



# ANT ANTICS

## Teacher Manual

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# Goals/Objectives

|  |  |
|--|--|
| <b>English Language Arts Standard</b>              | Students will build reading comprehension skills by selecting the sentence that best describes a given picture.  |
| <b>Language/ Reading Skills</b>                    | Students will... <ul style="list-style-type: none"><li>• understand the structural features of the English language, including syntactic features like word order and parts of speech, and morphological features like prefixes, suffixes, plurals, and subject-verb agreement (English grammar)</li><li>• quickly and automatically read common high-frequency words by sight (high-frequency words)</li><li>• recognize and apply knowledge of words and word parts such as morphemes and phonemes (word structure &amp; knowledge)</li><li>• clarify the meaning of unknown words using strategies such as morphemic and contextual analysis (word learning strategies)</li></ul> |
| <b>Reading Comprehension Skills</b>                | Students will... <ul style="list-style-type: none"><li>• recognize whether they understand what they are reading, and if necessary, take steps to repair their comprehension before continuing to read (monitoring comprehension)</li></ul>  |
| <b>Cognitive Skills</b>                            | Students will... <ul style="list-style-type: none"><li>• hold a phrase or sentence in working memory while comparing it to a picture (memory)</li><li>• focus on specific information, sustain that focus, and ignore distractions while carrying out a task (attention)</li><li>• rapidly interpret visual information to identify written words as well as details within the picture (processing)</li><li>• use the order of words to identify subtle differences in meaning among phrases and sentences (sequencing)</li></ul>   |
| <b>Social-Emotional/ Executive Function Skills</b> | Students will... <ul style="list-style-type: none"><li>• increase selective attention to detail</li><li>• increase confidence in syntactic comprehension</li><li>• enhance motivation for tasks requiring attention to contentive details</li><li>• increase self-regulation</li></ul>   |

## Icon Key



Audio



Download



English Learner



Quick Check



Settings



Video

## Exercise Screen



### 1 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.

### 2 Time

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

### 3 Points

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

- Correct answers: 5 points for each correct answer.
- Bonus points: 16 points after 10 correct answers.
- High score: Animates when the student surpasses the highest score ever achieved in one session.

### 4 Progress Meter

Tracks and celebrates every 10% of exercise content completion.

### 5 Go Button

Presents a question.

### 6 Current Streak (Raised paw)

The anteater student with the raised paw holds up more fingers to show the current number of consecutive correct answers. Resets after 3 correct in a row or an incorrect answer.

### 7 Number of Streaks (Ants)

An ant climbs part way up the side of the notebook after the student makes each 3-in-a-row streak. After 4 streaks, the ant reaches the top, jumps up, hits the bell on the wall, and reappears on the globe (up to 13 ants).

### 8 Answer Buttons (Lines in notebook)

Presents possible answers on 4 lines on the notebook page. The student must choose the phrase or sentence that correctly describes something in the picture.

# Exercise Overview

## Task

In Ant Antics, the student views a picture and reads 4 phrases or sentences, written on the lines of the notebook below. The student must choose the phrase or sentence that correctly describes something in the picture.

## Content

### Progression

In Ant Antics, the student progresses through increasingly difficult groups of phrases and sentences. There are three levels of reading difficulty (vocabulary level and sentence length). Within each of these levels, the grammatical structures presented become increasingly difficult. Increasing the reading level and grammatical difficulty of the text increases the attentional and memory demands of the task as the student demonstrates mastery of the content.

| Grammatical Structure                  | Sample Sentences                              |
|--|---|
| Predicative Adjectives                 | The paper is blue.                            |
| Third Person Subject Pronouns          | They are running.                             |
| Singular/Plural Nouns                  | large box / large boxes                       |
| Singular/Plural Nouns with Quantifiers | a large box / some large boxes                |
| Singular/Plural Verbs                  | The spotted cow eats. / The spotted cows eat. |
| Possession                             | The rat has some cheese.                      |
| Active Voice                           | The man calls the woman.                      |
| Wh- Object Questions                   | What is the cat pulling?                      |
| Singular/Plural Auxiliary Verb         | The cow is standing. / The cows are standing. |
| Simple Negation                        | The cow is not standing.                      |
| Object Pronouns                        | I gave the paper to her.                      |
| Possessive Pronouns                    | Her paper is blue.                            |

# Exercise Overview

| Grammatical Structure            | Sample Sentences                            |
|----------------------------------|---|
| Comparative                      | This cat is smaller.                        |
| Quantifiers                      | The basket has some. / The basket has none. |
| Comparatives                     | This shelf has more books.                  |
| Subject Relative Clauses         | The boy that is sitting is tired.           |
| Reduced Subject Relative Clauses | The boy sitting is tired.                   |
| Complex Negation                 | The box that is not open is large.          |
| Passive Voice                    | The cheese was eaten by the rat.            |
| Prepositions                     | Pancakes are made for the children.         |
| Who vs. What                     | What is on the shelf?                       |

## Did you know?

There are many research studies that provide evidence for the value of visual cues to improve retention and retrieval of information.<sup>1</sup> Pictures and diagrams within a text slow readers down, so that there is more processing time for reading comprehension. They also help to break down the learning task into manageable parts. Using visual aids also allows for clearer delivery of content, resulting in greater retention of key concepts in long-term memory. Visual aids also enhance and serve an important role in maintaining student attention. Additionally, pairing instructional content with visuals within clear, short activities supports students' working memory.<sup>2</sup> Based on the research, Ant Antics provides visually aided, appropriately leveled syntactic and vocabulary instruction in clear, short chunks.

1. Kouyoumdjian, H. (2012) Learning Through Visuals: Visual imagery in the classroom. *Psychology Today*. Posted July 20, 2012.

2. Pictures & Visuals/Learner Variability Project ([digitalpromiseglobal.org](http://digitalpromiseglobal.org))

# Facilitate and Encourage

## Introduce

### Engage

To introduce this exercise to your students, start by saying: [Today, we are going to practice identifying the sentence that best matches a picture.](#) Display a picture of a student laughing. Next, display the three sentences: *the student is laughing*, *the student is sleeping*, and *the student is talking*. Ask: [Which phrase best matches the picture?](#) Read the response options aloud as you point to each sentence. Confirm the correct response by saying: [the student is laughing.](#) After the correct response is confirmed, allow the students to come up with other correct and silly/incorrect answers.

### Demo

1. Say: [Today, we're going to practice selecting the phrase or sentence that best matches the picture or parts of the picture. Together, we'll work on an exercise called Ant Antics. I'll get us started, and then I'd like for you to try.](#)
2. Project the "Introduction - English or Spanish" demo for Ant Antics.
3. Follow along with the demo, which explains how the exercise works.
  - Describe the details you see in the picture.
  - Then, read the 4 phrases/sentences to choose from.
  - Explain which one is the best match and how you ruled out the other options.
  - Click the correct answer.
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 Ant Antics 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.



Ant Antics 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.

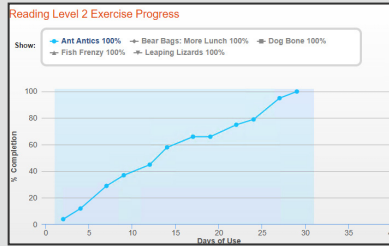
## Monitor Student Progress

Review Ant Antics 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 - Ant Antics

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

| Schedule    |            | Minutes/Questions |                       | Start Time |             | Total Minutes   |  |
|-------------|------------|-------------------|-----------------------|------------|-------------|-----------------|--|
| Days of Use | Date       | Ant Antics        | Bear Bags: More Lunch | Dog Bone   | Fish Frenzy | Leaping Lizards |  |
| 22          | 04/06/2021 |                   |                       |            |             |                 |  |
| 21          | 04/05/2021 | ●                 |                       |            |             |                 |  |
| 20          | 04/01/2021 |                   |                       |            | ●           |                 |  |
| 19          | 03/30/2021 |                   |                       |            | ●           | ●               |  |
| 18          | 03/29/2021 | ●                 |                       |            | ●           | ●               |  |
| 17          | 03/26/2021 | ●                 |                       |            |             | ●               |  |

**Schedule**

See if the student has met their daily schedule, and check what's planned for the next few days:

- Time completed
- Time not completed
- Exercise Skipped
- Planned for day

#### 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

| Schedule    |            | Minutes/Questions |                       | Start Time |             | Total Minutes   |      |
|-------------|------------|-------------------|-----------------------|------------|-------------|-----------------|------|
| Days of Use | Date       | Ant Antics        | Bear Bags: More Lunch | Dog Bone   | Fish Frenzy | Leaping Lizards |      |
|             |            | Min               | Ques                  | Min        | Ques        | Min             | Ques |
| 22          | 04/06/2021 | -                 | -                     | -          | -           | 30              | 33   |
| 21          | 04/05/2021 | 15                | 111                   | -          | -           | 15              | 65   |
| 20          | 04/01/2021 | -                 | -                     | -          | -           | 15              | 75   |
| 19          | 03/30/2021 | -                 | -                     | -          | -           | 15              | 69   |
| 18          | 03/29/2021 | 15                | 130                   | 15         | 19          | -               | -    |
| 17          | 03/26/2021 | 9                 | 88                    | 10         | 22          | 11              | 46   |
| 16          | 03/25/2021 | -                 | -                     | 15         | 29          | -               | -    |
| 15          | 03/22/2021 | 15                | 136                   | -          | -           | 15              | 64   |
| 14          | 03/18/2021 | -                 | -                     | 11         | 24          | 11              | 41   |
| 13          | 03/16/2021 | -                 | -                     | 10         | 2           | 10              | 28   |

#### 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.

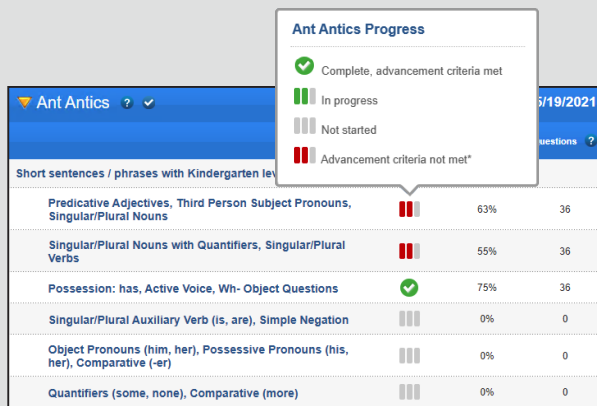
#### Is the student answering more questions than usual?

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.

# Facilitate and Encourage

## Where to look...

### PROGRESS: Progress Details - Ant Antics Progress



### Percent Correct

To make progress, students must correctly answer 3 of the 4 questions in each of three grammatical areas.

### Questions

Each attempt on a group includes 12 questions.

## What to look for... what it means

### Are there red bars under Progress?

Each group targets three different grammatical structures. To pass a group, the student must correctly answer at least 9 out of 12 questions (3 out of 4 for each structure). Red bars indicate that the student did not pass the group within three attempts (36 questions). After 3 attempts to pass, the student will move on to new content but they will revisit the group later. Make sure that the student remains focused and motivated.

### Is percent correct well below 70%?

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

### Has the student answered too many questions without passing?

Typically, students will pass a group on the first or second attempt (12 or 24 questions), although some groups, especially those pertaining to singular and plural, may require an additional attempt. A student who has not passed a group after 3 attempts may be struggling. See the "Adjust Instruction/Intervene" section in this teacher manual for suggestions on supporting struggling students.



Reading Level 2 Progress Monitoring Chart in [Student & Teacher Resources](#)



## 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 Ant Antics 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 Ant Antics.



#### **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.
  - 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.

# Facilitate and Encourage



## **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 phrases or sentences that the student doesn't know?**

- Have the student write down any 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.



## **Is the student struggling to identify details within a picture?**

- Gather a set of images that display clear events, social interactions, or still shots of multiple items displayed next to each other. Show the student one image at a time.
- Provide the student response options related to each picture in the form of sentence strips. Have the student select the response option that best describes a detail in the picture.



## **Is the student demonstrating difficulty with answering comprehension questions?**

- Present a picture and have the students write one to three sentences that describe the picture. You can use the Ant Antics Comprehension Questions Worksheet in [Student & Teacher Resources](#).
- Gather a set of images that display clear events, social interactions or multiple items displayed. Show the student one image at a time, and ask the student questions about the displayed picture. Some examples of questions are:
  - What are they doing?
  - Who is the main character?
  - How does the character feel?
  - Why does the character feel that way?

# Facilitate and Encourage

## Adjust Instruction/Intervene

### Student Resources

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



Ant Antics Comprehension Questions Worksheet in [Student & Teacher Resources](#)



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.