Road to Reading Infographic

START HERE

PHONEMIC AWARENESS
Phonemic awareness is the ability to identify and manipulate the smallest units of sound in a word (phonemes), which help to differentiate units of meaning (morphemes).

- Can they isolate the individual sounds in words? E.g. *"tell me the first sound you hear in the word ....."* [3]
- Can they recognize common sounds in different words? E.g. *"tell me the sound that is the same in boy, bike, bat"*
- Can they turn one word into another by changing one phoneme? E.g. *cat into hat*

A.1

- Teach syllable awareness through counting, clapping, or tapping to count out the phonemes in words
- Use alliteration tongue twisters and rhythms to teach students how different words share common phonemes e.g. *"sally sells sea shells.."* [4]

I.1

ALPHABETIC PRINCIPLE
Knowledge of letter names and their sounds forms the basis of literacy development, what we refer to as *"grapheme/phoneme correspondence"*.

- Does the student understand that words are composed of letters?
- Can they associate a letter with its corresponding sound? [2]
- Can they apply this letter/ sound knowledge to sounding out words with regular consonant/vowel combinations? E.g. *"cat"*?

A.2

- Explicit instruction of the alphabet symbols and the sounds they represent [1]
- Right to left spellings represent their phonemes from first to last
- Understanding that multi-letter units can represent a single sound e.g. *"ch, sh, th"*

I.2

WORD READING
Ability to read **sight words** (non-decodable words) and **common words** (decodable words)

- Can they read sight words? (non-decodable words like *"the"*, *"was"*, *"of"*) [5]
- Can they read common words (decodable words like *"in"*, *"we"*, *"no"*)
- Do they understand the meaning of the word?

A.3

READING FLUENCY
Reading fluency is a measure of both accuracy and speed. The ability to read fluently frees the reader's working memory capacity to attend to the meaning of the text. Readers who rely on effortful decoding of each word are less able to comprehend what they read.

- Sight words are affixed through practice. **Repeated reading** should be used until students can accurately read 95% of words in text [6]
- Common words are initially read via **phonetic decoding** prior to being affixed for automatic retrieval [7]

I.3

- Reading fluency is an emergent ability that requires the reader's mastery of the preceding literacy skills
- Systematic instruction of foundational literacy skills will support reading fluency [9]

I.3

- Reading fluency is assessed via the **rate** and **accuracy** with which a body of text is read [8]
- Problems with fluency are expressed as mispronounced or omitted words
- Problems with intonation (choppy reading) are also an indicator of deficient fluency

A.3

How to Use This Infographic
This infographic provides a road map of literacy development for primary grade students. The ultimate goal for learning readers is to read with an accuracy and fluency that allows for <u>reading comprehension</u>. Before we can achieve this, foundational literacy skills need to be developed. Following the winding road below, educators should assess in order the **bolded** literacy skills in learning readers.

- *Text bubbles with this symbol provide tips for instructing readers in these foundational literacy skills*
- *Text bubbles marked with this symbol provide tips for assessing foundational literacy skills*
- **A.1** *Detailed information regarding specific assessment tools and instructional strategies and methods are found in the expanded appendices*

VOCABULARY
Readers must be able to understand 90-95% of the words in the passage in order to understand the meaning of the passage [6]

- Does the student understand common words and academic words needed to function in the classroom?

A.4

- Students need 3-7 exposures to a new word in order to learn it [10]
- A good rate of vocabulary acquisition is 10 new words a week [10]
- Target high frequency words that apply across subject areas (tier 2 words). [17]

I.4

READING COMPREHENSION
Reading comprehension is the ability to infer the meaning of read text. More complex texts require experienced readers to deduce meaning that goes beyond literal interpretations to figurative understandings. Reading comprehension requires that the reader continually monitor their understanding while reading.

- Can the student read a passage and then tell you what the passage is about?
- Can the student answer literal questions about the content of the material?
- Can the student infer abstract meaning from the text? [11]

A.5

Created by Damian Page, MA & Dr. Todd Cunningham

Road to Reading Infographic Assessment Appendix: A.1

How to use the Assessment Appendix

The following appendices provide detailed information on standardized measures used to assess foundational literacy skills. For each literacy skill, a list of measures is described including how they are administered, how they are scored, and examples of materials and instructions. Progress monitoring information at the bottom of each appendix displays benchmark and cut-off points for each measure according to their Grade level. Children who score at or below cut-off points are less likely to achieve literacy goals and more likely to require intensive support.

PHONEMIC AWARENESS

First Sound Fluency (FSF)

- Measure of a student's fluency in identifying the initial sounds in words.
- Using standardized instructions, the assessor reads aloud a word and asks the student to identify the first sound in that word.
- Example of instructions:
    - *Listen to me say this word, "man." The first sound that you hear in the word "man" is /mmm/. Listen. /mmm/. "Man." What is the first sound you hear in the word "man"? Now I am going to say more words. You tell me the first sound you hear in the word.* – **Acadience Reading**
- The student's score is calculated as the number of correctly pronounced first sounds uttered in one minute.

Test Item	Correct 2 Points	Correct 1 Point
Skirt	/s/	/sk/ /sker/
Flag	/f/	/fl/ /fla/
Crow	/k/	/kr/

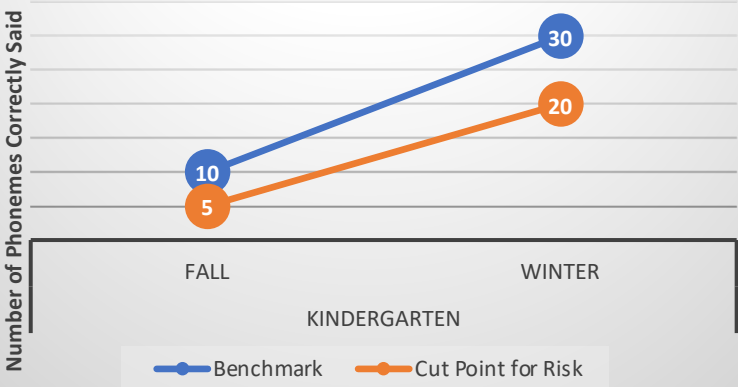*Partial example FSF assessment – Sourced from acadiencelearning.org*

Phoneme Segmentation Fluency (PSF)

- Assesses student's ability to fluently segment two-to-six phoneme words into their individual phonemes.
- Using standardized instructions, the assessor presents a series of words and asks the student to verbally produce the individual phonemes.

- Example of instructions:
    - *We are going to say the sounds in words. Listen to me say all the sounds in the word "fan." /f/ /a/ /n/. . I am going to say more words. I will say the word, and you say all the sounds in the word.* – **Acadience Reading**
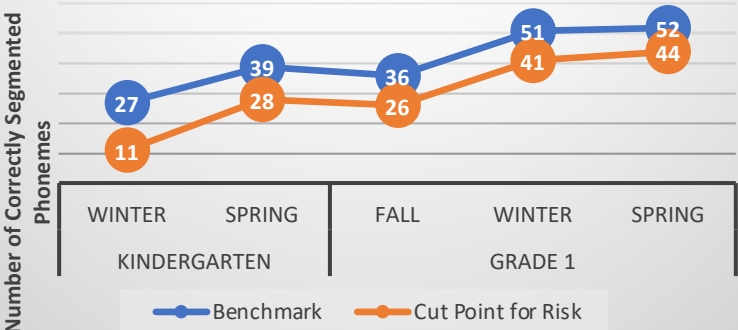- The student's score is calculated as the number of correct phonemes said in one minute.

sack /s/ /a/ /k/	hole /h/ /oa/ /l/	trip /t/ /r/ /i/ /p/	Score __ /10

Partial example PSF assessment – Sourced from acadiencelearning.org

FSF Progress Monitoring

Number of Phonemes Correctly Said

	FALL	WINTER
Benchmark	10	30
Cut Point for Risk	5	20

KINDERGARTEN

Phoneme Segmentation Progress Monitoring

Number of Correctly Segmented Phonemes

	KINDERGARTEN WINTER	KINDERGARTEN SPRING	GRADE 1 FALL	GRADE 1 WINTER	GRADE 1 SPRING
Benchmark	27	39	36	51	52
Cut Point for Risk	11	28	26	41	44

Road to Reading Infographic Instructional Appendix: I.1

How to use the Instructional Appendix

The following appendices provide detailed information on a selection of instructional strategies used to teach foundational literacy skills. These lists are not exhaustive but provide some ideas for how teachers can implement instruction of these literacy skills. For each literacy skill, a list of instructional methods is described including how they are administered and examples of materials and instructions. The layout of each instructional appendix follows a developmental sequence with instructional strategies for early grades listed at the top and moving down towards later grades. Additional resources available online are listed at the bottom of each page including compensatory approaches for readers in Grades 4 and above who have significantly underdeveloped literacy skills.

PHONEMIC AWARENESS

Kindergarten

Push That Sound

- A multi sensory approach to explicit instruction in phoneme identification and manipulation
- Students are provided with colored squares that represent first, middle, last, and/or digraph sounds (*see example right*)
- The teacher models the strategy to students first, showing how the blocks are pushed down as each phoneme is read, and then saying the completed word aloud
- The multisensory approach improves retention of information and creates an interactive way for students to explore principals of phonemic awareness

-**Teacher**
"You should have three colored blocks. When you hear me make a sound pull the first block down followed by the second and third. Then say the word the sounds make"

/h/ /o/ /t/

-**Students**
"Hot!"

-**Teacher**
*"now tell me a sentence with the word hot?"*

Grade 3

Trash or Treasure

- A multi sensory approach to instructing students to sound out CVC (consonant / vowel / consonant) real and made up words
- Using a set of three dice, students form CVC combinations and then by sounding them out determine if they are real or made up words.
- Students are then instructed to write the word according to how it was sounded out and place real words in their treasure box and made up words in the trash.
- Through this interactive game, students practice their decoding skills while also practicing their spelling and writing skills. The multi component nature of this game means that students are more likely to retain information.

-**Teacher**
"You're going to roll the dice and make a word that goes green, blue, red. Then you are going to read it aloud. What does this one say?"

M A T
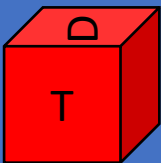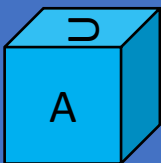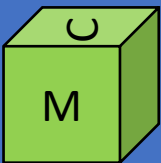
-**Student**
"Mat!"

-**Teacher**
Removes dice – *"Now write the word mat and put it in your treasure box if it is a real word and your trash bin if it is a made up word"*

Compensatory Approach

- Oral instruction and evaluation of student knowledge – limiting the need for students to read during tests or activities
- Assistive Technology including, audio books, text to speech, speech to text – providing a means for students to access the curriculum while circumventing significant reading impairment

Additional Resources

More instructional resources are available through
- Balanced Literacy Diet website (www.oise.utoronto.ca/balancedliteracydiet)
- Reading Teacher's Top Ten Tools (www.readingteacherstoptentools.com)
- Reading Rockets (www.readingrockets.org)

Road to Reading Infographic Assessment Appendix: A.2

How to use the Assessment Appendix

The following appendices provide detailed information on standardized measures used to assess foundational literacy skills. For each literacy skill, a list of measures is described including how they are administered, how they are scored, and examples of materials and instructions. Progress monitoring information at the bottom of each appendix displays benchmark and cut-off points for each measure according to their Grade level. Children who score at or below cut-off points are less likely to achieve literacy goals and more likely to require intensive support.

ALPHABETIC PRINCIPLE

Letter Sound Fluency (LSF)

- For students who are struggling to learn to read, it is their knowledge of letter sounds and the ability to apply that letter-sound knowledge to decode words that is most highly related to reading outcomes. [12]
- Using standardized instructions, the assessor presents the student with a page of upper- and lower-case letters, as well as digraphs, and instructs the student to sound out as many items as they can aloud in one minute.
- Example of instructions:
  - *"When I say begin, say the sound each letter makes. I will stop you after 60 seconds. Start at the top of the page and read across each row."* – **Easy CBM**
- The student's score on this measure is calculated as the number of correct items said in one minute.

D	m	g	Y	/4
H	e	U	t	/4
w	v	Th	sh	/4
Ph	A	x	i	/4

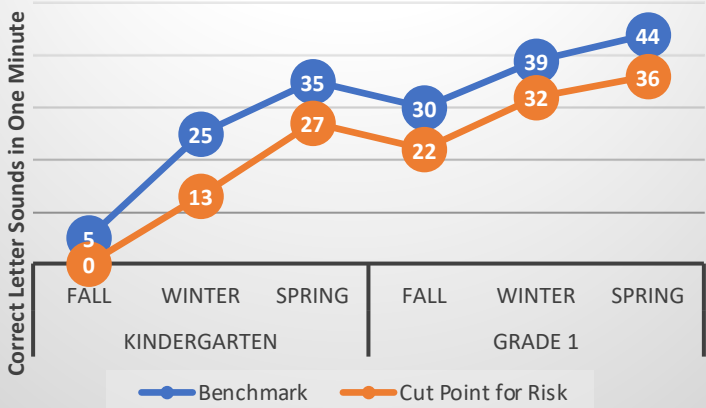*Partial example of LSF assessment – Sourced from app.easycbm.com*

Nonsense Word Fluency (NWF)

- Nonsense word fluency provides a measure of students' knowledge of sound/spelling patterns and their ability to blend sounds into words (**Decoding**).
- Using standardized instructions, the assessor presents the student with a list of nonsense words and instructs them to read as many as they can aloud in one minute.
- Example of instructions:
  - *"We are going to read some make-believe words. Listen. This word is 'sog.' (Run your finger under the word as you say it.) The sounds are /s/ /o/ /g/ (point to each letter)"* – **Acadience Reading**
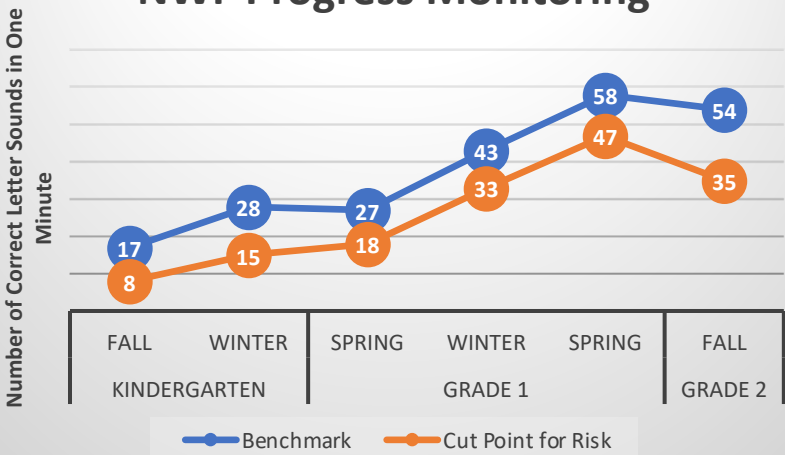- The student's score on this measure is calculated as the number of correct items read in one minute.

sog	kiz	jal	Correct Words Read /3
lav	muk	vos	/3
hep	jov	kul	/3

Partial example NWF assessment – Sourced from acadiencelearning.org

LSF Progress Monitoring

Correct Letter Sounds in One Minute

Benchmark: 5 (Fall K), 25 (Winter K), 35 (Spring K), 30 (Fall G1), 39 (Winter G1), 44 (Spring G1)
Cut Point for Risk: 0 (Fall K), 13 (Winter K), 27 (Spring K), 22 (Fall G1), 32 (Winter G1), 36 (Spring G1)

FALL / WINTER / SPRING — KINDERGARTEN
FALL / WINTER / SPRING — GRADE 1

— Benchmark   — Cut Point for Risk

NWF Progress Monitoring

Number of Correct Letter Sounds in One Minute

Benchmark: 17 (Fall K), 28 (Winter K), 27 (Spring K), 43 (Winter G1), 58 (Spring G1), 54 (Fall G2)
Cut Point for Risk: 8 (Fall K), 15 (Winter K), 18 (Spring K), 33 (Winter G1), 47 (Spring G1), 35 (Fall G2)

FALL / WINTER — KINDERGARTEN
SPRING / WINTER / SPRING — GRADE 1
FALL — GRADE 2

— Benchmark   — Cut Point for Risk

Road to Reading Infographic Instructional Appendix: I.2

How to use the Instructional Appendix

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ALPHABETIC PRINCIPLE

Kindergarten

Name Game

- An interactive large group game that has students make connections between letter shapes and the sounds they make using the names of classmates.
- The teacher prepares this game by writing the names of each student in clear block writing on strips of paper attached to a board.
- The teacher explains to the students that she will provide clues as to the name she is thinking of and the students will then have to guess what name the teacher is thinking of
- Clues are provided as the beginning sound in the name and the number of syllables clapped out by the teacher

Name Game

Sophia	Michael
Jordan	Maggie
Ken	Alex

-**Teacher**
"I'm thinking of a name that starts with the Aaaa sound, and when I clap it out *clap* *clap* it has two syllables"
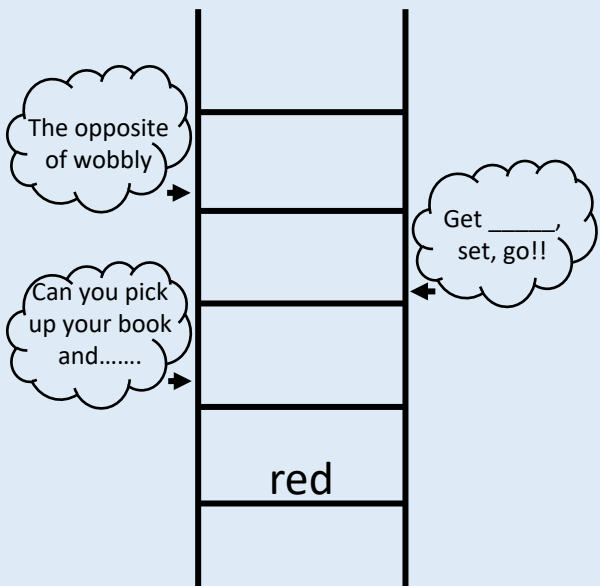
-**Students**
"Alex!"

Grade 3

Climb the Word Ladder

- Students develop their understanding of letter/sound correspondence and spelling patterns through a writing game
- The teacher prepares a sequence of words, each word differing from the last one by one letter
- The teacher also prepares a list of clues to guide the students in identifying the correct words in the sequence
- The teacher reads each clue and instructs the student to write the next word in the sequence

Word Ladder

The opposite of wobbly

Get _____, set, go!!

Can you pick up your book and.......

red

Compensatory Approach

- Oral instruction and evaluation of student knowledge – limiting the need for students to read during tests or activities
- Assistive Technology including, audio books, text to speech, speech to text – providing a means for students to access the curriculum while circumventing significant reading impairment

Additional Resources

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Road to Reading Infographic Assessment Appendix: A.3

How to use the Assessment Appendix

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WORD READING

Word Reading Fluency (WRF)

- Measure of accuracy and fluency in reading "sight" words and common words in .
- The assessor presents the student with a list of words and instructs them to read the words aloud.
- Example of instructions:
  - "Please read from this list of words. Read across the page and then on to the next row." . – **Easy CBM**
- The student's score is calculated as the number of correctly read words in one minute.

I	an	way	my	/4
great	wish	all	stop	/4
found	case	passed	sharp	/4

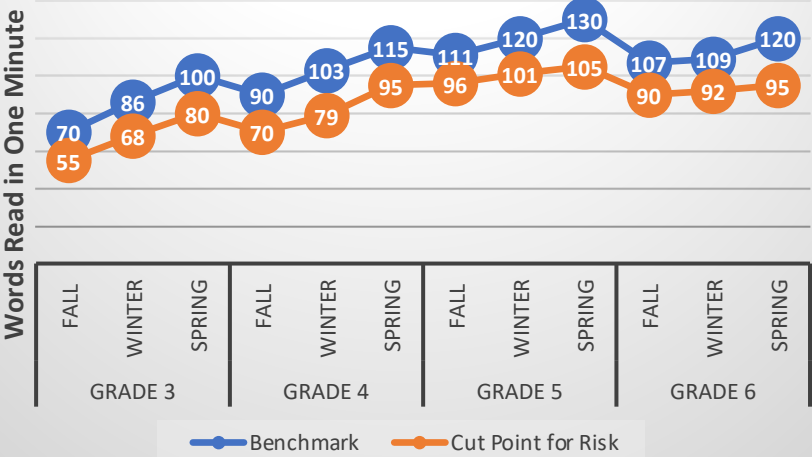*Partial example WRF assessment – Sourced from app.easycbm.com*

READING FLUENCY

Oral Reading Fluency (ORF)

- Assesses student's ability to read words in connected text.
- The assessor presents the student with a passage and asks the student to read the passage aloud for one minute.
- Example of instructions:
  - *Now read this story to me. Please do your best reading. Ready, begin.* – **Acadience Reading**
- The student's score is calculated as either the total words read or the number of correct words read (accuracy).
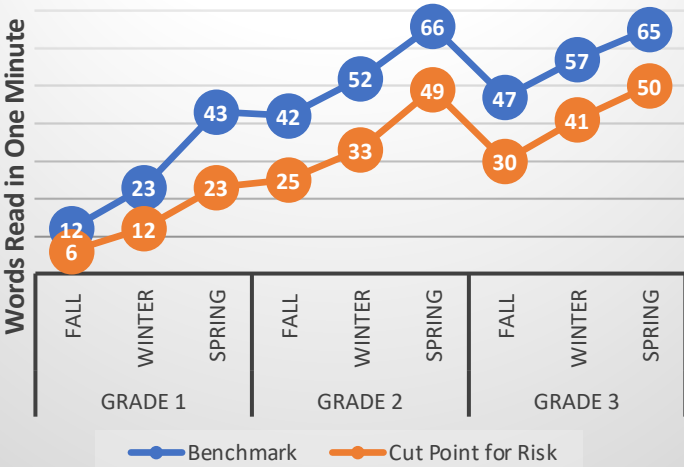
0	The teacher told the class that	6
6	they would have their pictures	11
11	taken the next day. Nick did not	18
18	look forward to picture day. He	24
24	did not understand why all the	30
30	other kids were excited.	34

Partial example ORF assessment – Sourced from acadiencelearning.org

ORF Progress Monitoring

Words Read in One Minute

Benchmark values: 70, 86, 100, 90, 103, 115, 111, 120, 130, 107, 109, 120
Cut Point for Risk values: 55, 68, 80, 70, 79, 95, 96, 101, 105, 90, 92, 95

GRADE 3			GRADE 4			GRADE 5			GRADE 6		
FALL	WINTER	SPRING	FALL	WINTER	SPRING	FALL	WINTER	SPRING	FALL	WINTER	SPRING

— Benchmark — Cut Point for Risk

WRF Progress Monitoring

Words Read in One Minute

Benchmark values: 12, 23, 43, 42, 52, 66, 47, 57, 65
Cut Point for Risk values: 6, 12, 23, 25, 33, 49, 30, 41, 50

GRADE 1			GRADE 2			GRADE 3		
FALL	WINTER	SPRING	FALL	WINTER	SPRING	FALL	WINTER	SPRING

— Benchmark — Cut Point for Risk

Road to Reading Infographic Instructional Appendix: I.3

How to use the Instructional Appendix

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WORD READING

Kindergarten

Teach high-frequency words along with phonemic awareness individual letter-sound relationships, and a concept of word. [16]

Practice reading high-frequency words in sentences and books, through repeated reading. Research indicates that four readings of the same material results in optimal gains in new words. [17]

Use high-frequency words to help children learn to decode new words e.g., *long -> strong.* [18]

Teach high-frequency words in groups that have similar patterns e.g., *some, come, & above, love*

Grade 3

Ask students to use grapho-phonemic analysis (letter/sound correspondence) to read high frequency words. [5]

READING FLUENCY

Peer-assisted reading – pairing students of mixed abilities offers a good opportunity for modeling and providing feedback

Choral reading – have students read text together in groups, ensuring that students of differing ability levels are paired together.

Reading while listening – students follow along to the teacher as they read or they follow along while they listen to a recording of the reading.

Guided reading groups – provide students guided oral practice to groups of students at the same level of fluency.

Compensatory Approach

- Oral instruction and evaluation of student knowledge – limiting the need for students to read during tests or activities
- Assistive Technology including, audio books, text to speech, speech to text – providing a means for students to access the curriculum while circumventing significant reading impairment

Additional Resources

More instructional resources are available through
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Road to Reading Infographic Assessment Appendix: A.4

How to use the Assessment Appendix

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VOCABULARY

Two Question Vocabulary Measure (TQVM)

- Differences in preschool students' vocabularies create widening gaps in developmental trajectories of reading achievement. Therefore, vocabulary development should start early in the preschool and primary years and be continually monitored. **(13)**
- **The Two Question Vocabulary Assessment (14)** is a 22-item measure designed to assess vocabulary knowledge in preliterate children (See Figure 1). It uses a "yes/no" multiple choice method to assess children's word meaning knowledge. Questions are read orally to the students in a group setting. Students respond by circling yes or no on their response sheets.
- Examples of instructions:
  - "*Are cherries and peaches **fruits**?*" (yes or no)

Alone — Do you do things by yourself when you are alone? | Yes No

Vegetables — Are peaches and cherries Vegetables? | Yes No

Signature — Would a fingerprint be a signature? | Yes No

Partial example Two Question Vocabulary Assessment – (Kearns & Biemiller, 2010)

Assessing Tier 2 Words

- Tier 2 words are high frequency words used by mature language users. These words provide students with more precise and complex ways of expressing concepts that they are already familiar with (e.g., *"keep going" vs. "maintain"*). **(15)**
- Tier 2 vocabulary knowledge can be assessed by providing students with fill in the blank and M/C questions to assess knowledge of words appropriate for their grade level and content areas of study.
- Students select the most appropriate word in the context of a particular sentence.
- Total score is the number of correct responses the student provides.

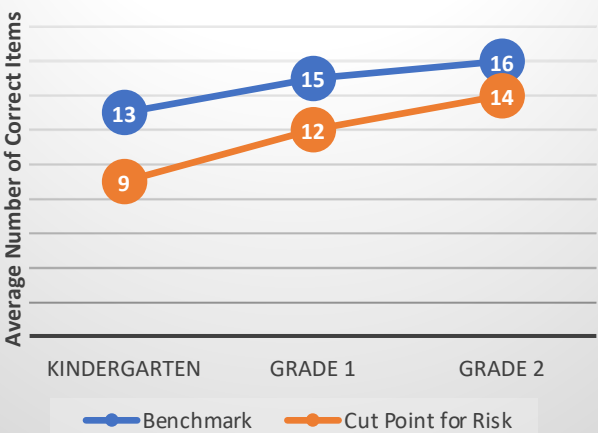1. To be a good basketball player takes **practice**. Here **practice** means:

   A: sleeping   B: watching   C: training

2. To be safe Sam walks on the _____ instead of the street.
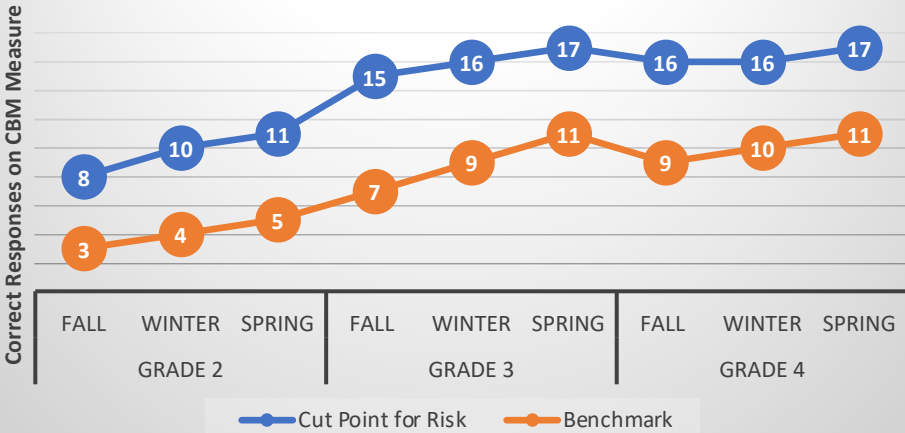
   A: highway   B: sidewalk   C: road

Partial example Vocabulary Assessment – Sourced from app.easycbm.com

TCVM Progress Monitoring

Average Number of Correct Items

Benchmark: 13, 15, 16
Cut Point for Risk: 9, 12, 14

KINDERGARTEN   GRADE 1   GRADE 2

— Benchmark   — Cut Point for Risk

Tier 2 Words Progress Monitoring

Correct Responses on CBM Measure

Cut Point for Risk: 8, 10, 11, 15, 16, 17, 16, 16, 17
Benchmark: 3, 4, 5, 7, 9, 11, 9, 10, 11

FALL   WINTER   SPRING   FALL   WINTER   SPRING   FALL   WINTER   SPRING
GRADE 2   GRADE 3   GRADE 4

— Cut Point for Risk   — Benchmark

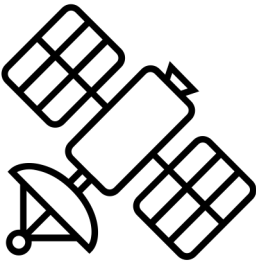# Road to Reading Infographic Instructional Appendix: I.4

How to use the Instructional Appendix

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VOCABULARY

Vocabulary Four-Square
- Students develop their vocabulary knowledge through a multi-modal strategy that reinforces depth of encoding and recall
- Students write the to be learned word and its definition and then draw a quick picture related to the word and a sentence that includes the word
- This strategy is not restricted to any grade level of subject area
- Through this, students can gradually build their own dictionaries of subject matter words (tier 3) and high frequency academic words (tier 2)

Satellite	An artificial body placed in orbit around the earth or moon or another planet in order to collect information or for communication.
Word	Meaning
The satellite circled the earth every 24 hours, sending pictures back to earth.	
Sentence	Picture

Road to Reading Infographic Assessment Appendix: A.5

How to use the Assessment Appendix

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READING COMPREHENSION

Oral Reading Fluency (ORF)

- The retell component of the ORF measure provides a comprehension check and indicates whether or not the student is reading for meaning. [8]
- After the student reads the ORF passage they are instructed to orally retell as much of the story as they can.
- Example of instructions:
  - *Now tell me as much as you can about the story* – **Acadience Reading**
- The student's score is calculated as either the total words relating to the story or the number of correct story details recounted.

Passage: Goldfish make good pets. They are easy to take care of and do not cost much to feed. Goldfish are fun to watch while they are swimming.

Example Student Response: *"He has a pet goldfish. The fish is easy to take care of. He likes to watch it swim. It is a good pet."*

Quality of Response		Story Elements Retold _____	
1	2 or fewer details	**3**	3 or more details in meaningful sequence
2	3 or more details	**4**	3 or more details in meaningful sequence, captures main idea

Partial example ORF assessment – Sourced from **acadiencelearning.org**

Maze Task

- The Maze task is designed to measure the reasoning processes that constitute comprehension. [8]
- Students are given a passage where approximately every seventh word has been replaced by a box containing the correct word and two distractor words. Students read the passage and circle the correct word.
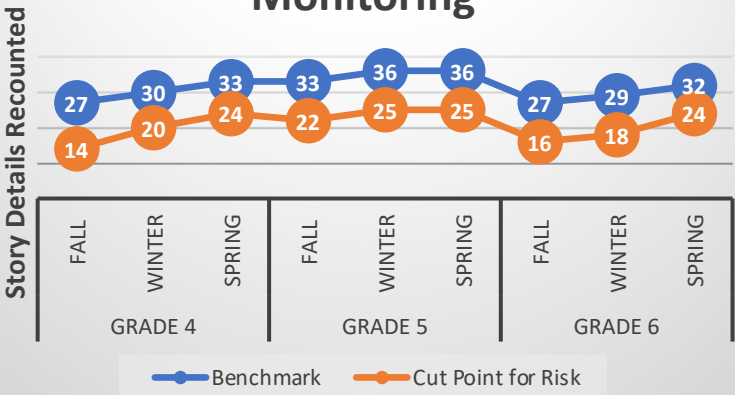
This is a person who has an | angry unusual result | talent for a sport. Tiger Woods | mind were is | one such person.

Partial example Maze assessment – Sourced from **acadiencelearning.org**

- Example of Instructions:
  - *You are going to read a story with some missing words. For each missing word there will be a box with three words. Circle the word that makes the most sense in the story.* – **Acadience Reading**
- Maze Adjusted Score = number of correct responses – (number of incorrect responses ÷ 2)

ORF Retell Progress Monitoring

Story Details Recounted

	FALL	WINTER	SPRING	FALL	WINTER	SPRING	FALL	WINTER	SPRING
Benchmark	27	30	33	33	36	36	27	29	32
Cut Point for Risk	14	20	24	22	25	25	16	18	24
	GRADE 4			GRADE 5			GRADE 6		

—●— Benchmark   —●— Cut Point for Risk

Maze Progress Monitoring

Maze Adjusted Score

	FALL	WINTER	SPRING	FALL	WINTER	SPRING	FALL	WINTER	SPRING
Benchmark	15	17	24	18	20	24	18	19	21
Cut Point for Risk	10	12	20	12	13	18	14	14	15
	GRADE 4			GRADE 5			GRADE 6		

—●— Benchmark   —●— Cut Point for Risk

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Additional Resources

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