



LEAPING LIZARDS

Teacher Manual

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Goals/Objectives

English Language Arts Standard

Students will build reading comprehension and vocabulary skills by selecting the correct word, letter, or punctuation mark to complete a sentence.

Language/ **Reading Skills**

Students will...

- use knowledge of conventions when reading (capitalization & punctuation)
- read texts with accuracy, appropriate rate, and expression to support comprehension (fluency)
- recognize and apply knowledge of words and word parts such as morphemes and phonemes (word structure & knowledge)
- clarify the meaning of unknown words using strategies such as morphemic and contextual analysis (word learning strategies)

Reading Comprehension Skills

Students will...

- distinguish key ideas from supporting details (key ideas & details)
- listen to and comprehend spoken language and derive meaning from oral texts (listening comprehension)
- read texts independently, with minimal to no assistance (independent reading)
- recognize whether they understand what they are reading, and if necessary, to take steps to repair their comprehension before continuing to read (monitoring comprehension)

Cognitive Skills

Students will...

- hold an incomplete sentence in working memory while recalling vocabulary and punctuation rules from long-term memory (memory)
- focus on specific information about a text, sustain that focus, and ignore distractions while carrying out a task (attention)
- rapidly interpret and integrate auditory and visual information to identify the meaning of words (processing)
- use the order of words to comprehend sentences and help identify missing parts (sequencing)

Social-Emotional/ **Executive Function Skills**

Students will...

- increase selective attention to detail
- increase confidence in detail comprehension
- enhance motivation for tasks requiring attention to contentive details and graphic structure
- increase self-regulation



Exercise Overview

Exercise Screen



Menu

Shows:

- Time Spent / Time Scheduled for the exercise.
- Network connection status.
- Exit: Returns student to the Assignments screen.
- Continue: Returns student to the exercise.

Number of Streaks (Ladybugs flying paper) airplanes)

A ladybug hops aboard a paper airplane, launched by one of the lizard kids, after the student makes 4 3-in-a-row streaks in the session. There is no limit on the number of paper airplanes that can be earned.

3 Time

Bar fills in from left to right to show time spent in the exercise.

4 Sentence Icons

Show the number of sentences in the current story (when applicable), with the current sentence highlighted.

6 Points

Shows total points awarded across all of a day's sessions.

- Correct answers: 5 points for each correct answer.
- Bonus points: 14 points after 8 correct answers.
- High score: Animates when the student surpasses the highest score ever achieved in one session.

Progress Meter

Tracks and celebrates every 10% of exercise content completion.

Answer Buttons (Cards)

Presents possible answers on 4 cards. The student must choose the card with the correct answer.

8 Current Streak (Ladybug) Go Button

The ladybug climbs up the slide to show the current consecutive correct answer. Resets after 3 correct in a row or an incorrect answer.

Go Button

Presents a question.



Exercise Overview

Task

In Leaping Lizards, the student reads an incomplete sentence and sees 4 possible answers on cards. The student must choose the correct answer to fill in the blank.

Early in the exercise, the sentence is read aloud to the student, and the answer cards include both a word and a picture. Later, the sentences are no longer read to the student, and the answer cards only show a word.

Did you know?

The *cloze procedure* has been used for many decades as a reading comprehension instructional approach, and assessments requiring cloze tasks have been shown to be valid measures of comprehension.¹ The cloze procedure requires the reader to fill in a blank within a passage with a word, letter, or punctuation prediction based on passage context and prior knowledge. In this way, the cloze procedure helps students develop comprehension prediction strategies.² Prediction during reading leads to increased awareness of linguistic properties of words, as well as increased recognition of phonological and orthographic representation. It also provides practice with sentence formulation—a bridge to written sentence construction.^{3,4}

The cloze tasks in Leaping Lizards help students focus attention on both the main idea and the grammatical, punctuation, and content details of a passage. As the learner progresses, they will read text-only passages, and response choices will change from pictures with text to text only.

- 1. Schneyer, J. (1965). Use of the Cloze Procedure for Improving Reading Comprehension. *The Reading Teacher,* 19(3), 174-179. Retrieved August 17, 2021, from http://www.jstor.org/stable/20195519
- 2. Afflerbach, P. (1990). The Influence of Prior Knowledge and Text Genre on Readers' Prediction Strategies. *Journal of Reading Behavior*, Volume XXII, No. 2
- 3. Van Berkum, J. J. A., Brown, C. M., Zwitserlood, P., Kooijman, V., & Hagoort, P. (2005). Anticipating Upcoming Words in Discourse: Evidence From ERPs and Reading Times. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 31(3), 443–467. https://doi.org/10.1037/0278-7393.31.3.443
- 4. Huettig, F., & Pickering, M. J. (2019). Literacy advantages beyond reading: Prediction of spoken language. *Trends in cognitive sciences*, *23*(6), 464-475.



Exercise Overview

Content

Progression

In Leaping Lizards, the student progresses through increasingly difficult groups of sentences. The linguistic complexity gradually increases, while scaffolds (such as oral presentation of the sentence) are withdrawn, increasing the attentional and memory demands of the task as the student demonstrates mastery of the content.

Leaping Lizards presents some sentences independently, and presents others in sequences that create brief fiction or nonfiction texts (stories).

Question and Answer Types	Target Type	Sample Question and Answers
Spoken & Written Words, Vocabulary	High-Frequency Word List 1	Doves and robins are two of the common kinds of birds. (most, end, blue, house)
Written Words, Capitalization & Punctuation	Initial Word Capitalization	I have a question we going to the park today? (Are, are, Ask, ask)
	End Punctuation	Why don't you try out for a part in the play (?!,_)
Written Words, Syntax	Select by Part of Speech, Easy Alternatives	The leaf floated away on the (stream, upon, pull, slowly)
	Categorize by Part of Speech	In the fall, the squirrels store nuts to eat in the winter. The underlined part is a (verb, noun, letter, sentence)
	Regular Verb Tenses	When the first astronaut stepped out of the shuttle, everyone and a big cheer went up. (clapped, claps, clap, clapper)
Written Words, Morphology	Irregular Subject- Verb Agreement	How can birds fall asleep standing on one? (foot, feet, ears, ear)
	Irregular Comparatives	These scissors are the, they are too dull to cut anything. (worst, better, bad, worse)



Introduce

Engage

To introduce this exercise to your students, first print and pass out copies of the Leaping Lizards Punctuation Cards in Student & Teacher Resources. Say: Today, we are going to practice completing the punctuation in a sentence.

- 1. Display the sentence "The puppy is having so much fun_" and read it aloud to the students. Say: The puppy is having so much fun!
- 2. Ask: What is the correct punctuation to finish the sentence? Hold up the card with the correct answer.
- 3. Confirm the correct response by saying: That's right! The exclamation point completes the sentence. Notice that the ending punctuation changes how a sentence is read.

After the correct response is confirmed, invite the students to practice reading the same sentence with a period, exclamation point, and question mark as the ending. Repeat with additional sentences and/or explain the use of these punctuation marks, as needed.

Demo

- 1. Say: Today, we're going to practice completing sentences with missing words, letters, or punctuation. Together, we'll work on an exercise called Leaping Lizards. I'll get us started, and then I'd like for you to come up and try.
- 2. Project the "Introduction English or Spanish" demo for Leaping Lizards.
- 3. Follow along with the demo, which explains how the exercise works.
 - First, look at each word, letter, or punctuation mark before choosing the answer that best fills in the blank and completes the sentence.
 - Explain why this is the best match, and how you ruled out the other options. For example, say: Sometimes you will see the same word on two different cards-one with a capital letter and one beginning with a lowercase letter. Read carefully and think about where we use capital letters and what punctuation marks go with sentences and questions. Do your best on each one!
- 4. Demo the keyboard shortcuts:
 - Go button = Space bar
 - Possible answers (left to right) = Number keys 1 4

Direct students to log in and work individually on the Leaping Lizards Demo for approximately 10 minutes. This time period mimics the timing of the exercise once it's assigned. Debrief with students to ensure they understand the task and objective of the exercise. Ask: What did you notice? Have students share anything that they have questions about.





Leaping Lizards includes instructional audio for the exercise introduction and instructions. By default, these are presented in English. You can, however, select Spanish instructions for all, some, or individual students on the Manage page in mySciLEARN.



Monitor Student Progress

Review Leaping Lizards reports regularly to monitor student progress. Use the data to determine which students are succeeding and which students might be struggling to make progress.

Where to look...

PROGRESS: Reading Level 2 Exercise Progress -Leaping Lizards

The colored line shows student progress and their percent complete. Each dot indicates a day the student worked on the exercise.



What to look for... what it means

Is the line going up?

The student is completing content accurately and making progress.

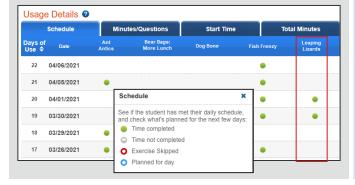
Is the line flat across several dots?

The student may be struggling and you need to find out why.

Are there long lapses between dots?

The student may be skipping this exercise.

USAGE: Usage Details - Schedule



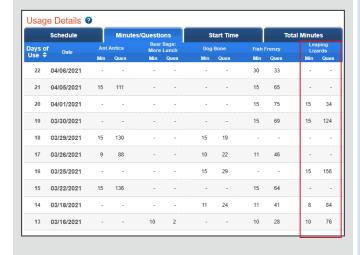
Do you see half-filled gray circles?

The student is working on this exercise, but not meeting the scheduled time. Make sure that they have time to complete their daily schedule. If fatigue is an issue, add some breaks to their schedule.

Do you see red circles?

The student is skipping this exercise. Provide support to help them re-engage.

USAGE: Usage Details - Minutes/Questions



Are many days highlighted in red?

The student is not meeting their daily schedule. Check the Schedule tab in this report to investigate further.

Is the student answering fewer questions than usual?

They may be distracted or losing focus. In comparison to their previous activity, a low number of questions to minutes may indicate the student is not applying themselves to the task.

Is the student answering more questions than usual?

They may be rushing. In comparison to their previous activity, a high number of questions to minutes may indicate that the student is trying to amass points or progress through the content without actually learning it. Remind them that making progress depends on accuracy, not speed.



Where to look...

PROGRESS: Progress Details - Leaping Lizards Progress



Percent Correct

To make progress, students must correctly answer 90% of the questions in a group.

Questions

Each group includes 10 or 20 questions.

What to look for... what it means

Are there red bars under Progress?

Red bars indicate that the student attempted a group of content but answered less than 90% of the questions correctly. Students typically pass most groups within 3 attempts, although the Categorize by Part of Speech, Regular Verb Tenses, and Irregular Comparative groups may require additional attempts.

A student who has not passed a group after 2 or 3 attempts (2 or 3 sets of red bars) may be struggling. See the "Adjust Instruction/Intervene" section in this teacher manual for suggestions on supporting struggling students. Note that after 3 attempts to pass, the student will move on to new content and will revisit that group again later.

Is percent correct well below 80%?

The student may be struggling with the task. See the "Adjust Instruction/ Intervene" section in this teacher manual for suggestions on supporting struggling students.

When a group is repeated, does the percent correct increase?

The student's performance is improving.

When a group is repeated, does the percent correct stay the same or decrease?

The student is not making progress and may be frustrated or losing focus. See the "Adjust Instruction/Intervene" section in this teacher manual for suggestions on supporting struggling students.



Reading Level 2 Progress Monitoring Chart in <u>Student & Teacher Resources</u>



Adjust Instruction/Intervene

Differentiation Activities

Differentiating instruction requires continually striving to know and to respond to each student's needs in order to maximize learning. Use the data in Leaping Lizards reports to adjust instruction to meet each student's needs and respond to variance among learners. The activities below are suggestions to support students who might be struggling with their progress in Leaping Lizards.



Does the student understand the exercise goal/task?

After initially reviewing the exercise goal/task with the student, if the student is demonstrating difficulty, consider clarifying the instructions, setting a goal based on student area of need, and modeling and practicing self-monitoring to encourage accuracy, confidence, and independence.

- First, start by setting a clear goal:
 - Set a goal in student-friendly language prior to beginning the exercise. The goal should be positively stated, written using clear and concise language, and be observable and measurable.
 - Review the goal with the student and check for understanding.
- Next, introduce and model how the student will monitor their goal:
 - Choose or create a self-monitoring chart for students to track their progress (aligned with the Reading Level 2 Progress Monitoring Chart found in Teacher Resources). Use the chart to motivate, encourage, and allow the student to practice self-monitoring. Include the goal on the self-monitoring chart.
 - Explain and model the steps needed to complete and interpret the self-monitoring chart.
 - Practice completing and interpreting the self-monitoring chart with the student.
- Then, clarify the expectations by modeling and reviewing the specific steps required to complete the exercise:
 - Review the steps of the activity with the student.
 - Model or explain the steps of the activity.
 - o Practice completion of the task with the student.
 - Encourage the student to explain or show you how to complete the task.
 - Monitor independent practice and provide feedback and prompts as needed.





Is the student on task and engaged with the activity?

When a student is struggling to stay on-task and engaged, consider the strategies below as a starting point to increasing student engagement.

- Adjust the pacing or duration of instruction.
- Provide built-in breaks as well as allow the student to request breaks as needed. Involve the student in determining their preferred and most successful work schedule. Some students prefer longer work periods and longer breaks while others prefer shorter work periods and more frequent breaks. Adjust as needed to increase student momentum, success, and confidence.
- Consider student motivation. Motivation can be intrinsic and extrinsic. How to motivate the student is largely dependent on their learning needs, preferences, and reinforcers. Student observation, reinforcer surveys, rapport building, and parent and student questionnaires can be helpful in determining how to increase student motivation.



Are there words in the task (prompt and response) that the student doesn't know?

- Have the student write down unfamiliar words.
- Define and review key vocabulary used in the task.
- Display key vocabulary words and definitions.
- Promote student practice with vocabulary sentence strips, guided-notes, response cards, or note cards.



Does the student need development with forming sentences?

- Provide fill-in-the-blank activities where the student completes the sentence by writing the correct punctuation, letter, or word.
- Consider using write-on response cards such as small dry erase boards. For example, show the students a sentence that is incomplete (has a blank space to be filled in by the student).
 - Present the response options. The responses options will either be punctuation, letters or words.
 - Have the students write the sentence including filling in the blank with a selection from the response options.
 - Check for accuracy.
 - Model and complete with the student if they are struggling to complete the task independently.



Adjust Instruction/Intervene

Student Resources

You may decide to use the following worksheet with your students:



Leaping Lizards Punctuation Cards in <u>Student & Teacher Resources</u>

Use this worksheet to introduce the activity to your students, or provide extra practice. Students will need one copy.



Reading Level 2 Completion Chart in Student & Teacher Resources

Students can self-monitor their progress in each Reading Level 2 exercise by filling in the bar each day with their actual completed percentage. This provides students with an overall view of how much content they've completed compared to how much they have left to do. Students will need one copy.

