

Exercise Description – Hoof Beat

Hoof Beat helps participants develop skills in decoding, and vocabulary through exercises focused upon word sound, meaning, function, and structure. The exercise encourages flexibility during reading and automatic access to the various dimensions of vocabulary. The dimensions include grade-appropriate levels of semantics, phonology, morphology, syntax, and orthography. The exercise is designed to build vocabulary by showing the child how words function.

Reading Curriculum Standards and Hoof Beat

Hoof Beat reinforces the following nationwide Language and Reading Arts curriculum standards that center on fourth grade but contain items above and below grade level:

- Apply knowledge of word origins, derivations, synonyms, antonyms, and idioms to determine the meaning of words and phrases.
- Use appropriate strategies when reading for different purposes (e.g., full comprehension, location of information, personal enjoyment).
- Identify and use regular and irregular verbs, adverbs, prepositions, and coordinating conjunctions in writing and speaking.
- Locate information in reference texts by using organizational features (e.g., prefaces, appendixes).
- Use knowledge of antonyms, synonyms, homophones, and homographs to determine the meanings of words.
- Demonstrate knowledge of levels of specificity among grade-appropriate words and explain the importance of these relations (e.g., dog/mammal/animal/living things). -
- Recognize the similarities of sounds in words and rhythmic patterns (e.g., alliteration, onomatopoeia) in a selection. -
- Identify subjects and verbs that are in agreement and identify and use pronouns, adjectives,
- Arrange words in alphabetic order.

The Skills Developed in Hoof Beat

Hoof Beat helps the participant improve decoding skills and vocabulary by working on:

- Semantics
- Phonological properties
- Morphological properties
- Syntax
- Orthographic properties

How Participants Work on Hoof Beat

KPAW radio is out on the streets of the city, asking question of the inhabitants. Four citizens do their best to respond to the question and the participant chooses the response they feel is correct.

When the participant clicks the yellow paw, a question is presented aurally or visually depending on the category and question type. Four responses are displayed and the participant clicks the correct response.

How Participants Progress through Hoof Beat

Hoof Beat progresses through four category types as follows:

- Semantic categories: The participant is asked questions about definition
- Phonological categories: The participant is asked questions about vowels sounds and number of syllables
- Morphological categories: The participant is asked questions about prefixes, suffixes, and roots
- Orthographic categories: The participant is asked questions about alphabetization
- Syntactic categories: The participant is asked questions about grammar (such as nouns and verbs)

How Participants Advance in Hoof Beat

When the participant begins, trials will be presented randomly from the first level (Level 1) of the first category (Semantic). There are 10 trials at each level in each category. When these 10 trials are completed they are evaluated. Regardless of the results of this evaluation the 10 trials from the next category of the same level are presented.

Once all categories in the first level have been presented in the sequence shown in the table below, the participant returns to the first category. If 90% of the participant's responses in the first category were correct, they will advance to the next level in that category and complete the 10 trials at that level. Otherwise the category will be repeated at the first level. Once the 10 trials in that category have been completed, the participant moves to the next category and check for advancement as described for the previous category. Note that if all levels of a category have been completed with 90% correct, then that category is completed.

Level	Semantic	Phonological	Morphological	Syntactic	Alphabetizing
1	Concrete Categories (Animals, Foods)	<i>Vowel Digraphs:</i> ai, ay, oa, ea, ee	<i>Prefixes:</i> un-, re-	Noun, Verb, Adjective, Adverb	1 letter deep
2	Abstract Categories (Emotions)	<i>Vowel Digraphs:</i> au, aw, oo: boot, ew	<i>Suffixes:</i> -ly, -ful, -ness, -less	Articles, Prepositions, Pronouns	2 letters deep
3	Synonyms, Antonyms	<i>Diphthongs:</i> ou, ow, oi, oy	<i>Prefixes:</i> pre-, en-, dis-, mis-, ex-, in-	Word Function (Homograph)	3 letters deep
4		<i>r-control:</i> ar, er, ir, or, ur	<i>Suffixes:</i> -tion, -sion, -teen	Word Function (Homophones)	
5		<i>Syllables</i>	Compound Words	Subject Control Verbs	
6			Greek and Latin Roots and Affixes		

Plateau-Based Transitions

If any unit (a level of a category) is repeated three times without achieving 90% correct, that unit is temporarily skipped and the next level of the current category replaces it. If there are no more levels left in the current category the unit is not skipped. Categories that are skipped will reappear after exposure to the remaining levels in a category.

Points Rewarded in Hoof Beat

Hoof Beat awards points to the participant based on the following conditions:

- **Correct answers:** The participant earns 4 points for each trial that is correctly completed.
- **Bonus points:** After the participant completes 10 trials correctly, Hoof Beat rewards the participant's performance with 10 bonus points.

Exercise Description – Jitterbug Jukebox

Jitterbug Jukebox helps participants improve spelling and sensitivity to letter-sound correspondences. This exercise includes the 500 most commonly used words in written English. Most of the word families found in 3rd and 4th grade content standards are covered, along with many other words that teachers recommend teaching at this level.

Reading Curriculum Standards and Jitterbug Jukebox

Jitterbug Jukebox reinforces the following nationwide Language and Reading Arts curriculum standards that center on fourth grade but contain items above and below grade level:

- Spell correctly roots, inflections, suffixes and prefixes, and syllable constructions.
- Spell correctly one-syllable words that have blends, contractions, compounds, orthographic patterns (e.g., qu, consonant doubling, changing the ending of a word from -y to -ies when forming the plural), and common homophones (e.g., hair-hare).
- Spell basic short-vowel, long-vowel, r-controlled, and consonant-blend patterns correctly.
- Spell frequently used, irregular words correctly (e.g., was, were, says, said, who, what, why)
- Know and use complex word families when reading (e.g., -ight) to decode unfamiliar words.
- Decode two-syllable words and regular multisyllable words.
- Recognize and use knowledge of spelling patterns (e.g., diphthongs, special vowel spellings) when reading.

The Skills Developed in Jitterbug Jukebox

Jitterbug Jukebox helps participants improve spelling and sensitivity to letter-sound correspondences by presenting words in three categories:

- **Transparent:** words that have highly regular spellings and follow the most basic system of letter-to-sound correspondences.
- **Rule Governed:** words that are governed by some of the most reliable rules of the English language
- **High Frequency Inconsistent/Exceptional:** words that either employ rules of low reliability or have irregular, highly idiosyncratic spellings but are used frequently.

How Participants Work on Jitterbug Jukebox

When the participant clicks the yellow paw, the participant hears the word spoken aloud and letters appear on the jukebox keys. The participant then spells the word by clicking on the jukebox keys. The trial is complete when the participant clicks the "Done" button or when they click an incorrect letter.

If the participant needs to hear the word again, the participant can click the yellow paw again to hear it spoken aloud.

How Participants Progress through Jitterbug Jukebox

Jitterbug Jukebox progresses through three grade levels of vocabulary: 2nd Grade, 3rd Grade, and 4th Grade.

Jitterbug Jukebox progresses through three category types as follows:

- Transparent - words that follow simple letter-sound correspondence
- Rule Governed - words that follow highly consistent spelling rules
- High Frequency Inconsistent/Exceptional - words from among the 2000 most frequently used words in written English that contain inconsistent spelling patterns like the [oo] in 'book' and 'moon,' or exceptional (irregular) spellings like 'yacht.'

A trial is evaluated as correct if the participant clicks the "done" button after correctly spelling the word. A trial is defined as incorrect immediately after the first incorrectly clicked letter or additional letter clicked after a word is correctly spelled.

How Participants Advance in Jitterbug Jukebox

At each grade level the words will be split into three categories: transparent spellings, rule governed spellings, and high frequency words with inconsistent/exceptional spellings. The progression will move through all three categories and then advance the grade level.

Level	Category 1	Category 2	Category 3
2nd Grade	<i>Transparent</i>	<i>Rule Governed</i>	<i>High Frequency Inconsistent/Exception</i>
3rd Grade	<i>Transparent</i>	<i>Rule Governed</i>	<i>High Frequency Inconsistent/Exception</i>
4th Grade	<i>Transparent</i>	<i>Rule Governed</i>	<i>High Frequency Inconsistent/Exception</i>

The words in 2nd grade, category 1 (Transparent) will be presented randomly. After the first 40 words are presented, these are evaluated for 90% correct. If achieved, and the last response was correct, the participant advances to the next category. The evaluation continues every trial in a moving block of 40 trials until 90% correct is achieved on a correct response or all the stimuli has been repeated twice. The advancement is the same for category 3 (High Frequency Inconsistent/Exception).

In category 2, the words in each rule group will be presented together. If there are more than 10 words, the rule group will be evaluated for 90% after the first randomly chosen 10 words. The last response must be correct to advance. If the rule group has less than 10 words, the group will be evaluated as meeting criteria if all trials are correct. If criteria are met in a group, the rule for that group will be presented and the participant will advance to the next (randomly chosen) rule group. They will also move to the next rule group if they did not meet criteria, but they will have to return to that rule group before advancing from category 2. Once criteria are met in all rule groups, the participant advances to the next category. If a participant does not pass a rule group after 3 attempts, that group will be closed and allow for the participant to move out of the current category when the other rule groups are also closed. They must meet criteria in that rule group later.

Plateau-Based Transitions

In categories 1 and 3, if 90% is not achieved in a moving block of 40 trials, and all words in the category have been presented twice, the participant will move to the next category. In category 2, if a participant does not pass a rule group after 3 attempts, that group will be skipped to allow for the participant to move out of the current category when the other rule groups are also closed or skipped (either by meeting criteria or failing to meet criteria three times). If a participant skips a category as described above they must return to that category and meet criteria before the exercise is complete.

Points Rewarded in Jitterbug Jukebox

Jitterbug Jukebox awards points to the participant based on the following conditions:

- **Correct answers:** The participant earns 4 points for each trial that is correctly completed.
- **Bonus points:** After the participant completes 10 trials correctly, Jitterbug Jukebox rewards the participant's performance with 10 bonus points.

Exercise Description – Goat Quotes

Goat Quotes helps participants improve comprehension of short paragraphs as measured by performance on a paraphrase-detection task. The exercise is designed to sample the basic syntactic (i.e., grammatical) structures of spoken English generally mastered in the early elementary grades. The exercise develops not only careful reading but also logical thinking and working memory skills as well.

Reading Curriculum Standards and Goat Quotes

Goat Quotes reinforces the following nationwide Language and Reading Arts curriculum standards that center on fourth grade but contain items above and below grade level:

- Quote or paraphrase information sources, citing them appropriately.
- Use simple and compound sentences in writing and speaking.
- Combine short, related sentences with appositives, participial phrases, adjectives, adverbs, and prepositional phrases.
- Understand and be able to use complete and correct declarative, interrogative, imperative, and exclamatory sentences in writing and speaking.
- Identify and correctly use prepositional phrases, appositives, and independent and dependent clauses; use transitions and conjunctions to connect ideas.
- Identify and use past, present, and future verb tenses properly in writing and speaking.
- Identify and use subjects and verbs correctly in speaking and writing simple sentences.
- Restate facts and details in the text to clarify and organize ideas.
- Recognize and use the correct word order in written sentences.

The Skills Developed in Goat Quotes

Goat Quotes helps the participant improve comprehension by presenting trials in 12 categories of paraphrasing.

1. Using the adverbial form (vocabulary paraphrasing)

Using adjectives to combine sentences with the copula Goat Quotes helps participants improve comprehension of short paragraphs as measured by performance on a paraphrase-detection task. The exercise is designed to sample the basic syntactic (i.e., grammatical) structures of spoken English generally mastered in the early elementary grades. The exercise develops not only careful reading but also logical thinking and working memory skills as well.

Reading Curriculum Standards and Goat Quotes

Goat Quotes reinforces the following nationwide Language and Reading Arts curriculum standards that center on fourth grade but contain items above and below grade level:

- Quote or paraphrase information sources, citing them appropriately.
- Use simple and compound sentences in writing and speaking.
- Combine short, related sentences with appositives, participial phrases, adjectives, adverbs, and prepositional phrases.

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- Understand and be able to use complete and correct declarative, interrogative, imperative, and exclamatory sentences in writing and speaking.
- Identify and correctly use prepositional phrases, appositives, and independent and dependent clauses; use transitions and conjunctions to connect ideas.
- Identify and use past, present, and future verb tenses properly in writing and speaking.
- Identify and use subjects and verbs correctly in speaking and writing simple sentences.
- Restate facts and details in the text to clarify and organize ideas.
- Recognize and use the correct word order in written sentences.

The Skills Developed in Goat Quotes

Goat Quotes helps the participant improve comprehension by presenting trials in 12 categories of paraphrasing.

1. Using the adverbial form (vocabulary paraphrasing)
 1. Using adjectives to combine sentences with the copula
 2. Nested prepositional phrases
 3. Simple clausal conjunction
 4. Passive transformation
 5. Conjunction in verb phrase
 6. Conjunction in noun phrase
 7. Verb-phrase ellipsis
 8. Subject relative embedding: (That)
 9. Object relative embedding
 10. Object relative embedding: relativized objects (present & past)
 11. Subject relativization: passive (present & past)

These categories are designed to sample the basic syntactic (i.e., grammatical) structures of spoken English usually mastered in the early elementary grades. The foils in each item use the same words and structures as the paragraph and correct paraphrase but omit key information and/or introduce false statements.

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How Participants Work on Goat Quotes

In Goat Quotes four newspapers paraphrase a headline at the top of a news kiosk. Only one is correct, which the participant attempts to choose. A goat news vendor eats the paper once selected.

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When the participant clicks the yellow paw, a paragraph (two or three sentences long) is presented textually. Four separate sentences also appear, one of which correctly paraphrases the paragraph. The participant must select the correct one.

How Participants Progress through Goat Quotes

Participants progress through the exercise through three different levels (see table below) and twelve different paraphrasing categories (as outlined above). The level is determined by vocabulary grade level, sentence length, and number of sentences. All categories are represented at each level.

How Participants Advance in Goat Quotes

In a given level a category is randomly chosen. All five trials from that category are presented randomly. After all trials from that category have been presented a new category is randomly selected. All the Level 1 trials will be presented and once the participant has responded to each, the trials will be evaluated. If 90% of the trials were responded to correctly, the participant progresses to the next level, otherwise the current level will be repeated.

Level 1	Level 2	Level 3
Generally 2nd Grade vocabulary Average 10 words/sentence 2 sentences	Generally 3rd Grade vocabulary Average 12 words/sentence 2 sentences	Generally 4th Grade vocabulary Average 16 words/sentence 3 sentences

Plateau-Based Transitions

There are no plateau-based transitions in Goat Quotes. The same paraphrase categories are repeated in each level. If a participant is having trouble with the trials in Level 1, Level 2 with longer sentences and more advance vocabulary will usually prove to be more difficult.

Points Rewarded in Goat Quotes

Goat Quotes awards points to the participant based on the following conditions:

- **Correct answers:** The participant earns 4 points for each trial that is correctly completed.
- **Bonus points:** After the participant completes 10 trials correctly, Goat Quotes rewards the participant's performance with 10 bonus points.

Exercise Description – Book Monkeys: Book Two

Book Monkeys: Book Two helps participants develop paragraph comprehension skills. Specifically, Book Monkeys: Book Two helps participants learn to read for literal meaning, cause-and-effect relationships, and inferential comprehension; these different aspects of text contribute to participant's overall comprehension of long passages. In addition to expository and narrative text, this exercise features tables, instructions, schedules, and poems. Book Monkeys: Book Two helps participants improve working memory as well as vocabulary skills, which are crucial for flexible, fluent reading.

Reading Curriculum Standards and Book Monkeys: Book Two

Book Monkeys: Book Two reinforces the following nationwide Language and Reading Arts curriculum standards that center on fourth grade but contain items above and below grade level:

- Use sentence and word context to find meaning of unknown words
- Distinguish and interpret words with multiple meanings.
- Understand and be able to use complete and correct declarative, interrogative, and imperative sentences
- Demonstrate comprehension by pinpointing answers in text
- Recall and summarize major points in text
- Make predictions about coming information
- Distinguish main idea and supporting details in expository text
- Distinguish cause and effect
- Evaluate new information and hypotheses by testing them against known information and ideas.
- Extract appropriate and significant information from text, including problems and solutions
- Use knowledge of root words to determine the meaning of unknown words within a passage.
- Determine the underlying theme or author's message in fiction and nonfiction
- Extract appropriate and significant information from the text, including problems and solutions
- Understand and explain the figurative and metaphorical use of words in context.
- Follow simple multiple-step written instructions (e.g., how to assemble a product or play a board game).
- Identify the musical elements of literary language (e.g., rhymes, repeated sounds, instances of onomatopoeia).
- Describe the function and effect of common literary devices (e.g., imagery, metaphor, symbolism).
- Identify structural patterns found in informational text (e.g., compare and contrast, cause and effect, sequential or chronological order, proposition and support) to strengthen comprehension.
- Understand how text features (e.g., format, graphics, sequence, diagrams, illustrations, charts, maps) make information accessible and usable.

The Skills Developed in Book Monkeys: Book Two

Book Monkeys: Book Two helps the participant improve paragraph comprehension in the following ways:

- **Literal comprehension:** Book Monkeys: Book Two presents questions that ask the participant to recall facts from the paragraph, such as the main point. The ability to extract the main point from a paragraph—the gist—contributes to comprehension of longer passages.
- **Causative comprehension:** Book Monkeys: Book Two presents questions about the cause of the events within the paragraph. Understanding cause and effect is important for comprehending and remembering text. Participants work on recognizing cause-and-effect relationships.
- **Inferential comprehension:** Book Monkeys: Book Two presents questions that ask the participant about various hypotheses he or she needed to form in order to understand the text, such as what happens next, what the best title for the paragraph might be, and what is the meaning of a word used in the paragraph. Inferential comprehension is crucial for understanding the links between concepts and building a coherent gist for the entire passage.
- **Content and Style:** Book Monkeys: Book Two presents questions that ask the participant about content and style such as if the paragraph is fiction or non-fiction, identifying the narrator of the paragraph, identifying an example of a simile, and selecting sentences that have the same meter as the presented poem.
- **Working memory:** The participant must hold in working memory the gist of the paragraph, as well as important details, to answer the questions correctly. Developing working memory abilities helps the participant not only keep the gist of the paragraph in mind but also read and comprehend longer, more complicated texts.
- **Vocabulary:** As the participant progresses, Book Monkeys: Book Two presents longer paragraphs that use more advanced vocabulary words. In addition, Book Monkeys: Book Two regularly asks participants to identify the meaning of a word that is from 1 to 3 grade levels above the vocabulary level of the paragraph. Vocabulary skills contribute to automatic word recognition, an important factor in fluent reading.

How Participants Work on Book Monkeys: Book Two

In **Mode 1**, the participant clicks the yellow paw, and a monkey dangles an open book on the screen. The participant must first read the displayed paragraph, click the **Done Reading** button, and then read the librarian's question. Several scholarly monkeys display possible answers to the question, and the participant must choose the correct answer. After the participant has answered two questions about the paragraph, Book Monkeys: Book Two displays the paragraph again to help the participant refresh his or her memory. The librarian asks six questions about each paragraph; the paragraph reappears after the participant has answered the second and fourth questions.

In **Mode 2**, the participant clicks the yellow paw and a monkey opens a book to display a table, schedule, or instruction text. In addition, a question is displayed with four possible responses. The participant clicks the correct answer to complete a trial.

How Participants Progress through Book Monkeys: Book Two

Book Monkeys: Book Two progresses through three levels of difficulty as follows:

- **Level 1:** The participant works on paragraphs of around 5 to 6 sentences; each sentence contains, on average, 9 to 10 words. Words are generally at the 2nd grade.
- **Level 2:** The participant works on paragraphs of around 7 sentences; each sentence contains, on average, 9 to 12 words. Words are generally at the 3rd grade level.
- **Level 3:** The participant works on paragraphs of around 9 sentences; each sentence contains, on average, 16 words. Words are generally at the 4th grade level.

At each level, Book Monkeys: Book Two presents six nonfiction paragraphs and four fiction paragraphs. After the participant has read a paragraph, Book Monkeys: Book Two asks the participant:

- Two **literal** questions of a true-false nature (*This story does not tell you...*)
- Two **causative** questions regarding causes of events within the paragraph (*The animals dig the holes first because...*)
- Two **inferential** questions that require the participant to formulate a hypothesis about certain components of the paragraph. The two inferential questions are chosen from four possible types:
 - The most appropriate title for the paragraph (*The best title for this story is...*)
 - What is most likely to happen next (*Which sentence would most likely come next?*)
 - The meaning of a particular word (*The word "mayor" means...*)
 - Whom or what a particular pronoun refers to (*The word "she" is talking about...*)

At each level, the monkeys ask all types of inferential questions.

Mode 1

After Book Monkeys: Book Two presents a paragraph and six questions about that paragraph, Book Monkeys: Book Two evaluates the participant's responses. If the participant answered all six questions correctly, Book Monkeys: Book Two activates the yellow paw and allows the participant to go on to the next paragraph. If the participant has not answered a question correctly, Book Monkeys: Book Two gives the participant two more tries at it.

Book Monkeys: Book Two allows the participant to revisit incorrectly answered questions for two reasons. One is to accommodate the working memory capacity of young participants; a participant may have answered the question incorrectly simply because he or she could not remember the paragraph well enough. If so, the participant will do better after reading the paragraph again. The second reason is that the participant may not have developed the skills necessary to comprehend and extract the main point of a passage. By giving the participant the chance to rethink his or her reading strategy, Book Monkeys: Book Two guides the participant toward reading for comprehension and retention of the salient points of a text.

During the participant's second attempt to answer a question correctly, Book Monkeys: Book Two displays the paragraph again and the librarian repeats the question. The monkeys give the participant the same four choices, but Book Monkeys: Book Two grays out and deactivates the incorrect answer the participant chose the first time.

After the participant responds, Book Monkeys: Book Two displays another question that wasn't correctly answered (if there are any). After Book Monkeys: Book Two cycles through all the questions that the participant didn't answer correctly the first time around, Book Monkeys: Book Two evaluates the participant's responses.

If the participant still has not answered a question correctly, Book Monkeys: Book Two gives the participant one last attempt. During the participant's third attempt to answer a question correctly, Book Monkeys: Book Two displays the paragraph again and the librarian repeats the question. The monkeys give the participant the same four choices, and Book Monkeys: Book Two grays out and deactivates both incorrect answers that the participant chose the first two times. If the participant answers correctly, Book Monkeys: Book Two displays the next question that has not yet been correctly answered (if any). If the participant doesn't choose the correct answer on the third try, Book Monkeys: Book Two highlights the correct answer.

Book Monkeys: Book Two does not give the participant a fourth try at questions that the participant has not answered correctly; after the third round of attempts, Book Monkeys: Book Two activates the yellow paw and allows the participant to progress to the next paragraph.

After the participant has completed all the trials in one level, Book Monkeys: Book Two evaluates all the trials for that level. In evaluating trials for advancement, Book Monkeys: Book Two only considers the participant's first response to each question. If the participant has chosen 90 percent of the answers correctly on the first try, Book Monkeys: Book Two advances to the next level. Otherwise the mode at that level will be repeated.

Mode 2

After Book Monkeys: Book Two presents a paragraph and six questions about that paragraph, Book Monkeys: Book Two evaluates the participant's responses. If the participant answered all six questions correctly, Book Monkeys: Book Two activates the yellow paw and allows the participant to go on to the next table, schedule, or instruction. If the participant has not answered a question correctly, Book Monkeys: Book Two gives the participant two more tries at it.

If the participant has not answered one or more questions correctly, one of the incorrectly answered questions is randomly selected and presented again. The incorrect response previously chosen is inactive and displayed in a grayed out state. Once the participant responds to this question, one of the remaining incorrectly answered questions is randomly selected and presented. The incorrect response previously chosen is inactive and displayed in a grayed out state. This continues until all the incorrectly answered questions have been presented again.

If all of these questions were answered correctly the yellow paw becomes active again. If one or more of these were responded to incorrectly, one of the incorrectly answered questions is randomly selected and presented again. This time both incorrectly chosen responses are inactive and displayed in a grayed out state. If the participant makes an incorrect response at this point the correct answer highlights and there is a short delay before the next question is shown. If the participant doesn't choose the correct answer on the third try, Book Monkeys: Book Two highlights the correct answer.

Book Monkeys: Book Two does not give the participant a fourth try at questions that the participant has not answered correctly; after the third round of attempts, Book Monkeys: Book Two activates the yellow paw and allows the participant to progress to the next table, schedule, or instruction.

After the participant has completed all the trials in one level, Book Monkeys: Book Two evaluates all the trials for that level. In evaluating trials for advancement, Book Monkeys: Book Two only considers the participant's first response to each question. If the participant has chosen 90 percent of the answers correctly on the first try, Book Monkeys: Book Two advances to the next level. Otherwise the mode at that level will be repeated.

Plateau-Based Transitions

Book Monkeys: Book Two does not use plateau-based transitions to advance the participant to the next level for the following reasons:

- Book Monkeys: Book Two presents all categories of questions at all three levels.
- Level 2 increases the difficulty of the exercise by increasing the similarities between the target answer and the foils, but it does not increase the difficulty of the type of question asked.
- Level 3 increases the difficulty of the paragraph by increasing the number of sentences per paragraph, the sentence length, and the vocabulary level, but it does not increase the difficulty of the type of question asked.

Therefore, Book Monkeys: Book Two requires the participant to work on the trials at Level 1 until he or she achieves 90 percent accuracy. At that point, the participant is better prepared to work on the same types of questions at a higher level of difficulty.

However, if a participant is unable to answer a question after three tries, Book Monkeys: Book Two transitions the participant to another paragraph, table, or schedule. Because the librarian asks slightly different questions about each paragraph, table, or schedule, the participant has the chance to not only read different material but also respond to questions that might be more comprehensible to him or her.

Points Rewarded in Book Monkeys: Book Two

Book Monkeys: Book Two awards points to the participant based on the following conditions:

- **Correct answers:** The participant earns 12 points for each trial that is correctly completed on the first attempt. The participant earns 6 points for a trial that is correctly completed on the second attempt and 3 points for a trial that is correctly completed on the third attempt.
- **Bonus points:** After the participant completes 10 trials correctly, Book Monkeys: Book Two rewards the participant's performance with 40 bonus points.

Exercise Description – Stinky Bill's Billboard

Stinky Bill's Billboard helps participants improve sentence comprehension while practicing the decoding of words in realistic contexts. It also helps build vocabulary and awareness of word structure.

Reading Curriculum Standards and Stinky Bill's Billboard

Stinky Bill's Billboard reinforces the following nationwide Language and Reading Arts curriculum standards that center on fourth grade but contain items above and below grade level:

- Know common roots and affixes derived from Greek and Latin and use this knowledge to analyze the meaning of complex words (e.g., international).
- Identify and interpret figurative language and words with multiple meanings.
- Spell frequently misspelled words correctly (e.g., their, they're, there).
- Distinguish and interpret words with multiple meanings.
- Understand and explain frequently used synonyms, antonyms, and homographs.
- Know abstract, derived roots and affixes from Greek and Latin and use this knowledge to analyze the meaning of complex words (e.g., controversial).
- Identify and correctly use verbs that are often misused (e.g., lie/lay, sit/set, rise/raise), modifiers, and pronouns.
- Identify compound words, and articles correctly in writing and speaking.
- Recognize and use knowledge of spelling patterns (e.g., diphthongs, special vowel spellings) when reading.
- Use knowledge of individual words in unknown compound words to predict their meaning.

The Skills Developed in Stinky Bill's Billboard

Stinky Bill's Billboard helps improve sentence comprehension and decoding and builds vocabulary by presenting words in six categories:

- easy words
- compound words
- prefixes
- homophones
- near misses (i.e., common-error words)
- hard words

How Participants Work on Stinky Bill's Billboard

A messy skunk is sloppily pasting sentences onto a billboard. Some words including one important to the sentence have fallen into the hands of animals in windows below. The participant helps the skunk by picking the correct word from those that have fallen.

When the participant clicks the yellow paw, a sentence with a missing word will appear on screen. The participant responds by clicking on the correct word to complete the sentence.

How Participants Progress through Stinky Bill's Billboard

Stinky Bill's Billboard progresses through five category types as follows:

- easy words
- compound words
- prefixes
- homophones
- near misses (i.e., common-error words)
- hard words

A trial is evaluated as correct if the participant responds by clicking the correct missing word.

How Participants Advance in Stinky Bill's Billboard

When the participant begins, trials will be presented randomly from the first level (Level 1) of the first category (Easy Words). There are 10 trials at each level in each category. When these 10 trials are completed they are evaluated. Regardless of the results of this evaluation the 10 trials from the next category of the same level are presented. Once all categories in the first level have been presented, the participant returns to the first category. (See the table below for a description of the categories and levels.)

If 90% of the participant's responses in the first category were correct, they will advance to the next level in that category and complete the 10 trials at that level. Otherwise the category will be repeated at the first level. Once the 10 trials in that category have been completed, the participant moves to the next category and check for advancement as described for the previous category. Note that if all levels of a category have been completed with 90% correct, then that category is completed.

	Easy Words	Compound Words	Prefixes	Homophones	Near Misses	Hard Words
Level 1	K	2nd	2nd	2nd	2nd	4th
Level 2	1st	3rd	3rd	3rd	3rd	5th
Level 3	2nd	4th	4th	4th	4th	6th
Level 4	3rd	5th	5th	5th	5th	7th

Plateau-Based Transitions

If any level of a category is repeated three times without achieving 90% correct, that level/category combination is temporarily skipped and the next level of the current category replaces it. If there are no more levels left in the current category the level is not skipped. Levels that are skipped will reappear after exposure to the remaining levels in a category.

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Points Rewarded in Stinky Bill's Billboard

Stinky Bill's Billboard awards points to the participant based on the following conditions:

- **Correct answers:** The participant earns 4 points for each trial that is correctly completed.
- **Bonus points:** After the participant completes 10 trials correctly, Stinky Bill's Billboard rewards the participant's performance with 10 bonus points.

Exercise Description – Lulu's Laundry Line

Lulu's Laundry Line helps participants develop the correct use of capitalization, commas, and such general punctuation marks as the period, quotation mark, exclamation point, parenthesis, and apostrophe. Because the participant must read the words and understand the sentences to decide what form of punctuation is appropriate, the exercise also helps develop automaticity for decoding and sentence comprehension.

Reading Curriculum Standards and Lulu's Laundry Line

Lulu's Laundry Line reinforces the following nationwide Language and Reading Arts curriculum standards that center on fourth grade but contain items above and below grade level:

- Use parentheses, commas in direct quotations, and apostrophes in the possessive case of nouns and in contractions.
- Use underlining, quotation marks, or italics to identify titles of documents.
- Capitalize names of magazines, newspapers, works of art, musical compositions, organizations, and the first word in quotations when appropriate.
- Capitalize geographical names, holidays, historical periods, and special events correctly.
- Punctuate dates, city and state, and titles of books correctly.
- Use commas in dates, locations, and addresses and for items in a series.

The Skills Developed in Lulu's Laundry Line

Lulu's Laundry Line helps the participant develop the correct use of capitalization, commas, and general punctuation as well as decoding and sentence comprehension by presenting the range of punctuation forms encountered between grades 2 and 4 within a range of vocabulary and sentence lengths appropriate to these same grades.

How Participants Work on Lulu's Laundry Line

Lulu hangs her laundry out to dry. When the participant clicks the yellow paw, a paragraph with blanks and choices for the first blank appear on items that hang on the line. The participant responds by clicking on the correct choice to fill the blank. The target and choices for the next blank will then be displayed and the participant again responds by clicking the correct choice. Once all the blanks have been filled the participant can click the yellow paw for the next paragraph.

How Participants Progress through Lulu's Laundry Line

Participants progress through groups of punctuation rules (General, Capitalization, and Commas). A group consists of 10 trials in a category that works on a specific rule. A trial is evaluated as correct if the participant responds by clicking the correct target for a blank.

How Participants Advance in Lulu's Laundry Line

Advancement proceeds up the levels. When criteria have been met in a level, the participant advances to the next level.

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	General	Capitalization	Commas
Level 1	Sentence endings (., !, ?)	First word of sentence, names of people, and the pronoun /	
Level 2	Quotation marks	Proper nouns, months, days of the week; titles & initials of people (e.g., Former President John F. Kennedy)	Greeting and closure of a letter, dates, items in a series
Level 3	Abbreviations	Geographical names, holidays, historical periods, special events	City and state; addresses
Level 4	Parentheses, apostrophes in the possessive case of nouns and in contractions, italics and quotation marks to identify titles of documents	Titles of magazines, newspapers, works of art, musical compositions, organizations; first word in quotations when appropriate	Use commas in direct quotations

Plateau-Based Transitions

If a participant repeats a unit three times without advancement, the participant will move to the next level. If the current unit is the highest level, it will continue to be repeated. If a unit is skipped in this way, the participant must later return and meet criteria in that unit to complete the exercise.

Points Rewarded in Lulu's Laundry Line

Lulu's Laundry Line awards points to the participant based on the following conditions:

- **Correct answers:** The participant earns 4 points for each trial that is correctly completed.
- **Bonus points:** After the participant completes 10 trials correctly, Lulu's Laundry Line rewards the participant's performance with 10 bonus points.