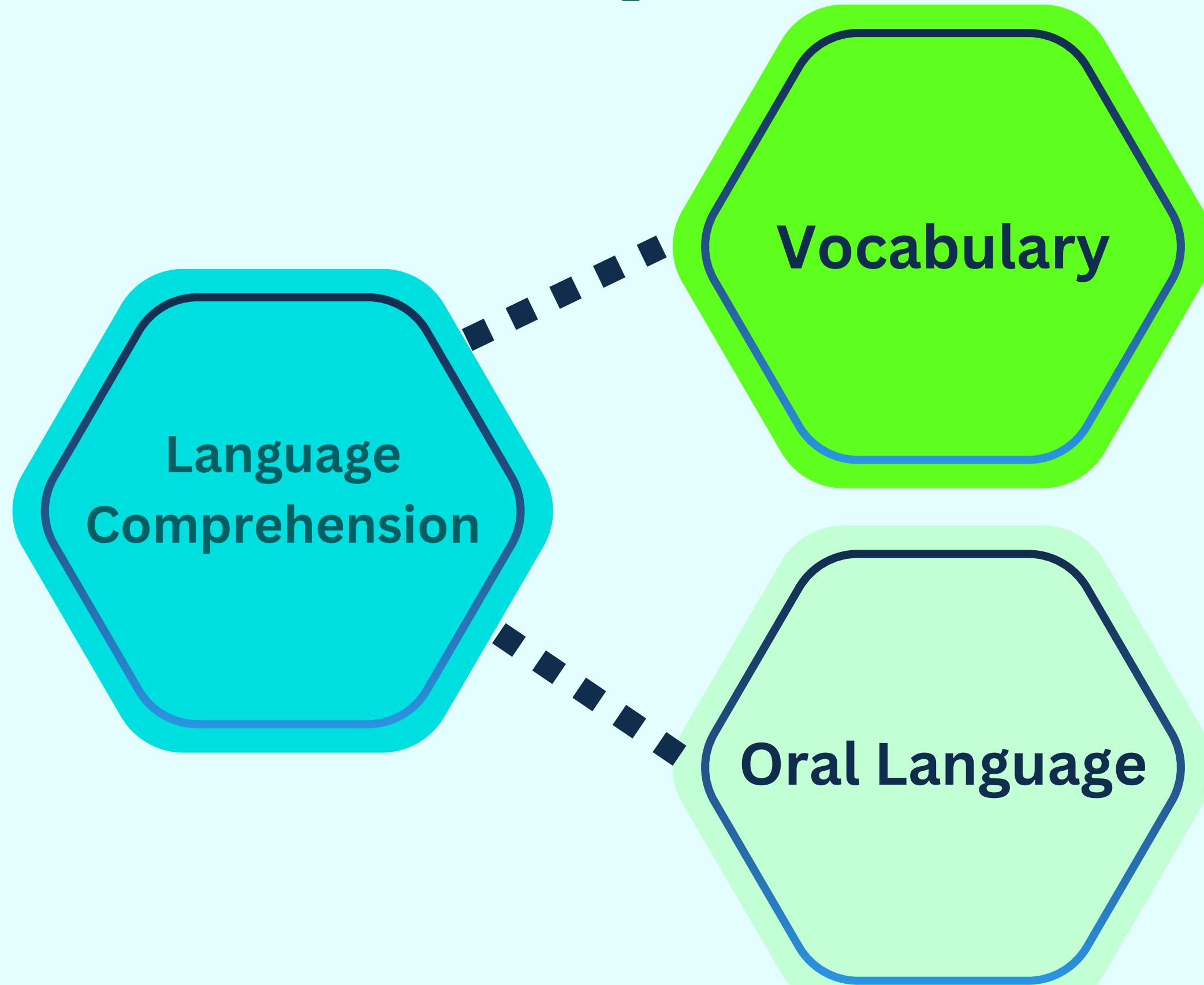


cat

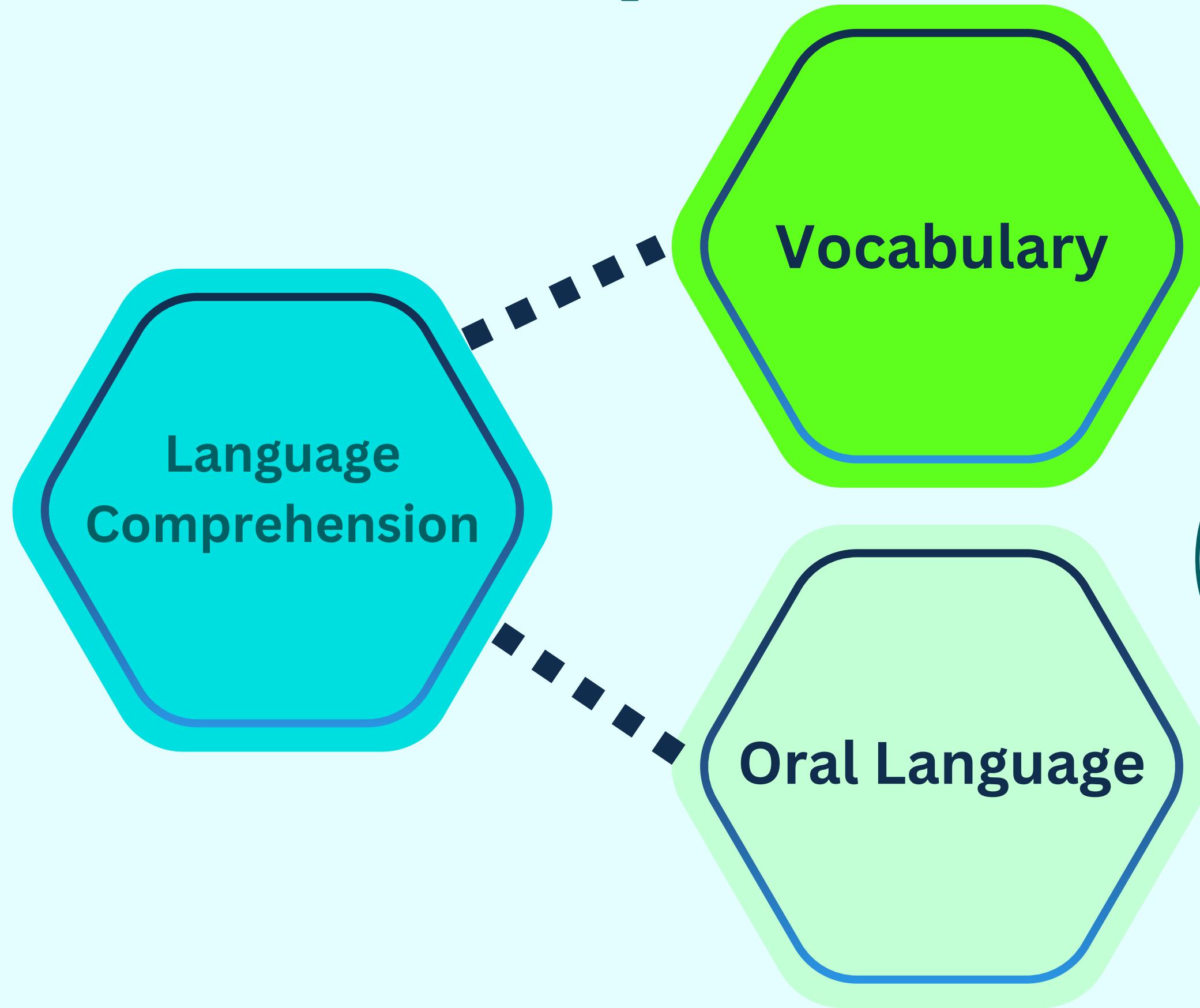


kitty
feline
litter box
pet
kitten
nap

Simple View of Reading



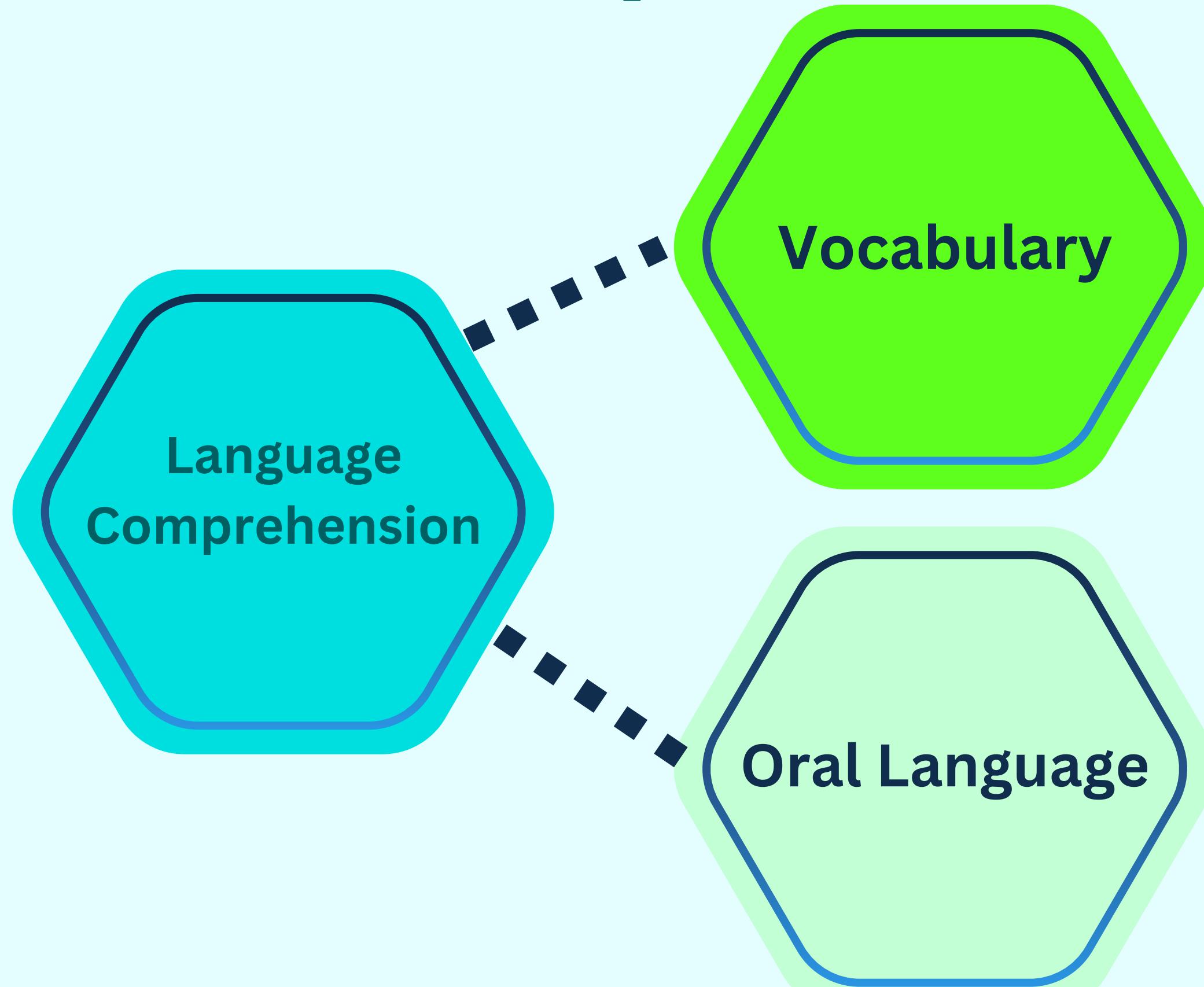
Simple View of Reading



**Strong oral language
fuels strong reading
comprehension**

**Strong reading
comprehension fuels
strong oral language**

Simple View of Reading

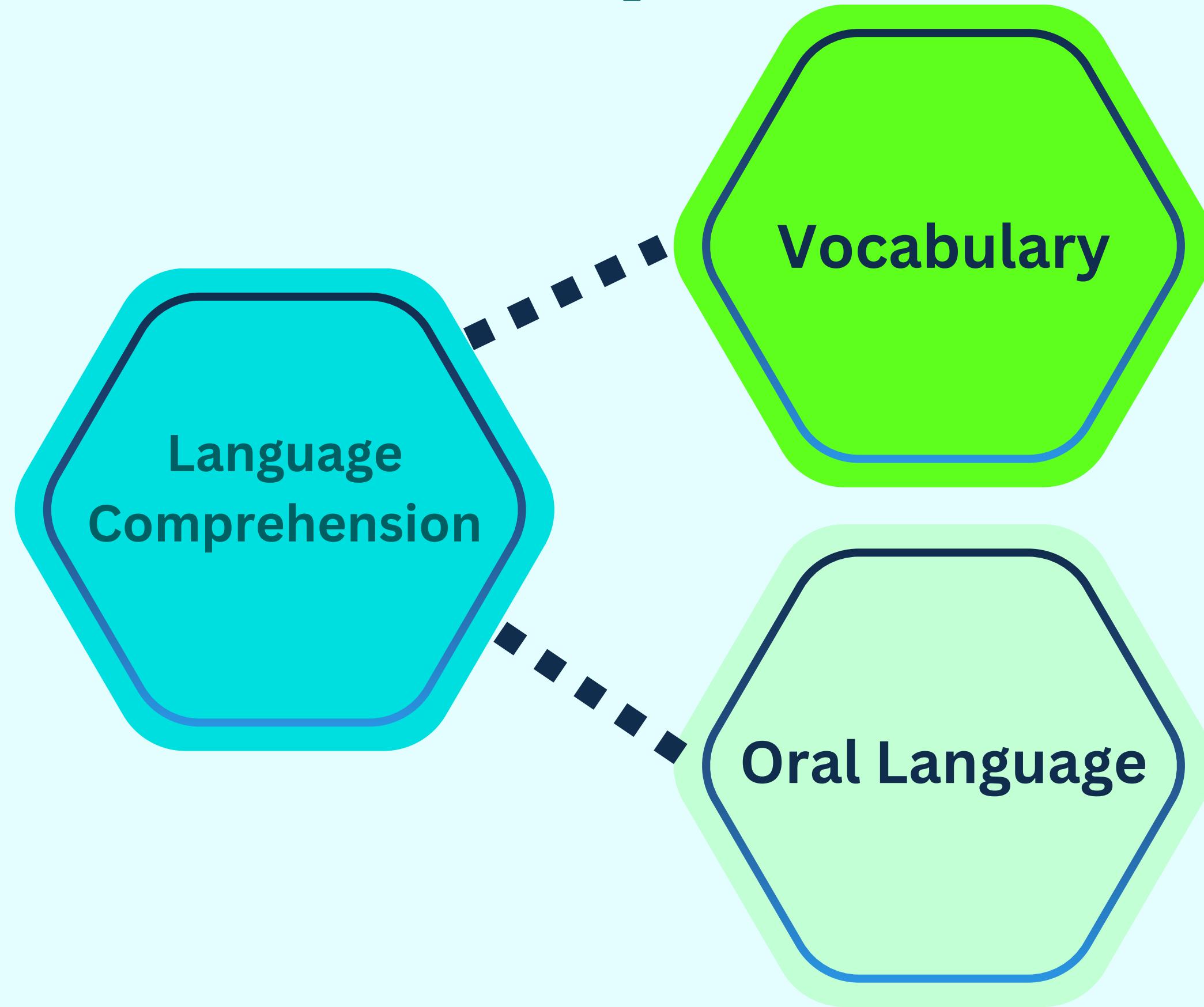


Written language typically has richer vocabulary and semantics than spoken language



In the light of the moon a little egg lay on a leaf.

Simple View of Reading

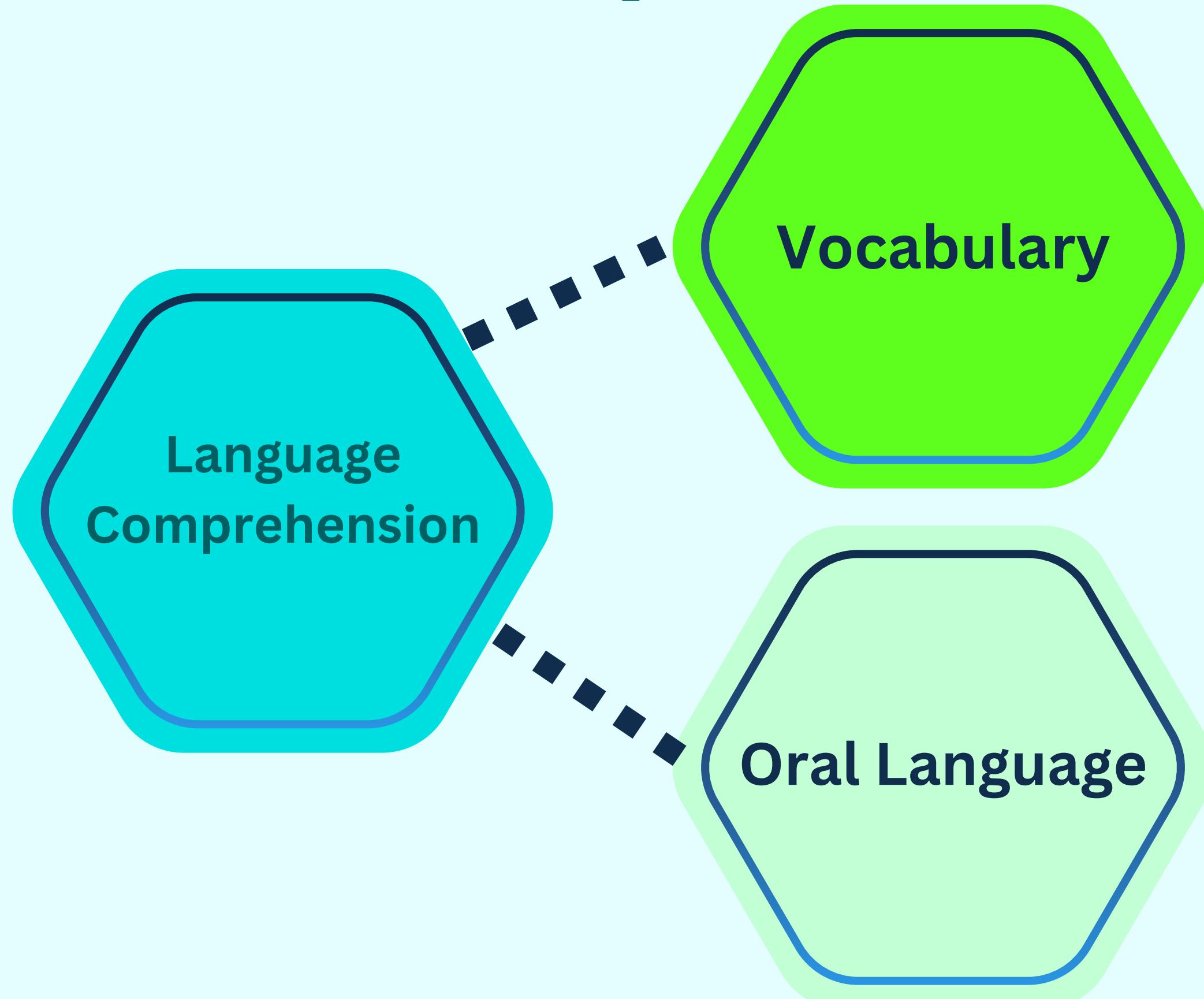


Written language typically has richer vocabulary and semantics than spoken language

In her attic bedroom Margaret Murry, wrapped in an old **patchwork** quilt, sat on the foot of her bed and watched the trees tossing in the **frenzied lashing** of the wind. Behind the trees clouds **scuddled frantically** across the sky. Every few moments the moon ripped through them, creating **wraith-like** shadows that raced along the ground.

-A Wrinkle in Time

Simple View of Reading

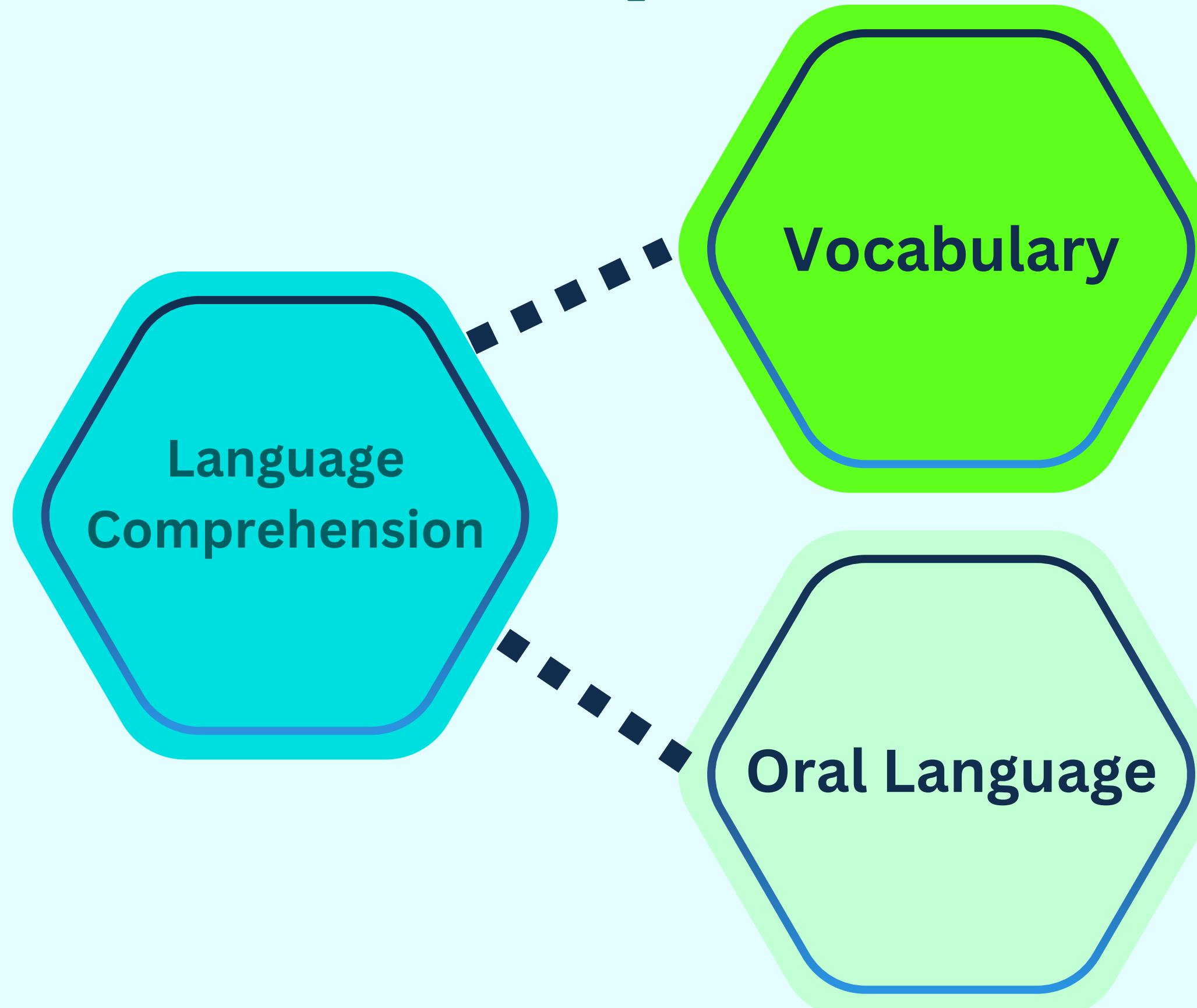


Written language typically has richer vocabulary and semantics than spoken language

But being read to is not enough

You must say and use the word to log it

Simple View of Reading

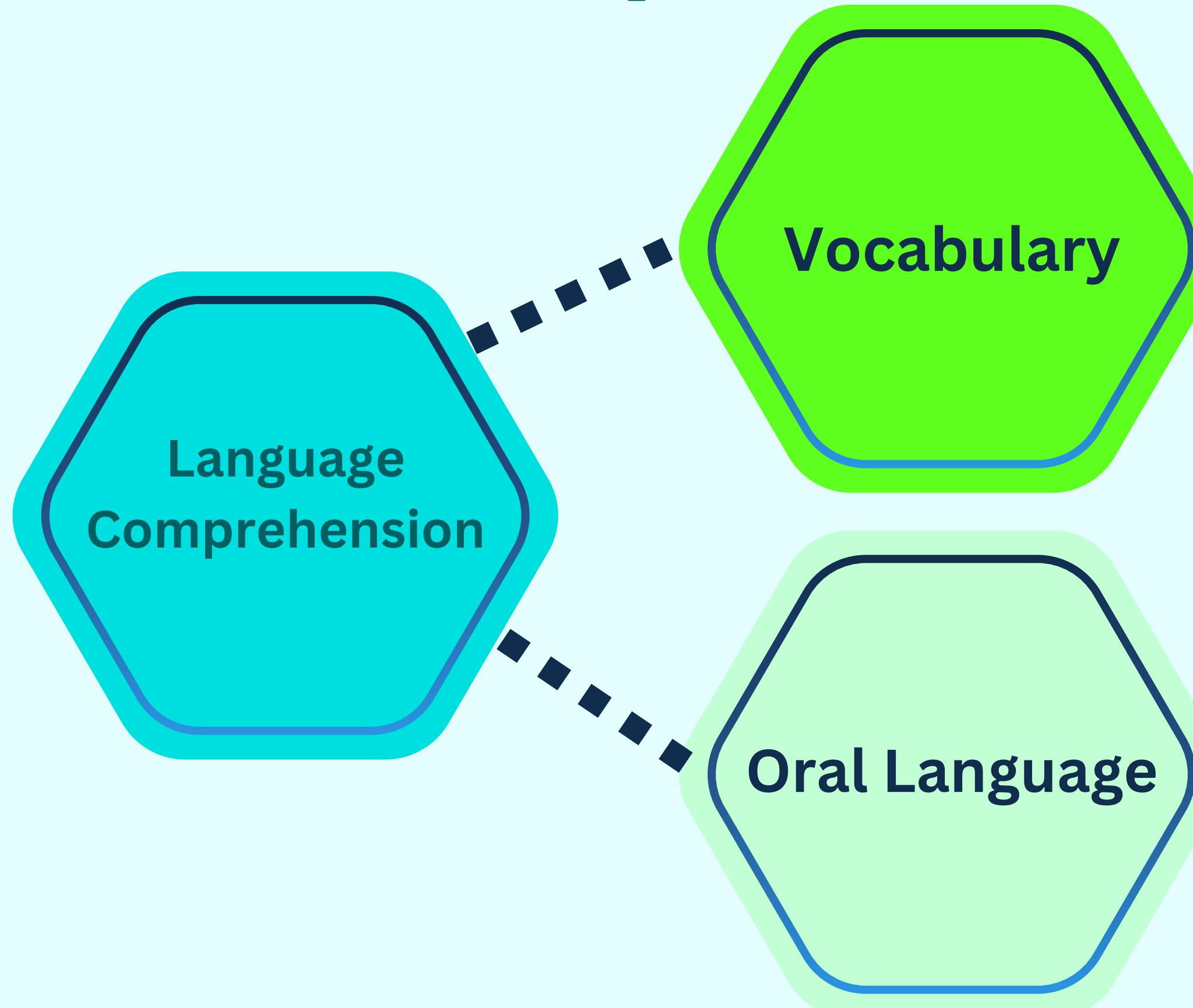


Offer **SEMANTIC** connections

Frog - Leap - Pond

Pay attention to common
words that kids are likely to
see a lot!

Simple View of Reading



Talk to your students!

- Point out words
- Use the decodable texts and word lists to build vocab knowledge

Vocabulary knowledge builds on itself

The stronger the orthographic map, the easier it is to learn new words

Simple View of Reading

Fluency



The Science of Reading

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The Ladder of Reading & Writing



Art: Dean Stanton

Learning to read seems effortless; some instruction for spelling/writing may be needed (5-10%)



Learning to read is relatively easy with broad instruction; some explicit instruction for spelling/writing likely needed (35-40%)



Learning to read/spell/write proficiently requires code-based & explicit instruction (40-45%)

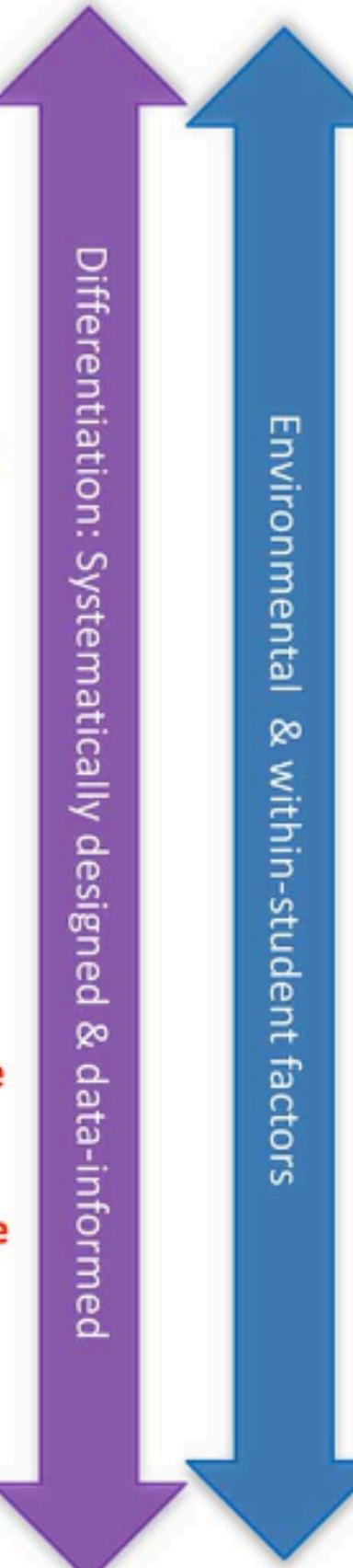


Learning to read/spell/write requires code-based, explicit, intensive instruction & frequent repetition (10-15%)

Extended learning or acceleration likely essential

Faster pace & increased implicit learning opportunities likely valuable

A comprehensive analytical approach to learning language structure likely essential



What is the implication of this graphic?

How should this impact reading instruction?



COULD YOU
PLEASE
SHOVEL THE
RAMP?

ALL THESE OTHER
KIDS ARE WAITING TO
USE THE STAIRS.
WHEN I GET THROUGH
SHOVELING THEM OFF,
THEN I WILL CLEAR
THE RAMP FOR YOU.

BUT IF
YOU SHOVEL THE
RAMP, WE CAN
ALL GET IN!

All children can learn to read

Black educators have long advocated for structured literacy.

Prior to desegregation, many Black educators used structured literacy to support children. In recent years, many Black educational leaders have pushed back against curriculum and models that did not include structured literacy. They were often ignored.



All children can learn to read

Parent advocates and dyslexia experts have long argued that structured literacy should be taught in all schools.

Not everyone who struggles to read has dyslexia...

...but everyone who struggles to read benefits from structured literacy.



At your table, share...

Something I am thinking
differently about is...

I wonder...

Something I will take
away from today is...

Partner A shares

Partner B says:
What I heard you say was...

Tell me more about...

Switch!