



ST Math® Instructional Software



Training Manual

ST Math®: Fluency



MIND Research Institute



JiJi Console

Username:

Password:

Log in

[Forgot Your Login?](#)

My Teacher Login is:

Username:

First 3 letters of
school's name

First letter of
first name

Last name

Example:

w a s j doe

(John **D**oe from **W**ashington Elementary)

Password:

Hint: Keep it simple and easy to remember. Write it here in case you do forget.

ST Math: Fluency Training Manual

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Support Information

My Education Support Specialist is:



trs.stmath.com

- ✓ Access the **Teacher Resource Site** anytime for help with all your ST Math needs. Find tutorials, videos, and other frequently updated resources.

Program access:

- ✓ Access ST Math from any computer by navigating to **stmath.com**.
- ✓ Access ST Math from supported tablets! Download **ST Math: School Version** from the iTunes® Store, Google Play, or the Amazon Appstore.

Additional help is available!

- ✓ **Toll-free:** (888) 491-6603, Monday-Friday, 6:00 AM - 5:00 PM, PST
- ✓ **e-mail:** support@mindresearch.net
- ✓ **text:** 424-MIND TXT (424-646-3898)

The 2008 National Math Panel report repeatedly emphasizes the educational importance of achieving automatic (accurate, quick and effortless) retrieval of basic math facts. One scientific basis for requiring “quick and effortless” retrieval is that it frees up working memory (Ashcraft, 1994) and allows students to avoid getting bogged down by basic calculations when learning and applying mathematics at later stages. ST Math®: Fluency is designed to develop this level of automaticity for each student using an engaging, highly-effective visual approach that promotes understanding of the underlying math concepts.

What is fluency?

Fluency is most often associated with language. For example, we say a person is fluent in a foreign language if he or she is able to speak or write that language easily and accurately. However, the concept of fluency can be applied to other areas of learning, such as basic arithmetic, where being fluent in a particular area means that you can accurately and swiftly perform the key skills and recall the key facts with ease.

Being fluent, then, can be summarized as having the following attributes:

- ✓ High accuracy
- ✓ High speed
- ✓ Effortlessness

The last attribute is crucial, yet frequently ignored. Many math programs focus on accuracy (a score on a test). But accuracy alone does not ensure “quick and effortless.” Other programs incorporate speed (a score on a timed test), but being fast doesn’t necessarily mean that you are doing it effortlessly. Students can become exceptionally fast at using counting or other cumbersome techniques to derive basic facts, and students will continue to rely on these techniques and can even do well on a timed test (Sherin & Fuson, 2005). However, these techniques, despite the speed at which some students can perform them, require substantial mental effort, which we want to free up for other purposes.

How does ST Math Fluency address these needs?

Our ultimate goal for ST Math: Fluency is to enable students to recall basic math facts accurately, quickly and effortlessly. Only with this level of fluency will students be unencumbered by these basic calculations when progressing to higher levels of mathematics. ST Math: Fluency helps students achieve this goal by incorporating adaptive training techniques, informative feedback and actively controlled (as opposed to passively watched) visual proofs. As a result, students memorize their facts with a solid understanding of the underlying operations in a way that leads to fast and effortless recall.

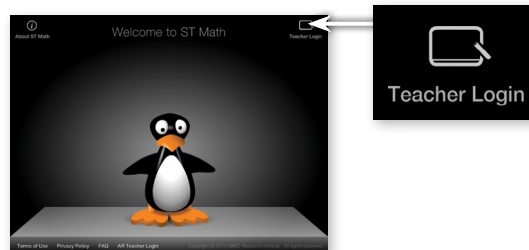
Accessing the JiJi Console

Tip: If you don't have a username or password, call your school's Education Support Specialist.

The JiJi Console provides all the tools needed to effectively manage your class rosters, browse and sequence content, view reports, and more.

To access the JiJi Console from a computer:

- 1 Navigate to **<http://web.stmath.com>**.
- 2 From the Welcome page, click on the “Teacher Login” button at the top right corner of the page.
- 3 Log in by typing in your username and password. Then click the “Log in” button.

A screenshot of the JiJi Console login interface. It has a blue background with a white icon of a document and a pencil on the left. The text 'JiJi Console' is below the icon. On the right, there are two input fields labeled 'Username:' and 'Password:'. Below these fields is a 'Log in' button. Below the 'Log in' button is a link that says 'Forgot Your Login?'. A white arrow points from this link down to the text 'Forgot your password? Click here.'

Forgot your password? Click here.

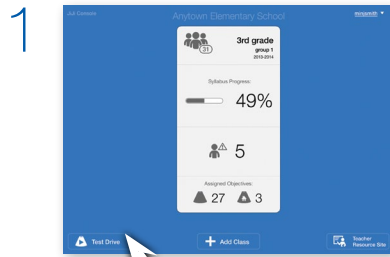
To access the JiJi Console from a tablet, or from your school's welcome screen:

- ✓ Triple-click or triple-tap on the bottom-right corner of the Welcome screen.
- ✓ Type in your username and password. Then select the “Log in” button.

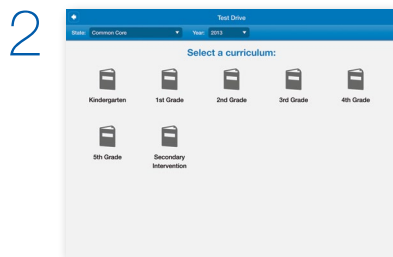


*Tablet devices require the **ST Math: School Version** app. See page iv for more information.

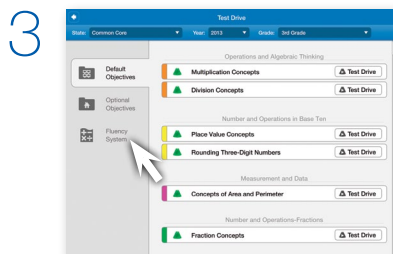
Accessing the Fluency Curriculum



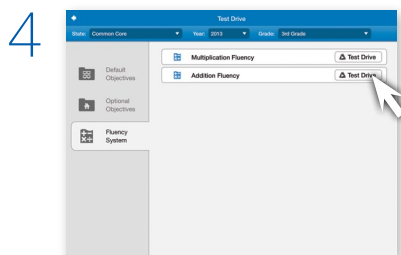
From the JiJi Console,
Select **Test-drive games**.



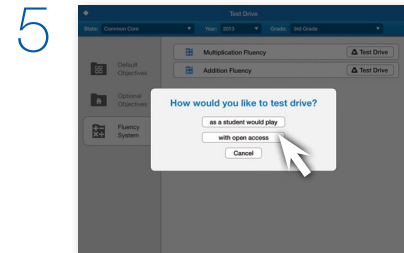
Select a grade level from 2 to 5 or
Secondary Intervention.



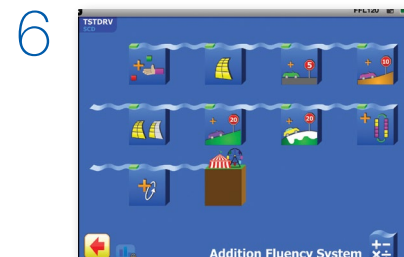
Select **Fluency System**.



Choose either Addition or
Multiplication Fluency and
select **Test Drive**.



Select **with open access** to
view all games.



Select the pool to explore.

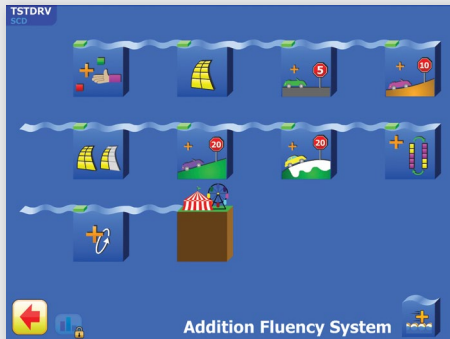


Select the game to explore.



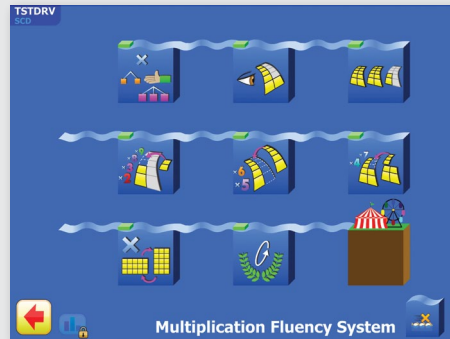
Select the stage to explore.

Fluency Hierarchy



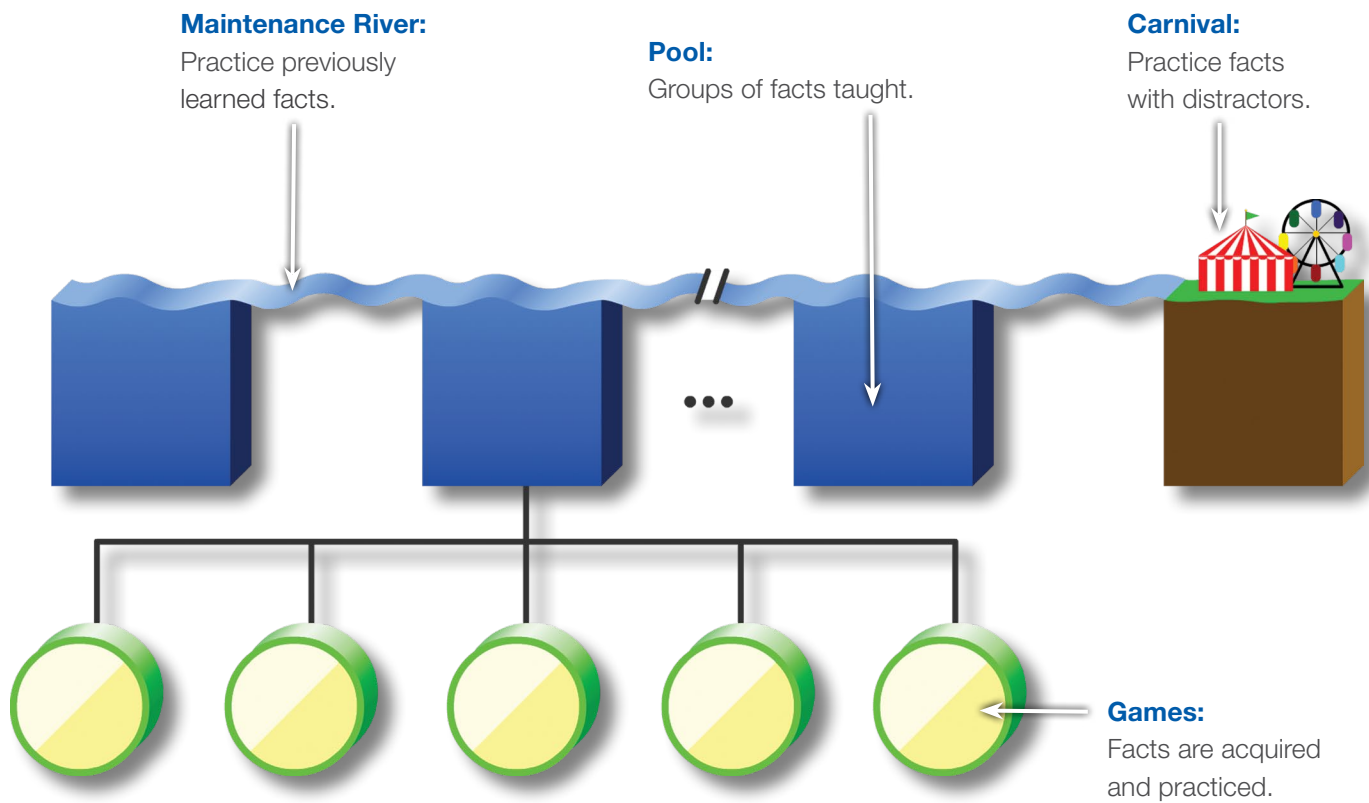
Addition Curriculum

(Available for grades 1 through
Secondary Intervention)



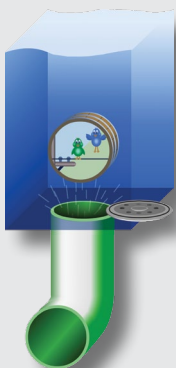
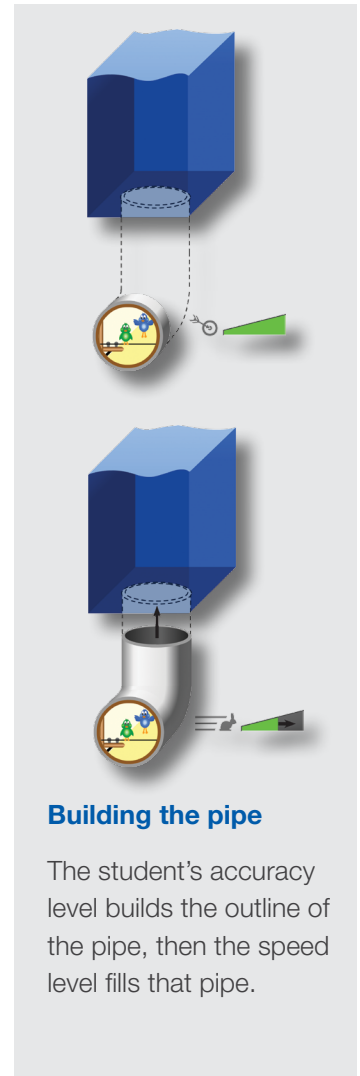
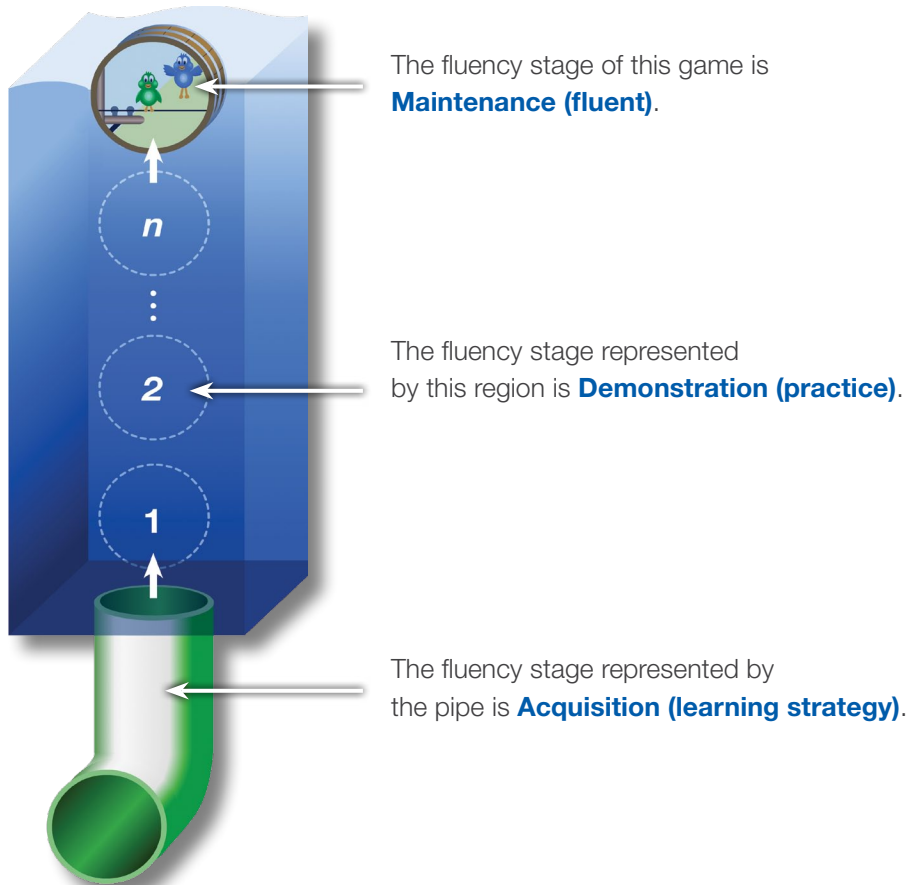
Multiplication Curriculum

(Available for grades 2 through
Secondary Intervention)



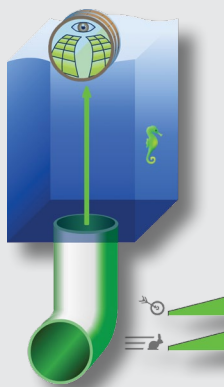
Fluency Stages and Interface

Fluency Stages



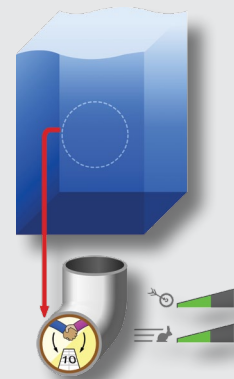
Transition to demonstration

When the pipe connects to the bottom of the pool, the group of facts transitions to the **demonstration** stage.



Fluency on first attempt

If the student demonstrates fluency on the first attempt, the group of facts accelerates to the **maintenance** stage.



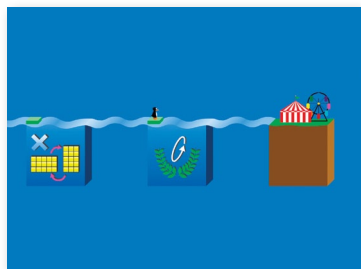
Failed demonstration

If the student fails to demonstrate fluency, the group of facts moves back to the **acquisition** stage.

Carnival Games

The Carnival: The last module of each curriculum is titled carnival. Games are designed to give students the opportunity to practice their facts in the presence of distractors in a fun and engaging way.

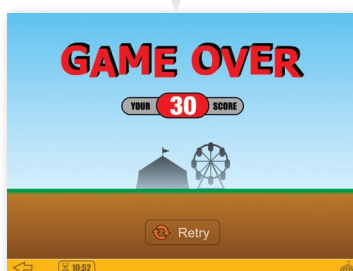
1



2

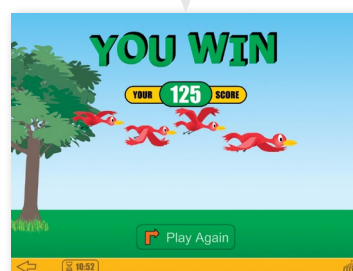


Carnival Bird Game



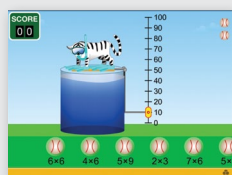
Lose scene

OR

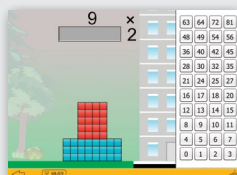


Win scene

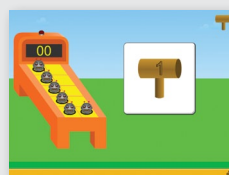
Other Carnival Games



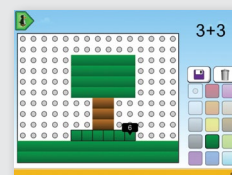
Dunk Tank



Stacker

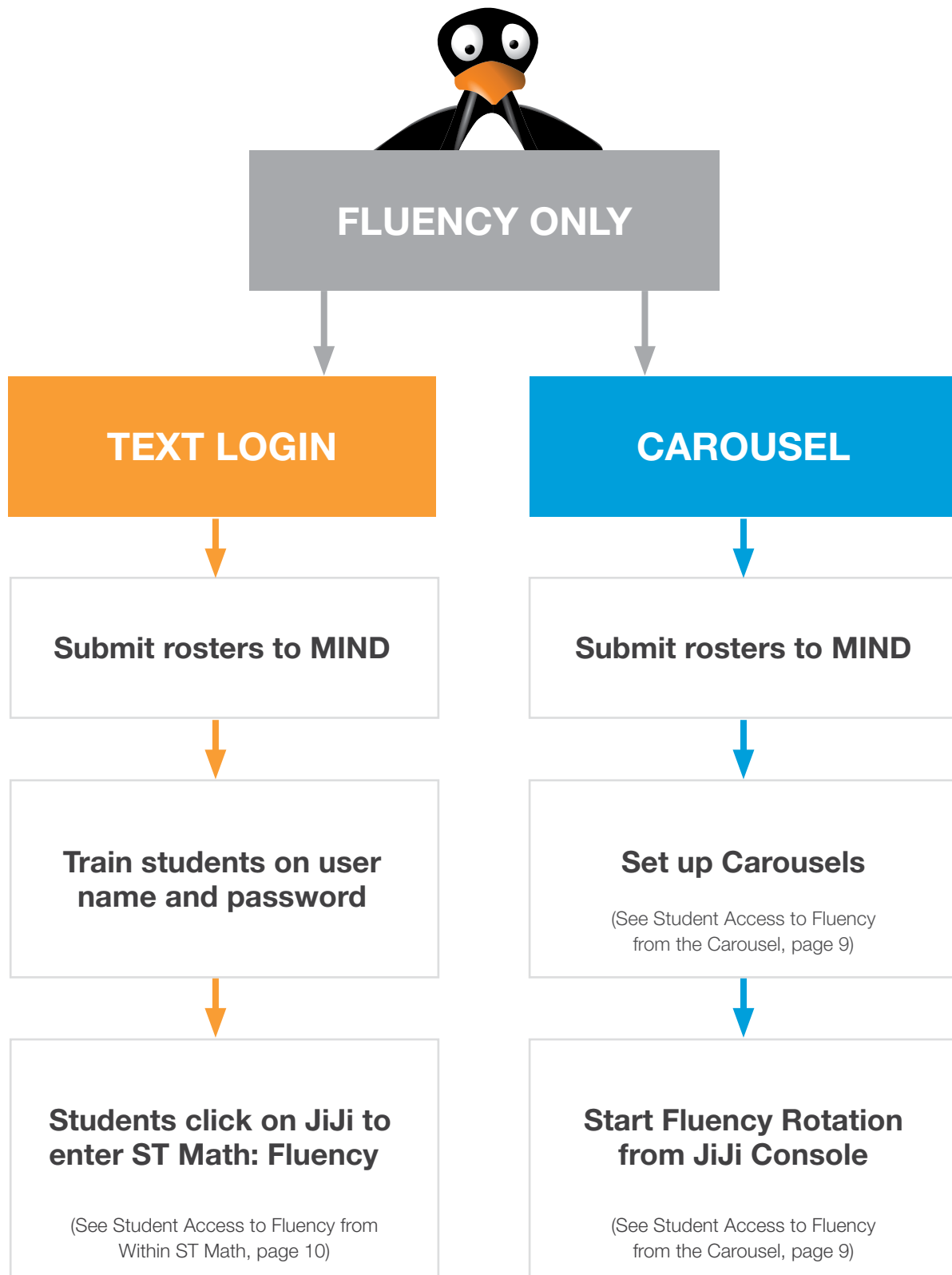


Whac-A-Ten-Frame



Add Paint

Setting Up A Class



Setting Up A Class



FLUENCY WITH OTHER ST MATH PRODUCT

TEXT LOGIN

CAROUSEL

PICTURE PASSWORD

**Submit rosters just
one time for both
Fluency and other
ST Math programs**

**Train students
on user name
and password**

**Students click
on JiJi to enter
ST Math**

(See Student Access to Fluency
from Within ST Math, page 10)

Yes

Text login?

No

**Create one class for
both Fluency and
other ST Math
programs**

**Train students on
picture password**

Add students

**Students play
password objective**

**Students click on
JiJi to enter
ST Math**

(See Student Access to Fluency
from Within ST Math, page 10)

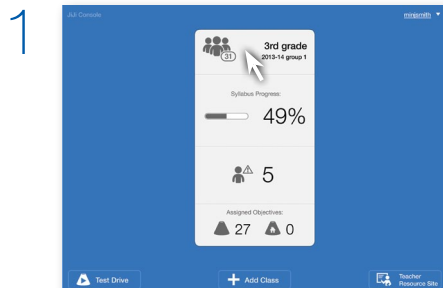
Set up Carousels
(See Student Access to Fluency
from the Carousel, page 8)

**Start Fluency
Rotation from
JiJi Console**

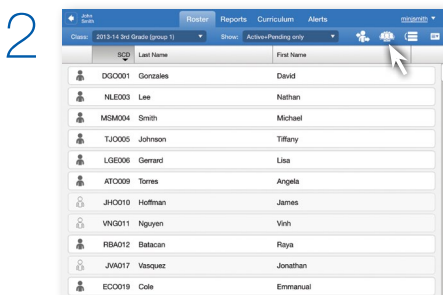
(See Student Access to Fluency
from the Carousel, page 9)

Student Access To Fluency Using the Carousel

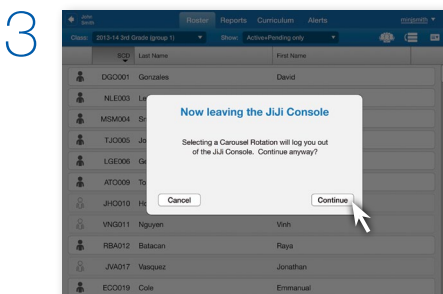
Note: The carousel is an automated student rotation system. Once saved, carousels will stay as set, but can be edited at any time by clicking the Edit Carousel button as shown in steps 5 and 6. Repeat these steps for each computer used in the rotation.



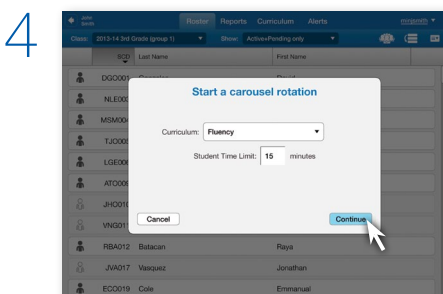
From the JiJi Console (see login instructions on page 2), select the **Roster** section of the **Class Card**.



Select the **Carousel** icon.



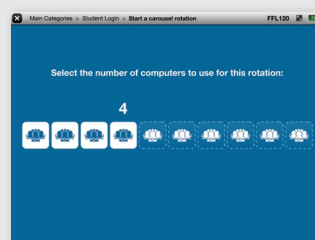
Select **Continue**.



Adjust time, if desired, then select **Continue**.

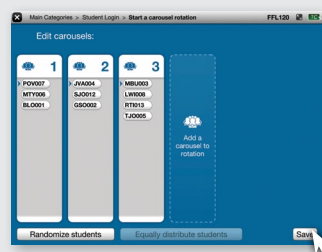
On first use, you will need to complete these two additional steps:

4.1



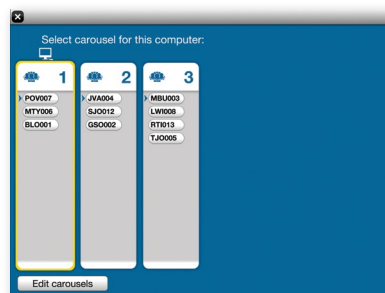
Select the number of computers to be used for this rotation.

4.2



Arrange students within and across each carousel, then select **Save**.

5



Select which carousel to use for the computer you are on.

Note: The Student code shows the first letter of the student's first name and the first two letters of the last name followed by a three-digit number. On computers only: Hover over the code and click Edit to see the full student name.

6



Call the first student to the device and instruct him/her to select **Play**.

Student Access To Fluency from Within ST Math

1



Instruct students to launch ST Math.

2



Students should then click/tap on JiJi to enter ST Math.

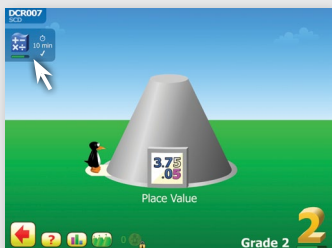
Visual password

3



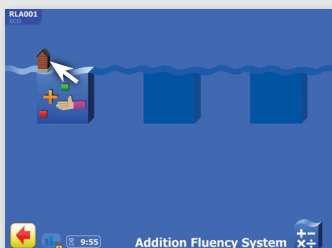
Instruct students to enter their visual password.

4



To start Fluency, instruct students to click/tap the Fluency button in the upper left corner of the screen.

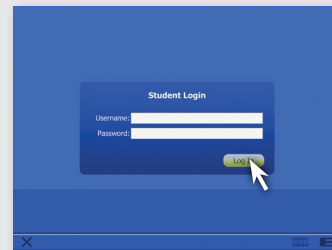
5



Finally, ask students to select the pool with the brown hut.

Text-based password

3



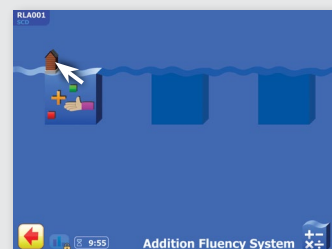
Tell students to enter their user name and password, then select **Log In**.

4



To start Fluency, instruct students to click/tap on JiJi.

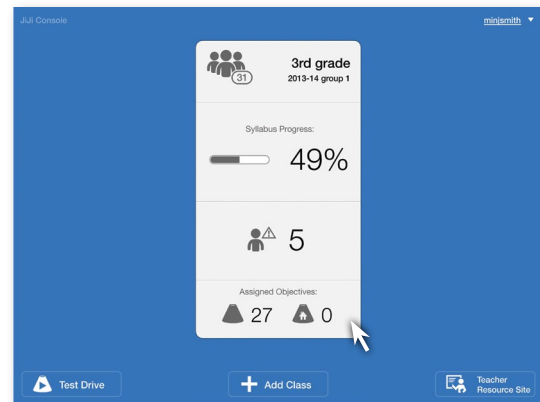
5



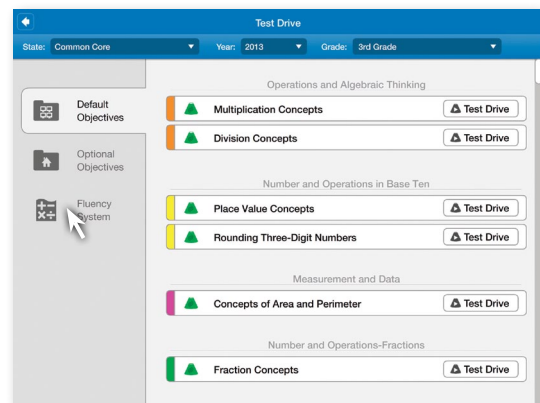
Finally, ask students to select the pool with the brown hut.

Setting Class Options

- 1 From the JiJi Console (see login instructions on page 2), select the **Curriculum section of the Class Card**.



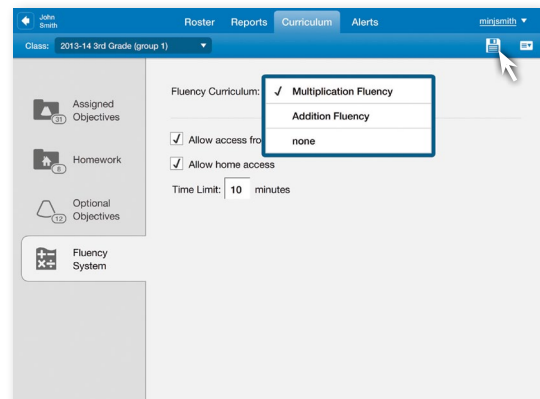
- 2 Select **Fluency System**.
Note: Fluency-only schools will not see the list of objectives.



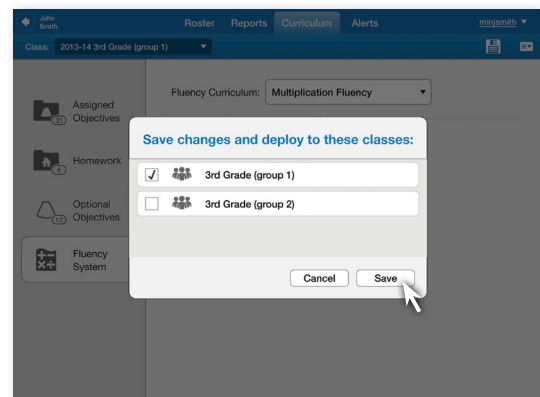
- 3 Modify the appropriate settings, then click/tap on **Save** to save changes.

Options include:

- ✓ Curriculum choice (addition or multiplication) - grades 2 through Secondary Intervention only
- ✓ Allow/disallow access through ST Math
- ✓ Allow/disallow access from home
- ✓ Adjust student time limit



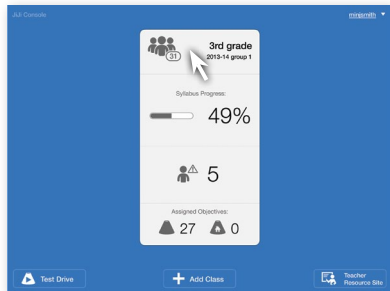
- 4 Confirm to which classes the changes should be deployed, then select **Save**.



Changing Curriculum for a Single Student

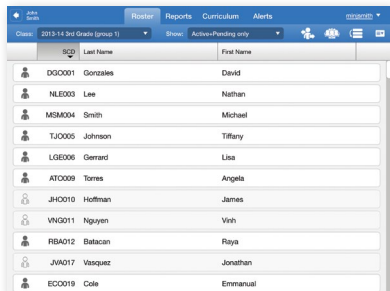
Note: First grade students have access to the Addition curriculum only.

1



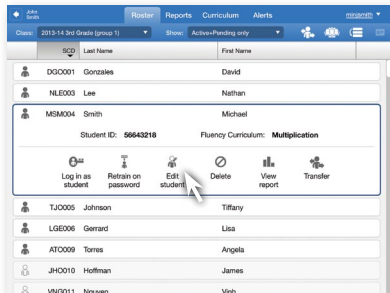
From the JiJi Console (see login instructions on page 2), select the Roster section of the Class Card.

2



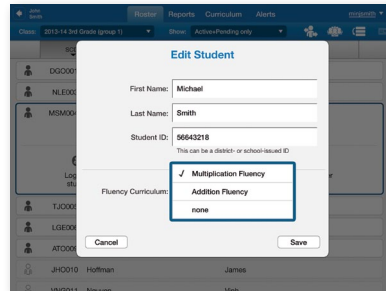
Select the student that needs the change.

3



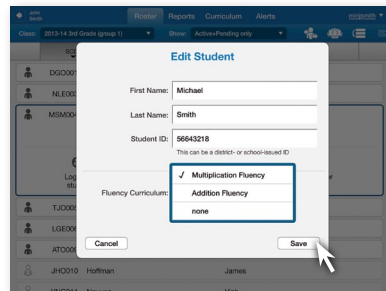
Select **Edit student**.

4



From the drop down menu, select the curriculum you wish to assign to the student.

5



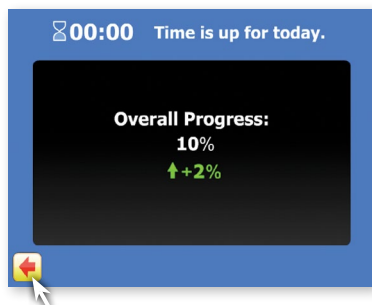
Select **Save**.

Exiting the Curriculum



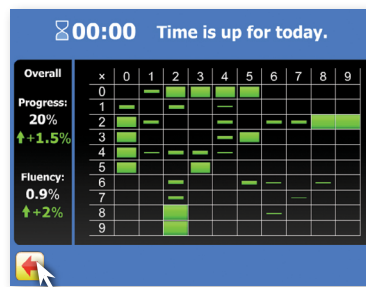
Time's Up!

When time runs out, students should review their progress report, then select the red back arrow button.



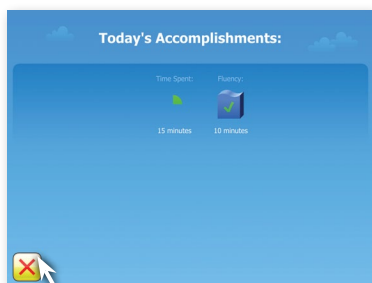
"Time's Up" scene for pools 1-2 for Addition curriculum and pools 1-3 for Multiplication curriculum. Use back arrow to exit.

OR

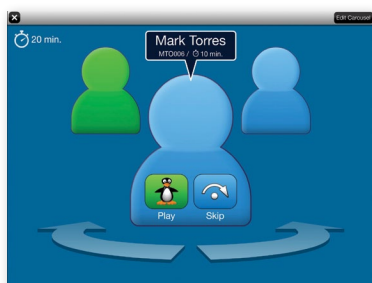


"Time's Up" scene for pools after students begin achieving fluency mastery. Use back arrow to exit.

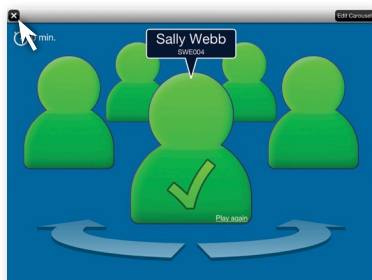
If using the Carousel



From the "Today's Accomplishments" screen, select the red X button to end the current student's session.



When the carousel appears, the current student should call the next student to the computer. If the student is absent or unavailable, select the following student.

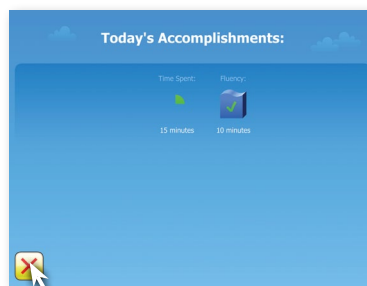


When all students have completed playing, select the X to exit the Carousel.

If accessed from within ST Math



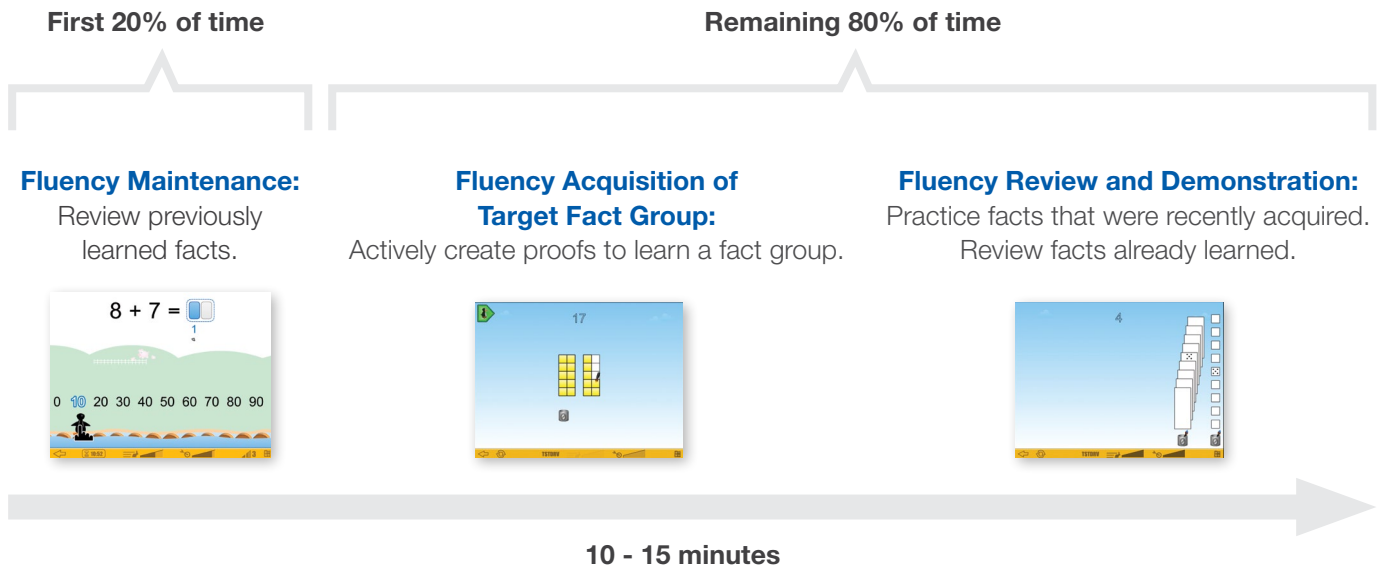
Students can either select the objective cone to enter the normal ST Math curriculum, or the red back arrow to exit the program.



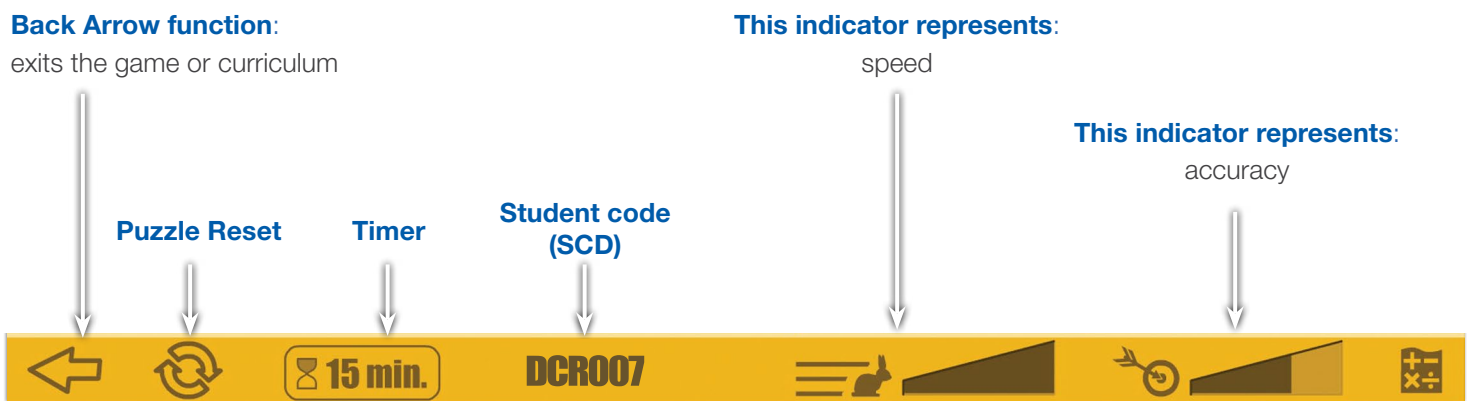
From "Today's Accomplishments" screen, select the red X button to exit the program.

The Fluency System Structure and Interface

Fluency Timeline



Game Toolbar



The toolbar appears at the bottom of the screen whenever the student is working within a game.

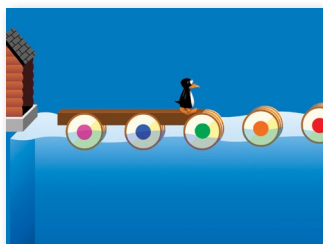
The Fluency River

The River

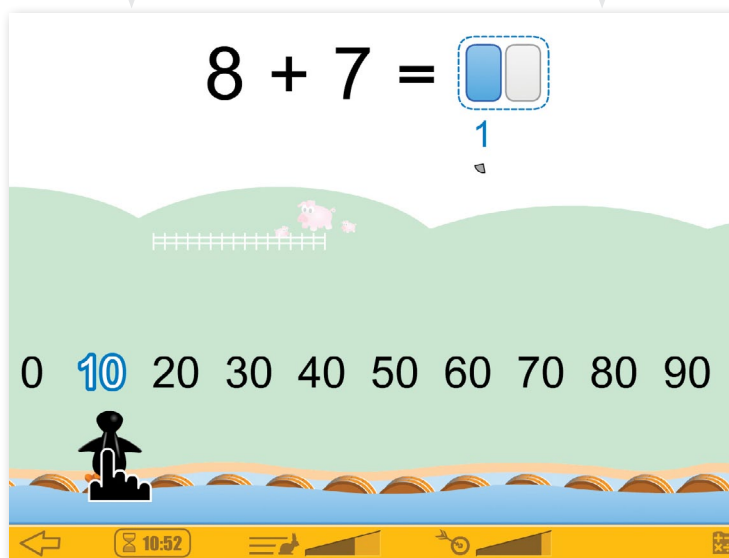
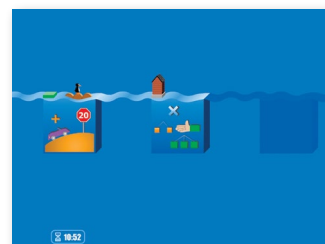
Students play the river game under various situations during their session.

Students play the river:

- Before going into the pool each day
- After completing a pool



OR

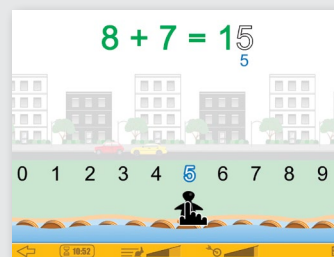
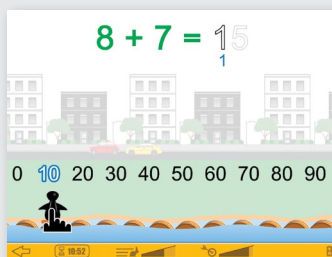
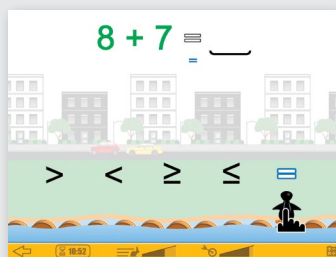
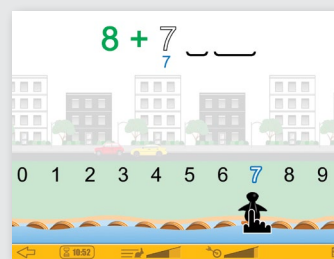
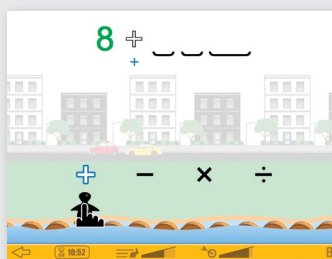
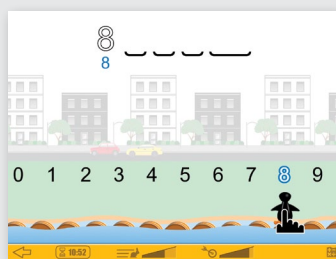


Background scenery

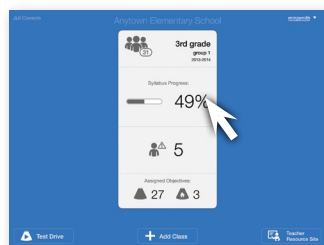
As students work on the river, the background scenery scrolls to show progress. When the questions cover multiple pools, the landscape changes. Here, the river is passing through hills.

Fact Walkthrough

When the student answers incorrectly, he/she is walked through the entire fact.



Class Progress Report



Navigate to the Report tab by selecting the **Class Progress** section of the Class Card.

Select any heading to sort the report by that column's data.

Select the back arrow to return to the Class Card.

Use the dropdown to easily navigate between classes.

Use the dropdown to select a different report for display.

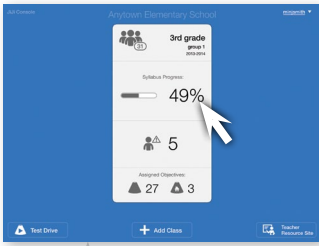
John Smith										
Roster Reports Curriculum Alerts minjsmith										
Class: 2013-14 3rd Grade (group 1)				Report: Progress						
Student	School Sessions	Home Sessions	Syllabus Progress	Standards Mastery	Fluency Progress	Fluency Mastery	Current Objective		Last Session	
William Allen	24	15	50%	45%	50%	49%	Using Place Value to Add... Petals Addition a..., Level 4		Yesterday 8:33 am	
Jennifer Ballentyne	24	14	41%	33%	40%	37%	Recognizing Shape Attrib... Find the Pair, Level 2		Yesterday 8:35 am	
Young Kim	24	9	38%	20%	37%	33%	Place Value Concepts Petals Place Value, Level 1		Yesterday 8:35 am	
Jason Lee	23	31	40%	31%	42%	38%	Recognizing Shape Attrib... Find the Pair, Level 1		Yesterday 8:31 am	
Reynaldo Montoya	22	10	33%	26%	30%	27%	Place Value Concepts Petals Place Value, Level 1		Yesterday 8:31 am	
Mark Nicholson	24	9	37%	30%	38%	30%	Recognizing Shape Attrib... Find the Pair, Level 1		Yesterday 8:31 am	
Kathryn Pinsky	2	0	0%	0%	0%	0%	Introduction to ST Math Module 1, Build JiJi, Level 2		3/1/2013 8:33 am	
Paul Reyes	20	13	27%	20%	29%	21%	Addition and Subtraction... Crittter Two Digit A..., Level 1		Yesterday 8:32 am	
Arya Samuelson	24	11	40%	20%	40%	18%	Place Value Concepts Petals Place Value, Level 3		Yesterday 8:35 am	
Michael Smith	20	9	28%	10%	19%	4%	Addition and Subtraction... Crittter Two Digit A..., Level 2		Yesterday 8:34 am	
Danielle Thorson	Not Active									
Megan Tully	24	12	33%	25%	31%	26%	Place Value Concepts Petals Multiple Ch..., Level 2		Yesterday 8:34 am	
Jorge Voltaggio	24	13	41%	32%	43%	39%	Recognizing Shape Attrib... Find the Pair, Level 2		Yesterday 8:33 am	
Cindy Vuong	9	0	10%	6%	11%	8%	Introduction to ST Math Module 1, Build ..., Level 4		Yesterday 8:34 am	
Class Average:	17	17	32%	23%	32%	25%	5 different objectives			

Fluency Progress indicates the percent of the curriculum completed. It includes progress in ALL pools.

Fluency Mastery indicates the percent of the facts mastered.

Note: Fluency Mastery does not begin until Pool 3 for the Addition Curriculum and Pool 4 for the Multiplication Curriculum.

Fluency Report



- 1 Navigate to the Report tab by selecting the **Class Progress** section of the Class Card.

- 2 Use the dropdown to select the **Fluency Report**.

Select the back arrow to return to the Class Card.

Use the dropdown to easily navigate between classes.

Select any heading to sort the report by that column's data.

Fluency Curriculum indicates whether the student is learning addition or multiplication facts.

John Smith		Roster	Reports	Curriculum	Alerts	minsmith	
Class: 2013-14 3rd Grade (group 1)		Report: Fluency					
Student	Total Time	Fluency Progress	Fluency Mastery	Fluency Curriculum			
William Allen	7 hrs. 15 min.	<div><div></div></div> 50%	<div><div></div></div> 49%	Multiplication Fluency			
Jennifer Ballentyne	5 hrs. 40 min.	<div><div></div></div> 40%	<div><div></div></div> 37%	Multiplication Fluency			
Young Kim	5 hrs. 7 min.	<div><div></div></div> 37%	<div><div></div></div> 33%	Multiplication Fluency			
Jason Lee	5 hrs. 29 min.	<div><div></div></div> 42%	<div><div></div></div> 38%	Multiplication Fluency			
Reynaldo Montoya	4 hrs. 2 min.	<div><div></div></div> 30%	<div><div></div></div> 27%	Multiplication Fluency			
Mark Nicholson	5 hrs. 55 min.	<div><div></div></div> 38%	<div><div></div></div> 30%	Multiplication Fluency			
Kathryn Pinsky	0 hrs. 0 min.	<div><div></div></div> 0%	<div><div></div></div> 0%	Multiplication Fluency			
Paul Reyes	3 hrs. 49 min.	<div><div></div></div> 29%	<div><div></div></div> 21%	Multiplication Fluency			
Arya Samuelson	5 hrs. 31 min.	<div><div></div></div> 40%	<div><div></div></div> 18%	Multiplication Fluency			
Michael Smith	2 hrs. 38 min.	<div><div></div></div> 19%	<div><div></div></div> 4%	Multiplication Fluency			
Danielle Thorson		Not Active					
Megan Tully	4 hrs. 19 min.	<div><div></div></div> 31%	<div><div></div></div> 26%	Multiplication Fluency			
Jorge Voltaggio	5 hrs. 57 min.	<div><div></div></div> 43%	<div><div></div></div> 39%	Multiplication Fluency			
Cindy Vuong	1 hr. 40 min.	<div><div></div></div> 11%	<div><div></div></div> 8%	Multiplication Fluency			
Emily Zubiate	3 hrs. 12 min.	<div><div></div></div> 22%	<div><div></div></div> 17%	Multiplication Fluency			
Class Average:		<div><div></div></div> 32%	<div><div></div></div> 25%				

Total Time indicates how many hours and minutes the student has spent logged in to the curriculum.

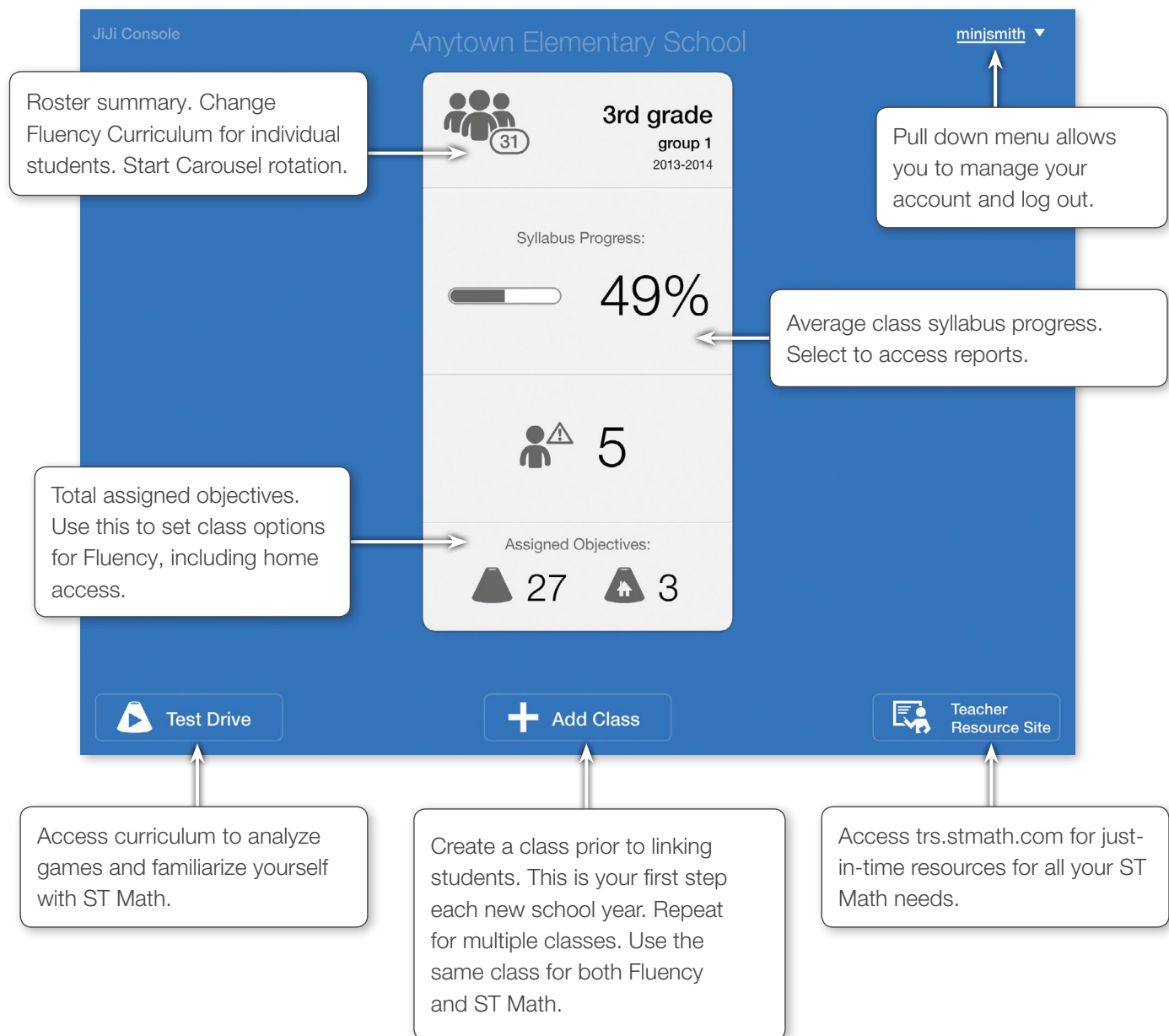
Fluency Progress indicates the percent of the curriculum completed. It includes progress in ALL pools.

Fluency Mastery indicates the percent of the facts mastered.

Note: Fluency Mastery does not begin until Pool 3 for the Addition Curriculum and Pool 4 for the Multiplication Curriculum.

JiJi Console Dashboard

Your dashboard displays the **Class Cards** you have created for a quick view of all the functions available to help you monitor and support your students. Multiple Class Cards will be displayed on the JiJi Console for teachers with multiple groups. Select any section of the Class Card for additional functions and details.



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