



# MOON RANCH

## Teacher Manual

### Contents

|  |           |
|--|-----------|
| <b><u>Goals/Objectives</u></b>         | <b>2</b>  |
| <b><u>Exercise Overview</u></b>        | <b>3</b>  |
| <u>Exercise Screen</u>                 | <b>3</b>  |
| <u>Task</u>                            | <b>4</b>  |
| <u>Content</u>                         | <b>4</b>  |
| <u>Targeted Practice</u>               | <b>6</b>  |
| <b><u>Facilitate and Encourage</u></b> | <b>7</b>  |
| <u>Introduce: Engage and Demo</u>      | <b>7</b>  |
| <u>Monitor Student Progress</u>        | <b>9</b>  |
| <u>Adjust Instruction/Intervene</u>    | <b>11</b> |
| <u>Differentiation Activities</u>      | <b>11</b> |
| <u>Student Resources</u>               | <b>14</b> |

# Goals/Objectives

## English Language Arts Standard(s)

Phonological Awareness: students will demonstrate an understanding of spoken words, syllables, and speech sounds (phonemes)

## Language/ Reading Skills

Students will be able to...

- identify speech sounds in a quick and efficient manner (phonological fluency)
- distinguish between syllables that differ by a single phoneme (phonological accuracy)

## Cognitive Skills

Students will be able to...

- rapidly process auditory details (auditory processing)
- remember speech sounds and recognize when a sound pattern has changed (phonological memory)

## Social-Emotional/ Executive Function Skills

Students will be able to...

- focus attention on a lesson or an activity
- refrain from making impulsive responses
- manage excitement and frustration

### Icon Key



Audio



Download



English Learner



Quick Check

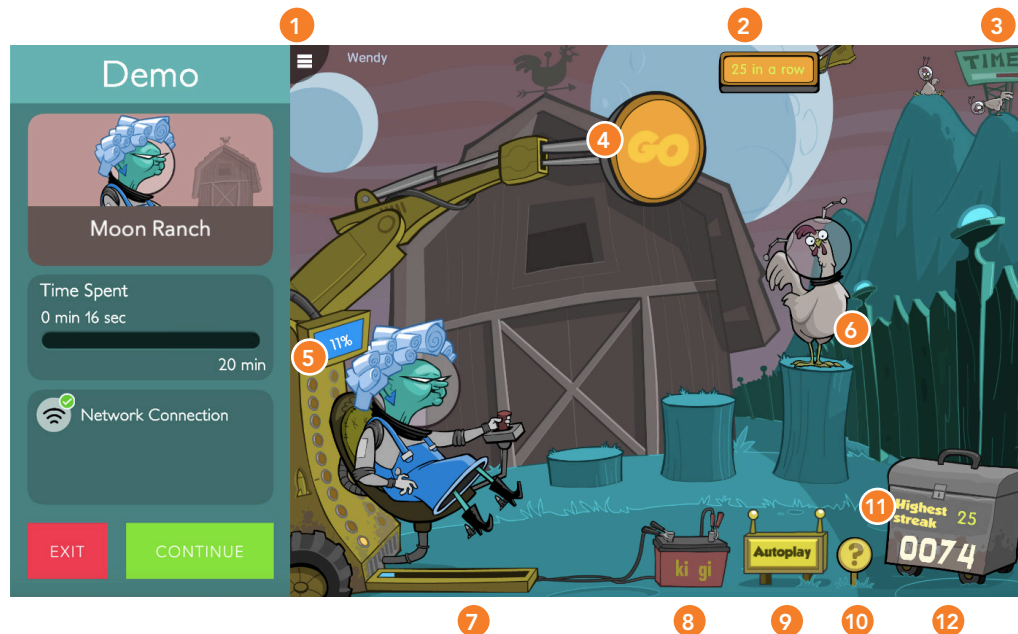


Settings



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 Current Streak

Shows the current number of consecutive correct answers in the session. Resets to zero after an incorrect answer.

### 3 Time

Fills in from left to right to show the amount of time spent vs. the time scheduled for the exercise.

### 4 Go

Presents the directions (questions) or a series of Autoplay questions. When an Autoplay sequence is in progress, this counter shows how many questions remain in the sequence.

### 5 Progress Meter

Tracks and celebrates every 10% of exercise content completion. Shows actual percent complete for the exercise.

### 6 Answer Buttons

The tokens which must be clicked or moved according to the directions presented.

### 7 Feeder Meter

Tracks and celebrates every 1% of exercise content completion.

### 8 Phoneme Pair

Displays the phoneme pair the student is currently working on.

### 9 Autoplay

Turns Autoplay on or off; when on, each click of the Go button presents a series of three or more questions.

### 10 Help

Allows the student to listen closely to sample questions and take practice attempts without affecting their progress.

### 11 Highest Streak

Shows the highest number of consecutive correct answers in this session.

### 12 Points

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

- Correct answers: 2 points for each correct answer, and 4 points for a correct answer on a wacky question.
- Bonus points: 5 points after 3 streaks of correct answers.
- Autoplay bonus: 2 points for each correct answer, if all answers in an Autoplay sequence are correct.

# Exercise Overview

## Task

In Moon Ranch students answer each question as follows:



Click the Go button to start the question. The animal begins pulsing while a series of syllables plays. For example, "ki-ki-ki-ki-gi." Listen closely! As soon as the syllable changes, click the animal again.



For each question, the initial syllable is repeated from 3 to 8 times before the syllable changes. When the syllable changes, the student must respond quickly. This combination of patiently waiting then rapidly responding helps students learn to stay focused and refrain from acting impulsively.

## Content

Students progress through five speech processing levels. Within each speech processing level, students work through directions from one or more of the following categories:

### SOUND SETS

| Target Syllable | Alternate Syllable |
|-----------------|--------------------|
| /gi/            | /ki/               |
| /chu/           | /shu/              |
| /si/            | /sti/              |
| /ke/            | /ge/               |
| /to/            | /do/               |
| /ba/            | /da/               |

### Wacky Questions

To keep the student engaged and attentive, Moon Ranch occasionally presents "wacky" questions—easy-to-answer questions that provide a fun, unexpected break in the exercise. It includes the following wacky questions, with a sound randomly chosen as the target sound:

a/i (vowel sounds)

low/high tones

weep/woop (Sky Gym sounds)

Wacky questions do not count toward exercise progression, so the student will not be penalized for incorrect answers.

# Exercise Overview

## Progression

Within each sound set, students progress through 18 stages. Across these stages the following changes occur:

- At first the syllables are modified so that they are easier to tell apart. This support is gradually reduced until the syllables resemble natural speech.
- The maximum repetitions of the alternate syllable increases from 6 to 8 after Stage 9.
- The syllable presentation becomes more rapid. Time between the syllables (inter-stimulus interval, or ISI) is reduced from 500ms to 300ms.
- The time allowed for a response is shortened.

Moon Ranch adapts to the students' performance within each sound set, moving them up and down between stages. Students also cycle between sets. A different set is presented at the beginning of each day, and/or when the student is struggling to progress. Each set is closed after its highest stage is passed.



## Acoustically Modified Speech


Have you ever worked with a student who had modifications for additional think time, extra wait time, or for teachers to speak more slowly? All of these modifications provide the student with extra time to make sense of information, also known as processing time. For students who struggle with processing speed, and for those learning a new language, slowing down the rate of speech and emphasizing specific sounds can be very beneficial to develop accurate phonological representations, while increasing comprehension.


*“Why does everything sound so strange?”*

Fast ForWord's acoustically modified speech technology (sometimes referred to as “glasses for the ears”) slows and emphasizes speech sounds so that students can hear all sounds in a word. This technology can even stretch out sounds that are physically impossible for human speakers to stretch on their own.

Some speech sounds, such as the /b/ sound in the word “bat,” have very fast transitional elements. When we say them aloud, these elements are easy to miss, but slowing them and emphasizing them (by presenting them at a higher volume) helps the brain to hear and respond to them more quickly.

The modified words and syllables in the Fast ForWord exercises may sound strange or mechanical to those who process sounds quickly. But for students who need a little extra time, the modified sounds and words will be easier to hear than natural speech. As students progress, the stretching and emphasis are reduced, pushing the brain to process at faster and faster rates until it can process natural speech.

 Why Does Everything Sound So Strange? (Student) in [Student & Teacher Resources](#)

 Why Fast ForWord Sounds the Way it Does (Teacher) in [Student & Teacher Resources](#)

# Exercise Overview

## Did you know?

Phonological fluency affects reading fluency. If students are unable to quickly and easily distinguish between all the sounds presented in a word, they may mispronounce or misremember words in a passage. Building phonological memory and fluency with Moon Ranch can help students strengthen reading skills by training them to hear all of the sounds in a syllable or word.

Phoneme: the smallest unit of sound in a word. Phonemes include all the distinct units of sound (consonants and vowels) used by the speakers of a language: /b/ /a/ /t/.

Syllable: a cluster of sounds that includes exactly one vowel: bat = 1 syllable.

Phonological memory: the ability to hold speech-based information in memory. We rely heavily on our phonological memory when reading and spelling. Students with poor phonological memory are unable to remember and then repeat nonsense words of increasing length and complexity. They tend to forget parts of a word or confuse the sounds and/or sequence of sounds in a word.

Phonological fluency: the ability to identify and manipulate speech sounds quickly and efficiently, such as, distinguishing between the syllables /ba/ and /da/.

## Targeted Practice

This exercise uses built-in, responsive technology to detect when a student is struggling and administer targeted, inline instruction—right when the student needs it—without any external resources or assistance required. This helps reduce frustration as it quickly gets the student back on track, so they can continue making progress.

Moon Ranch provides a variety of in-product interventions, such as: explanations, easier questions, coaching, and focus mode. For example, the Practice Mode intervention allows students to review a sound set by actually practicing and getting feedback on their efforts, without earning points or affecting their progress. The student can return to the exercise after listening to each sound 2 times.



The sounds in Moon Ranch may be hard to tell apart. Can you hear the difference? Click each of the Go buttons at least two times, listen for the sound that is different, and click as soon as you hear it.



# Facilitate and Encourage

## Introduce

### Engage

To introduce the exercise to your students, you can start by explaining to students that they will be listening to two syllables that sound alike. Say: *In this exercise you will be asked to choose between two syllables that sound alike, such as /ba/ and /da/. This seems like it should be very easy but these types of syllables can be difficult for our brains to tell apart, especially in some listening situations like in a noisy room, or when listening to someone who mumbles or who talks very quickly. If you don't hear these sounds clearly, you might misinterpret what someone is saying. For example, if you don't hear the difference between "my friend's bad" instead of "my friend's dad" you could be very confused about a situation.*

Students will encounter easily confusable pairs of syllables in Moon Ranch, so it will be helpful to have students practice the sounds prior to working on the exercise. Explain how the exercise works. Say: *You will hear a series of syllables, and you will click an image when you hear the syllable change. We are going to practice listening to these sounds before you work on this exercise.*

| SOUND SETS      |               |                    |               |
|-----------------|---------------|--------------------|---------------|
| Target Syllable | Pronunciation | Alternate Syllable | Pronunciation |
| /gi/            | (ghee)        | /ki/               | (key)         |
| /chu/           | (chew)        | /shu/              | (shoe)        |
| /si/            | (see)         | /sti/              | (stee)        |
| /ke/            | (cay)         | /ge/               | (gay)         |
| /to/            | (toe)         | /do/               | (doe)         |
| /ba/            | (bah)         | /da/               | (dah)         |

1. Ask students to close their eyes and listen to you say the two sounds /gi/ and /ki/.
2. Have them repeat the sounds with you. Talk about changes in the shape of their mouth and jaw when they say each of the two sounds.
3. Block your mouth with your hand or a piece of paper (so that the students can't guess an answer by reading your lips), or ask students to keep their eyes closed and listen carefully while you say /ki/. Ask the student to raise their hands when they hear the syllable change to /gi/.
4. Practice this same routine with the other sound sets.

# Facilitate and Encourage

## Demo

1. Say: *Today, we're going to practice listening for small changes in sounds. Together, we'll work on an exercise called Moon Ranch. I'll get us started, and then I'd like for you to try.*
2. Project the Moon Ranch Introduction (English or Spanish) demo.
3. Follow along with the demo, which explains how the exercise works.
4. Click the bubble:
  - Correct answer: the bubble pops and disappears
  - Incorrect answer: if the bubble is clicked too early or too late, a "thunk" sound effect plays, and the bubble remains on the screen.
5. Keyboard Shortcuts:
  - Go button = Space bar
  - Answer = Down arrow

Direct students to log in and work individually on the Moon Ranch 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.



Moon Ranch 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.



# Facilitate and Encourage

## Monitor Student Progress

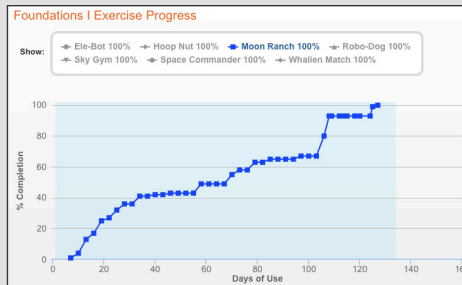
Review Moon Ranch reports regularly to monitor student progress. Use the data to determine which students are succeeding and which students might be struggling to make progress.

### Where to look...

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

#### PROGRESS: Foundations I Exercise Progress - Moon Ranch

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



#### 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 |          | Time/Exercise |                 |               |  |
|-------------|------------|-------------------|----------|------------|----------|---------------|-----------------|---------------|--|
| Days of Use | Date       | Ele-Bot           | Hoop Nut | Moon Ranch | Robo-Dog | Sky Gym       | Space Commander | Whalien Match |  |
| 123         | 07/05/2020 |                   | ●        | ○          |          |               |                 |               |  |
| 122         | 07/03/2020 |                   | ●        | ○          |          |               |                 |               |  |
| 121         | 07/02/2020 |                   |          | ○          |          |               |                 |               |  |
| 120         | 07/01/2020 |                   | ●        | ○          |          |               |                 |               |  |
| 119         | 06/30/2020 | ●                 | ●        | ○          |          |               |                 |               |  |
| 118         | 06/29/2020 |                   |          | ●          |          |               |                 |               |  |

**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 |      | Time/Exercise |      |     |      |     |      |
|-------------|------------|-------------------|------|------------|------|---------------|------|-----|------|-----|------|
| Days of Use | Date       | Min               | Ques | Min        | Ques | Min           | Ques | Min | Ques | Min | Ques |
| 124         | 07/06/2020 | -                 | -    | -          | -    | 15            | 53   | -   | -    | 15  | 38   |
| 123         | 07/05/2020 | -                 | -    | 15         | 62   | 0             | -    | -   | -    | -   | -    |
| 122         | 07/03/2020 | -                 | -    | 15         | 42   | 0             | -    | -   | -    | -   | -    |
| 121         | 07/02/2020 | -                 | -    | -          | -    | 0             | -    | -   | -    | 15  | 33   |
| 120         | 07/01/2020 | -                 | -    | 15         | 60   | 1             | 1    | -   | -    | -   | -    |
| 119         | 06/30/2020 | 15                | 83   | 15         | 49   | -             | -    | -   | -    | -   | -    |

#### 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 trials 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 trials to minutes may indicate the student is trying to amass points, or to progress more quickly, but rushing can result in mistakes. Ask them to turn Autoplay off. Remind them that making progress depends on accuracy, not speed.

# Facilitate and Encourage

## Where to look...

### PROGRESS: Progress Details - Moon Ranch Progress

**Moon Ranch Progress**

- Complete, advancement criteria met
- In progress
- Not started

|                          | Progress ? | Questions ? |
|--------------------------|------------|-------------|
| Introductory Level       | ✓          | 97          |
| Phoneme Pair /gi/ /ki/   | ✓          | 329         |
| Phoneme Pair /chu/ /shu/ | ✓          | 303         |
| Phoneme Pair /si/ /sti/  | ✓          | 367         |
| Phoneme Pair /ge/ /ke/   | ✓          | 426         |
| Phoneme Pair /do/ /to/   | ✓          | 541         |
| Phoneme Pair /ba/ /da/   | ✓          | 464         |

### Questions

Typical range for students making good progress:

- Introductory Level: 9-28
- Phoneme Pair /gi/ /ki/: 70 - 180
- Phoneme Pair /chu/ /shu/: 70 - 200
- Phoneme Pair /si/ /sti/: 50 - 120
- Phoneme Pair /ge/ /ke/: 50 - 150
- Phoneme Pair /do/ /to/: 50 - 150
- Phoneme Pair /ba/ /da/: 60 - 200

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

### Has the student taken too many questions without passing a level?

High performers can complete each level in fewer than 100 questions.

A student who is still working on a level after answering more than 200 questions may be struggling. Make sure the student remains focused and motivated. When a student reaches content that is difficult for them, their progress will slow and completing a level will require more questions. Monitor the student's progress graph and celebrate small advances.

See the "Adjust Instruction/Intervene" section in this teacher manual for suggestions on supporting struggling students.



Foundations I Progress Monitoring Chart in [Student & Teacher Resources](#)

# Facilitate and Encourage

## 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 Moon Ranch 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 to make progress in Moon Ranch.



#### **Does the student understand the exercise goal/task?**

Observe the student as they work through the exercise demo to determine where their understanding may be breaking down.



#### **Does the student frequently “miss” the correct answer because they have difficulty with timing and rhythm?**

Unlike many of the other exercises, this one requires a fast response time—so timing is everything! Ask the student to tap their foot every time they hear the syllable repeated to help them improve their timing. You may also suggest the student close their eyes while they listen to help them focus. If the student has trouble using a mouse or iPad, consider switching to a keyboard to use the keyboard shortcuts.



#### **Is the student aware that this exercise uses the *3-Forward/1-Back Rule* to make forward progress?**

Explain that accuracy is the key to moving through the content in this exercise. Students make progress based on the *3-Forward/1-Back Rule*: they move forward when they get 3 answers in a row correct, but they move backward when they get 1 answer incorrect. Because streaks record the number of correct answers in a row, charting this can help the student self-monitor by providing visual feedback of their number of correct answers in a row. Students can use the [Three-in-a-Row Worksheet](#).

# Facilitate and Encourage



## Does the student easily lose focus?

Choose an object near the student to focus on and ask them if they can hold their eyes on the object for 3 seconds without looking away. Have the student prove that they can. Ask the student if they can hold their eyes on the same object for 5 seconds. If they can, have them focus for 7 seconds. Affirm the student's ability to concentrate for that amount of time. Then explain that one answer in Moon Ranch rarely takes more than 7 seconds of concentration. Finally, ask the student to turn off autoplay so they determine when their 7 seconds of concentration begins. When the student has the discipline to resume with autoplay, allow them to do so.



## Is the student having difficulty discriminating between the two syllables?

Practice a "live" version of the exercise with an individual student or a small group.

1. Ask the student to close their eyes and listen to you say the two sounds "ki" and "gi" (pronounced "key" and "ghee"). Have them repeat the sounds with you. Talk about changes in the shape of their mouth and jaw when they say each of the two sounds.
2. Next, ask the student to keep their eyes closed and listen carefully while you say "ki" (key). The second time you say "ki" have them raise their hand. The third time you say "ki" have them say the sound with you while raising their hand.
3. Now, introduce the "gi" (ghee) sound to the student. Ask them to listen carefully with their eyes closed. The second time you say "gi" have the student place their hand down toward the floor. The third time you say "gi" have them say the sound with you while placing their hand down toward the floor.
4. Finally, explain that you will now say a series of "ki" sounds and then sneak in a "gi" sound. Ask the student to keep their eyes closed and listen carefully. Have them raise their hand each time they hear the "ki" sound, and then lower their hand when they hear you sneak in the "gi" sound.
5. Practice with the other sound pairs, if necessary:
  - shu/chu - "shoe" and "chew"
  - sti/si - "stee" and "see"
  - ke/ge - "cay" and "gay"
  - to/do - "toe" and "doe"
  - da/ba - "dah" and "bah"

## Facilitate and Encourage



### Does the student need help identifying the syllables?

Show the student how to use Help mode within the exercise. Using Help will not affect the student's standing in the exercise.

1. Have the student click the Help button in the exercise to see 3 streams of syllables at the current set and stage.
2. When Help opens, have the student click the Go button to hear the corresponding syllable streams:
  - 2 repeated syllables + new syllable
  - 4 repeated syllables + new syllable
  - 3-6 repeated syllables + new syllable



### Is the student unable to consistently get 3 correct answers in a row?

Challenge the student to "Beat the Teacher." The goal of this activity is to achieve accuracy and get streaks of correct answers. Students make progress based on the 3-Forward/1-Back Rule: they move forward when they get 3 answers in a row correct, but they move backward when they get 1 answer incorrect.

On a sheet of paper, make two columns, then put your name on the top of one column and the student's name on the top of the other column. Or use the [Beat the Teacher Worksheet](#).

Listen along with the student during the exercise.

When the student gets three in a row correct, record one point for the student. When the student makes an error, record a point for yourself.

At the end of the intervention, total the points for each column. Calculate the number of student points earned minus the number of teacher points earned. This number represents the total number of steps forward the student has progressed.

Have the student set a points goal to help them strive for even greater consistency and faster progress.

# Facilitate and Encourage

## Adjust Instruction/Intervene

### Student Resources

You may decide to use any or all of these monitoring sheets with your students:



Beat the Teacher Worksheet in [Student & Teacher Resources](#)

Explain to students that accuracy is the key to moving through the content in this exercise. Students make progress based on the 3-Forward/1-Back Rule: they move forward when they get 3 answers in a row correct, but they move backward when they get 1 answer incorrect. If a student is unable to consistently get 3 correct answers in a row, use this chart to play “Beat the Teacher”—a fun way to motivate the student and provide extra practice while observing their skill level. This sheet is useful as an intervention. Students will need one copy at your discretion.



Three-in-a-Row Worksheet in [Student & Teacher Resources](#)

Explain to students that accuracy is the key to moving through the content in this exercise. Students make progress based on the 3-Forward/1-Back Rule: they move forward when they get 3 answers in a row correct, but they move backward when they get 1 answer incorrect. Since streaks record the number of correct answers in a row, this chart is helpful for self-monitoring of correct answers by providing the visual feedback that some students need to register their number of correct answers in a row. This sheet is useful for daily monitoring. Students will likely need one copy per day.



Foundations I Streaks & Completion Chart in [Student & Teacher Resources](#)

Explain to students that accuracy is the key to moving through the content in Fast ForWord. Because streaks record the number of correct answers in a row, this chart can help students self-monitor for accuracy. After they complete their exercises for each day, have students record their highest streaks and percent complete in each exercise, then challenge them to exceed those numbers tomorrow. Students will need one copy every 5 days.



Foundations I Completion Chart in [Student & Teacher Resources](#)

Students can self-monitor their progress on each exercise in Foundations I by filling in the bar representing their actual completed percentage to provide them 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 per component.