



EDUCATOR GUIDE:

# Learning Games



# Educator Guide:

## *Learning Games*

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





# Getting to Know the Games

In the Learning Games suite, specific games are available to students based on their chronological grade level.

Within most games, students can choose from levels of difficulty that are “just right” for them based on their most recent performance on the Diagnostic for Mathematics or their previous performance in the games. Students given access to Learning Games by an account administrator before completing a Diagnostic will see game levels filtered by their chronological grade, and levels will be adjusted once students complete a Diagnostic. Adaptivity within the games meets students where they are and provides challenge, scaffolding, and feedback.



## Game Focus and Availability by Grade Level

	K	1	2	3	4	5	6	7	8
 <b>Hungry Guppy</b> Early number sense and addition	✓	✓	✓						
 <b>Hungry Fish</b> Addition, subtraction, and rational number operations fluency	✓	✓	✓	✓	✓	✓	✓	✓	✓
 <b>Zoom</b> World's most interactive number line	✓	✓	✓	✓	✓	✓	✓	✓	✓
 <b>Bounce</b> Integer and fraction estimation, negative rational numbers, and absolute values on a number line	✓	✓	✓	✓	✓	✓	✓	✓	✓
 <b>Match</b> Basic numbers, addition, subtraction, multiplication, division, fractions, rational numbers, and ratios	✓	✓	✓	✓	✓	✓	✓	✓	✓
 <b>Pizza</b> Mental math, economics, and proportions			✓	✓	✓	✓			
 <b>Cupcake</b> Word problems, real-world economics, proportions, ratios, rates, and coordinate planes			✓	✓	✓	✓	✓	✓	✓
 <b>Cloud Machine</b> Visual and symbolic fractions				✓	✓	✓	✓	✓	✓

Learning Games are available to students in Grades K–8 using i-Ready Classroom Mathematics and/or i-Ready Personalized Instruction for Mathematics at district discretion. Refer here to determine what games your students should focus on to [support their learning](#).

# Using Learning Games

**Learning Games offer students engaging math fluency practice that can be used in a variety of ways, in and out of the classroom.** The games can be played in one or multiple sessions per week, based on scheduling and access to technology. We recommend for students to play Learning Games for roughly 20 minutes a week, if time with devices allows, to boost their math skills. This gives students time to explore and take advantage of all the games have to offer.

Learning Games should be used to supplement—not replace—existing math instruction, including the recommended 45 minutes per week so students can maintain the recommended range of 30–49 minutes of *i-Ready Personalized Instruction* consistently (as applicable).

You can help your students get the most from their Learning Games experience—beyond the fun they will have—by following these steps.



## 1. Think about when you want your students to use Learning Games.

Because students can access and play Learning Games without teacher guidance, their use is extremely flexible. The following can be good options for Learning Games playtime:

- **Independent math centers or rotation stations** during regular class time
- Engaging **homework or weekend enrichment** if computers or iPads with internet access are available in students' homes
- **Before- and after-school program activities** (if applicable)
- Whenever students have **free, unstructured time** with internet-ready devices

Students can play freely during these times, or you can ask them to select specific games for practice with specific concepts or skills. You will find game recommendations in your Grade-Level Planning (Prerequisites) report and in your Teacher's Guide if using *i-Ready Classroom Mathematics*. A [Learning Games Planning Worksheet](#) for teachers is available on page 20.

**School Leaders and Administrators:** If you intend for teachers to use Learning Games in a specific way at the classroom level, be sure to communicate that to them. You may need to map out how Learning Games fit into school schedules alongside whole class, small group, and Personalized Instruction and how access to technology resources will be coordinated or adjusted. Also, work with your technology coordinator to complete checks on all devices that students will use to access Learning Games and download the latest version of the *i-Ready Connect™* for Students app. [More details.](#)





## 2. Get your students started with Learning Games.

Learning Games will typically be accessible to students when they do not have an assessment assigned under My Path on the student dashboard.\* Teachers can use the following strategies to make sure students make the best use of their technology time and Learning Games experience:



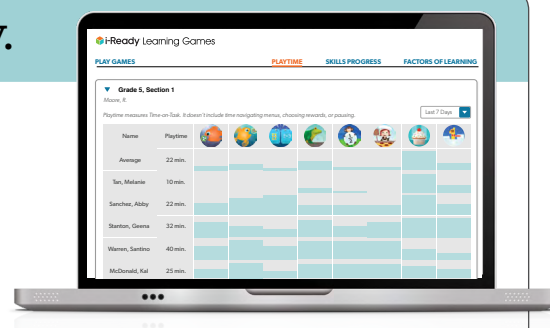
- Before incorporating Learning Games into instruction or homework, **let students know where to find the games** (but don't be surprised if they have already found them on their own!). We encourage students to learn how to play the games from the games themselves.
- When students begin a scheduled technology session, **let them know whether they should select a teacher assignment, My Path assignment, or Learning Games or have the freedom to choose** for themselves.
- If using the games **to focus on specific skills, also tell students which game(s) they should select** and why. *Example: "Today we're playing Hungry Fish so we can get faster at adding one-digit numbers!"* You can also use [Learning Games Display Cards](#) to display game selections to your students.
- If assigning Learning Games as homework, communicate to families how students can access the games at home, how long students should spend on gameplay, and which game(s) they should focus on (if applicable). The [Family Communication Template](#) includes important details for families. Families using iPads will need to download the free *i-Ready Connect for Students* app.

**\*School Leaders and Administrators:** To give students access to Learning Games and other dashboard resources during assessment periods, adjust your Student Content Restrictions in your Diagnostic and Standards Mastery settings.

## 3. Check in on Learning Games activity.

The Learning Games home screen offers reports that will let you know how much time students are spending on gameplay and how they are doing. **Review Playtime, Skills Progress, and Factors of Learning data periodically** to see which games students have played, where they're demonstrating fluency, and how they're responding to challenges within the games.

**Tip:** Using the Personalized Instruction Summary report and Learning Games Playtime report together will help you understand how students are spending their technology time and, when Lesson Time-on-Task is lower than expected, let you know whether students' focus on Learning Games is taking away from Personalized Instruction. You can strategically turn Learning Games on or off for a whole class or individual students as needed to keep time in both learning activities in balance. *See more about Learning Games data in the [Reports Overview](#) and directions for turning the games on or off at the class or student level under [Settings](#) in this guide.*



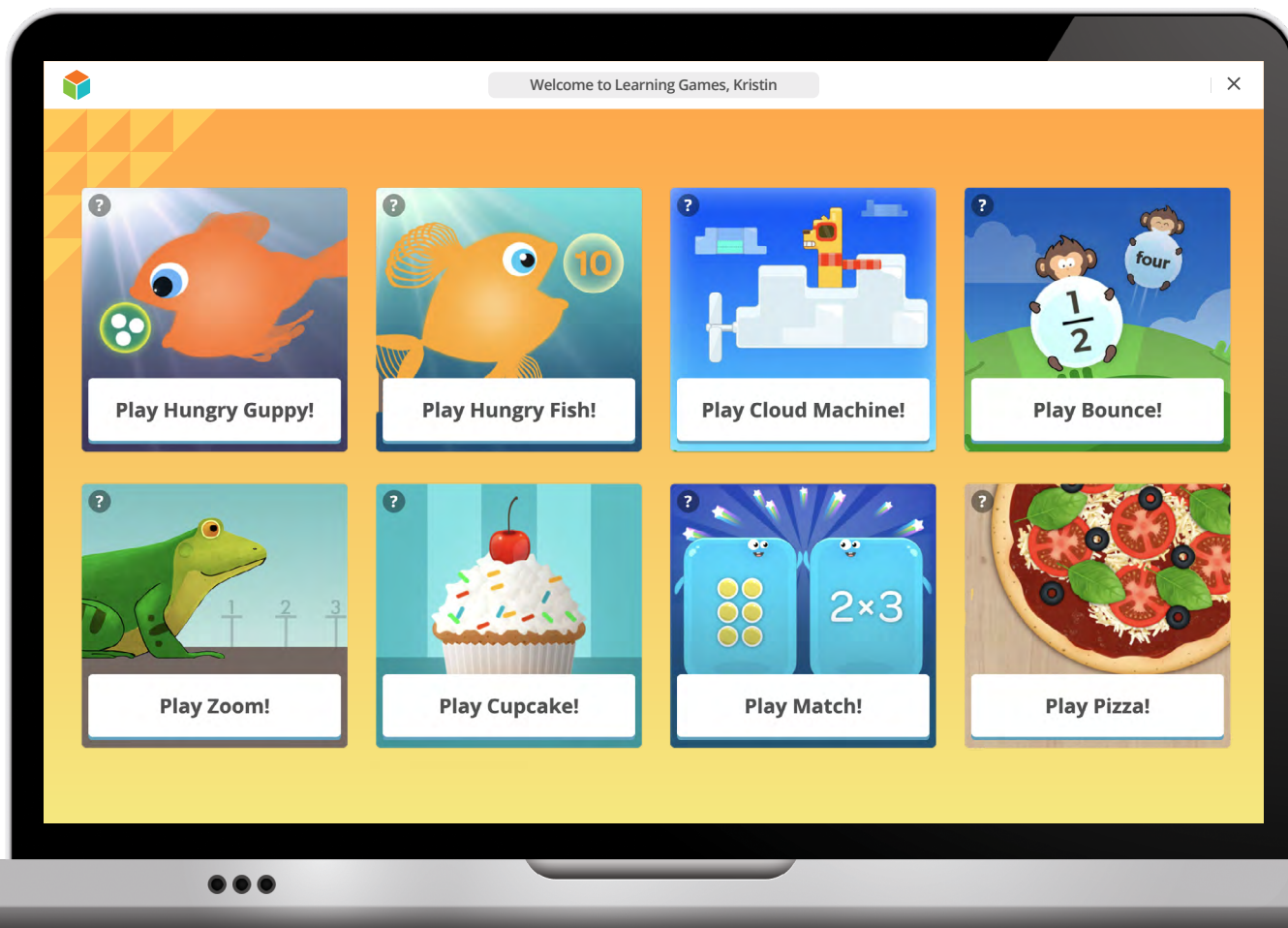
**School Leaders and Administrators:** You can also view Playtime, Skills Progress, and Factors of Learning data for all classes and students in your school.

\*Learning Games are available to students in Grades K–8 using i-Ready Classroom Mathematics and/or i-Ready Personalized Instruction for Mathematics at district discretion.

# How Learning Games Benefit Students

*i-Ready's* fun and interactive Learning Games strengthen understanding of mathematical concepts and foster a positive relationship to challenging elementary and middle school mathematics skills. Based on feedback from educators like you, we've added Learning Games to the *i-Ready* and *i-Ready Classroom Mathematics* experiences to provide engaging math fluency and skills practice in a way that develops internal motivation while encouraging productive struggle.

Learning Games are available for students in Grades K–8 and are accessible on the student dashboard.

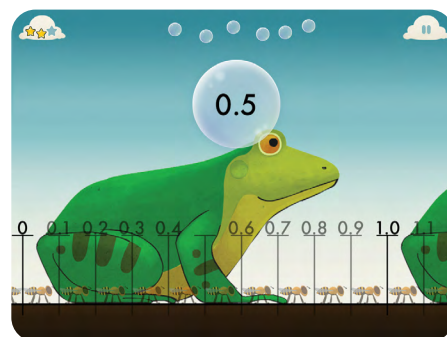


# Game Design Principles

Learning Games strengthen fluency, number sense, and conceptual understanding of challenging math skills in a way that is designed to be fun and engaging for students.

## Merges Gameplay and Learning

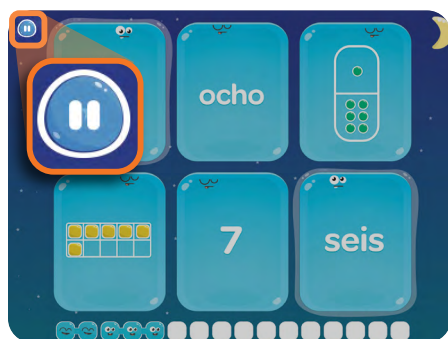
- Learning Games merge gameplay and learning, rather than alternating between the two, to foster students' internal motivation.
- Through different representations and contexts of numbers and operations, students build rich, visual mental models and learn to transfer concepts across contexts.
- Increasingly challenging experiences within each game encourage exploration with minimal instruction and productive struggle.
- Students are supported to overcome challenges and tackle higher-level problems through hints, scaffolding, and constructive feedback.
- The games are also designed to develop students as self-directed learners by giving them meaningful, strategic choices.



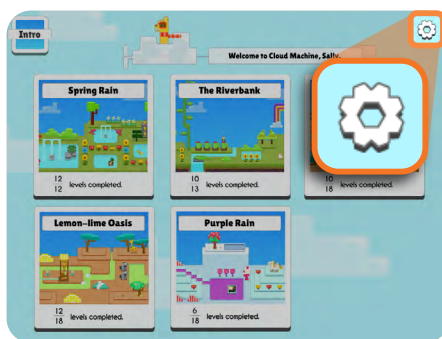
## Built-In Differentiation

- Student choice is provided in the form of multiple games, levels, and timed modes, fostering greater student agency.
- The range of available games is determined by the student's grade level, and the level of difficulty is determined by their most recent Diagnostic for Mathematics placement and performance on the games. Educators can use the [Learning Games Display Cards](#) to display what game they would like their students to work on.
- As students advance within the games or take additional Diagnostics, level choices will evolve, ensuring the difficulty for each game is just right for every student.
- Students working on remedial content will also have access to on-grade level content.
- Students can also turn on Spanish text and audio (as needed) from the Pause and Settings menus within the games.

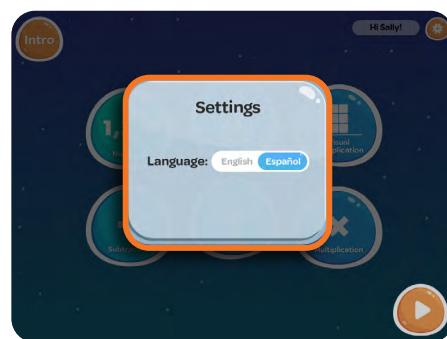
*Pause Icon*



*Settings Icon*

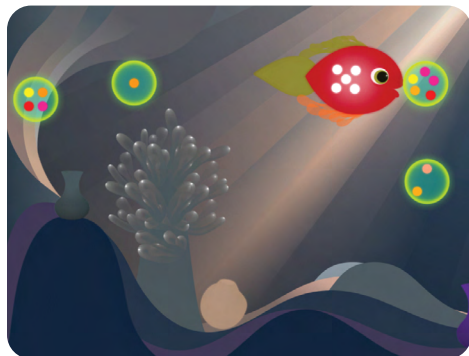


*Change Language*





# Meet the Games



## Hungry Guppy Grades K–2

In this precursor to Hungry Fish, students learn to identify small numbers of objects, fluently add sets of shapes, and recognize numerals up to 6. Varied colors and dot arrangements reinforce early number sense. Levels adaptively progress based on player performance.

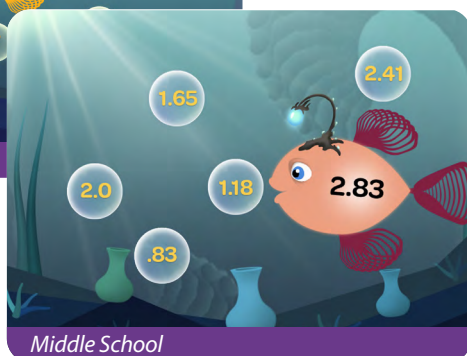


Elementary School

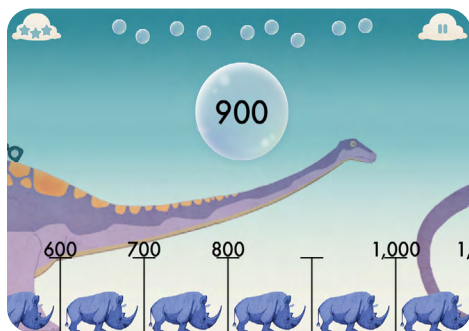
## Hungry Fish Grades K–8

Students combine integer bubbles to feed a fish with a specific target number, reinforcing the concept that there are multiple ways to compose and decompose a number by finding sums and differences.

The range of target numbers includes integers from 3–100, multiples of tens, multiples of hundreds, and negative numbers, as well as a range of time pressures. For middle school students, levels include rational number operations with tenths and hundredths.

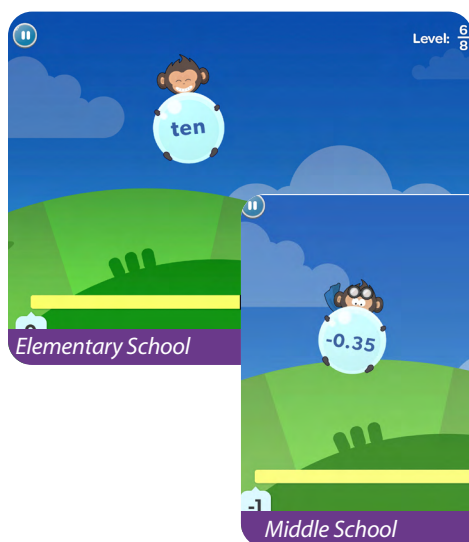


Middle School



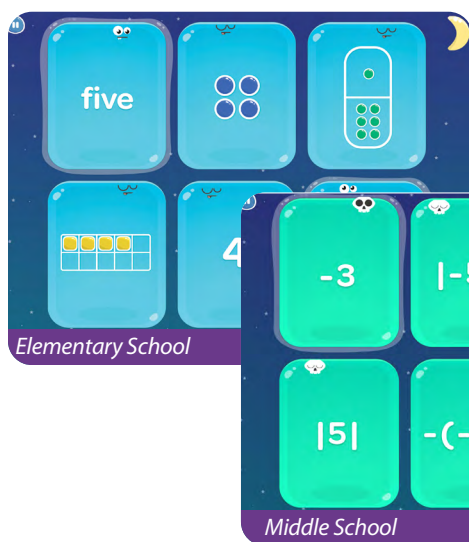
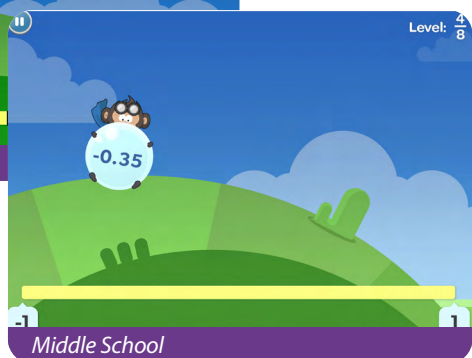
## Zoom Grades K–8

Students move left and right and zoom in and out of the world's most interactive number line to find missing values, compare numbers, and build number sense. Animals corresponding to each order of magnitude make the concept of place value concrete—from amoebas in the thousandths, to frogs in the ones, to dinosaurs in the thousands.



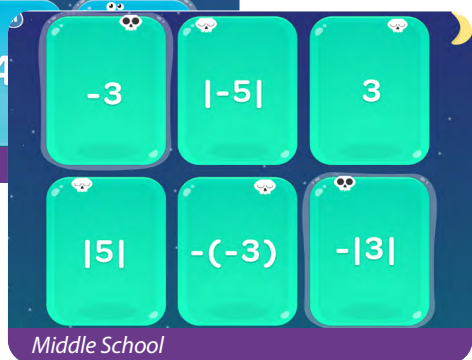
## Bounce Grades K–8

Students guide a bouncing ball to compare numbers and find the location on the number line of integers, fractions, percentages, decimals, and pie charts. Scaffolded hints help students who need additional support build a stronger number sense. For middle school students, problems include negative rational numbers and absolute values.



## Match Grades K–8

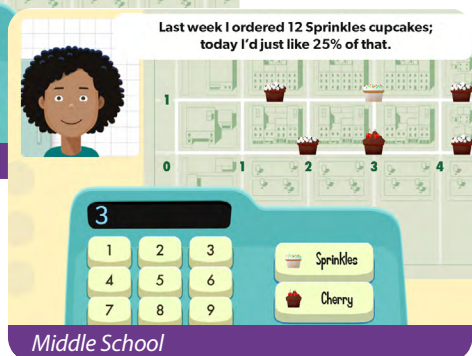
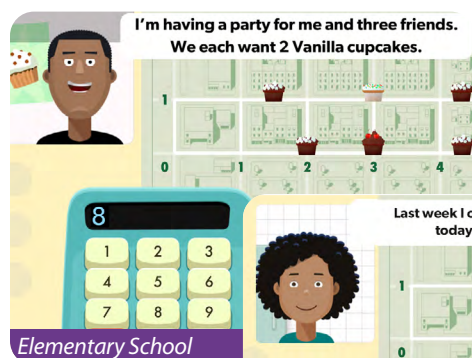
Students match tiles of equal value and learn to interpret varied visual and symbolic representations of integers, sums, differences, products, quotients, and fractions while improving working memory in the context of valuable fluency practice. Match for middle school students includes ratios and rational number operations.



## Pizza Grades 2–5

Students run a virtual pizza store. They set prices, compare vendors for ingredients, and perform quick mental math to calculate the price of customer orders. Adaptive timing gives students appropriately challenging fluency practice with addition, multiplication, and multistep problems.





## Cupcake Grades 2–8

Students run a cupcake delivery business, in which they need to interpret a rich variety of word problems and engage in practice with basic economics, proportions, and the coordinate system. Through the game, students budget for ingredients, make deliveries on the coordinate systems of the city grid, and take increasingly complex orders. For middle school students, these orders include ratio, rate, percentage, and percentage change problems.



## Cloud Machine Grades 3–8

Students solve puzzles featuring concrete, visual representations of fractional spaces. The goal is to fill a cloud to a precise level of liquid by opening and closing a series of gates. Students can also use the Puzzle Creator to build their own fraction puzzles and share them with classmates. They build understanding of fractions by designing, building, and testing puzzles, seeing the relationship between symbols and visuals. Cloud Machine helps students conceptually understand fraction recognition, equivalence, and addition and subtraction of fractions with the same and different denominators.

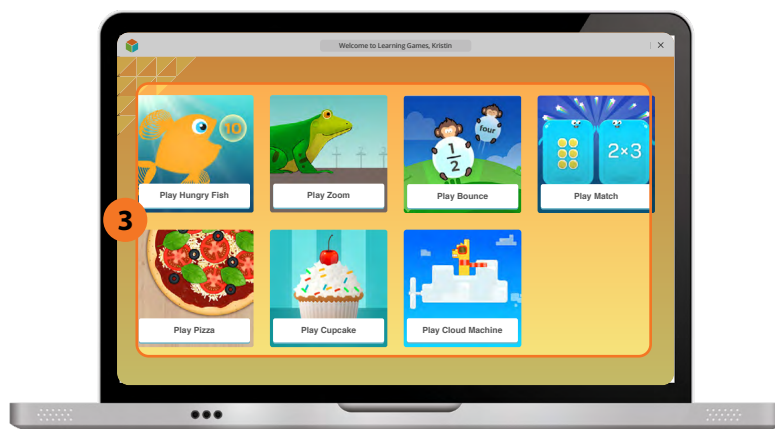
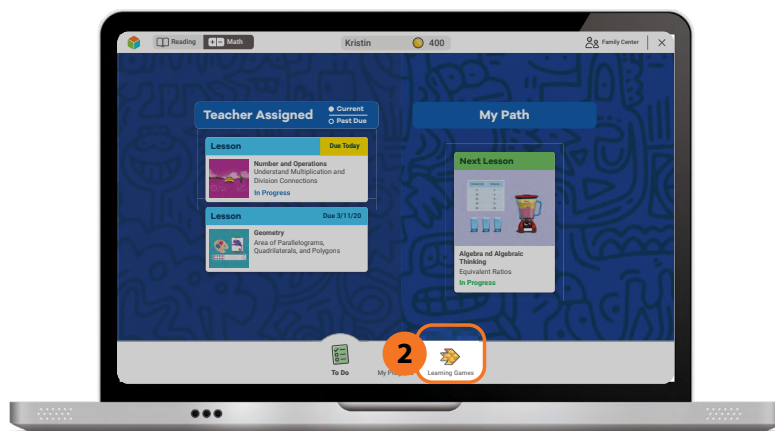
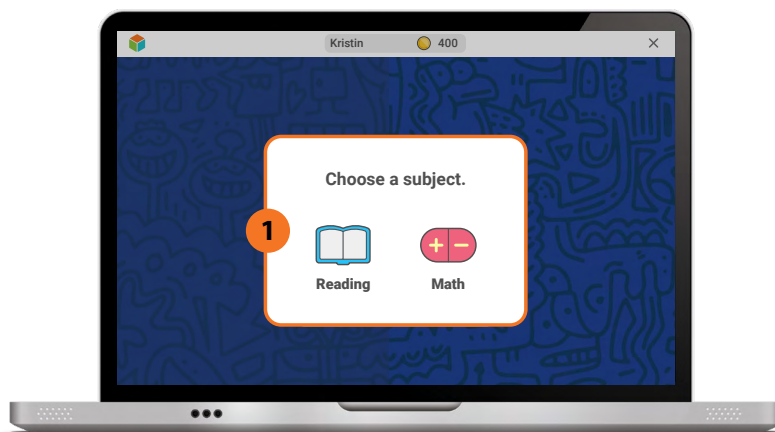
**Note:** Learning Games are available with *i-Ready Personalized Instruction* for Grades K–8 Mathematics (English and Spanish) at district discretion.

# Students on Computers and Chromebooks

Students can access Learning Games through their student dashboard.

To complete these steps, students must be logged in to their account at [i-ReadyConnect.com](https://i-ReadyConnect.com) or, for single sign-on (SSO) users, through their district's portal.

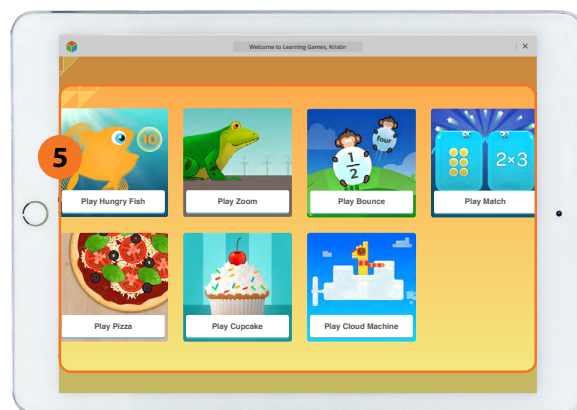
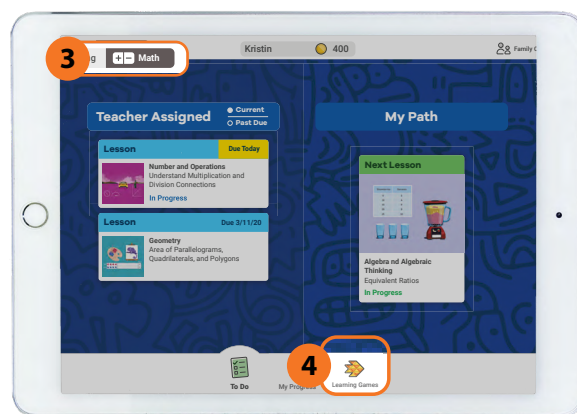
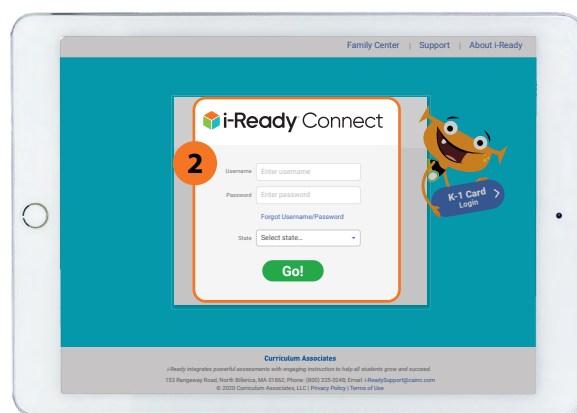
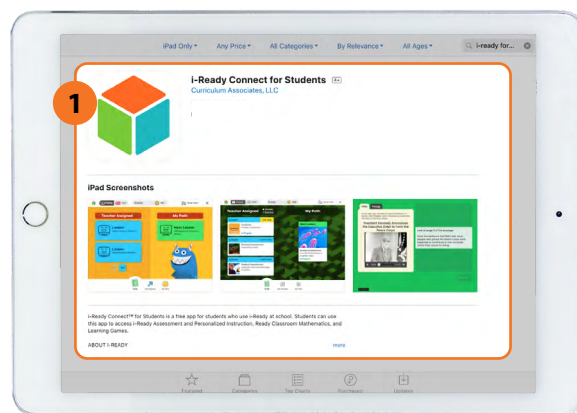
1. If using *i-Ready* for Reading and Mathematics, **select Math** under **Choose a subject**. If only using Math, students will go directly to their Math To Do screen (shown in Step 2) upon logging in.
2. If the student does not have an assessment assigned, or has been given access to Learning Games by an account administrator, they will see Learning Games in the bottom navigation bar. **Select Learning Games.**
3. The student will see the Learning Games home screen and can **select any game** displayed to start playing.



# Students on iPads

Ensure iPads have the most recent version of the *i-Ready Connect for Students* app.

1. If students have not installed the ***i-Ready Connect for Students*** app, it can be downloaded from the App Store®.\*
2. Log in to *i-Ready Connect* through the ***i-Ready Connect for Students*** app. *Note: SSO users should log in to i-Ready Connect the way they normally would through their district's SSO portal.*
3. **Choose Math** from the subject selector screen (not pictured) or in the upper left-hand corner of the To Do screen.
4. If the student does not have an assessment assigned, or has been given access to Learning Games by an account administrator, they will see Learning Games in the bottom navigation bar. **Select Learning Games.**
5. The student will see the Learning Games home screen and can **select any game** displayed to start playing.



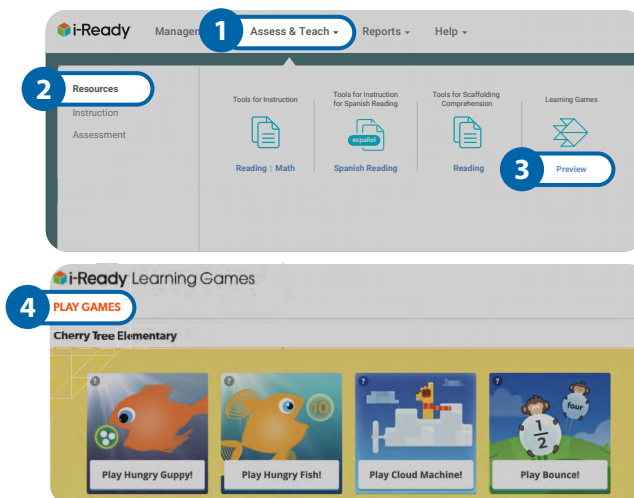
\*Note that iPad minis® are not supported, and the *i-Ready Connect for Students* app is not accessible on other tablets or the iPhone®. App Store®, iPad mini®, and iPhone® are registered trademarks of Apple, Inc.

# Educators

You can play Learning Games and access reports through your *i-Ready Connect* account.

## Preview and Explore Learning Games:

1. Select **Assess & Teach** from the top navigation.
2. Select **Resources** on the left.
3. Select **Preview** under *Learning Games*.
4. On the Learning Games home screen, **Play Games** will be selected by default. Select a Learning Game to demo.



## Access Reports for Learning Games:

1. Select **Reports** from the top navigation.
2. Teachers select **Class**. (Leaders should select **District** or **School**.)
3. Select **Instruction** as the report category on the left.
4. Select **Go** under *Learning Games*.
5. a. On the Learning Games home screen, the Playtime report will be selected by default. Select Skills Progress or Factors of Learning to view other **Learning Games reports**.  
b. Leaders will also select a school to view reports for a specific school.
6. Select **Play Games** to access demo versions of all Learning Games.



**Note:** All *i-Ready* leaders and teachers have access to Learning Games Playtime, [Skills Progress](#), and [Factors of Learning](#) reports, which can be used to check in on student activity and progress in the games. See the [Reports Overview](#) pages of this guide for details.

You can familiarize yourself with the games by selecting the Play Games tab or see student data by selecting the Playtime, Skills Progress, or Factors of Learning tabs.





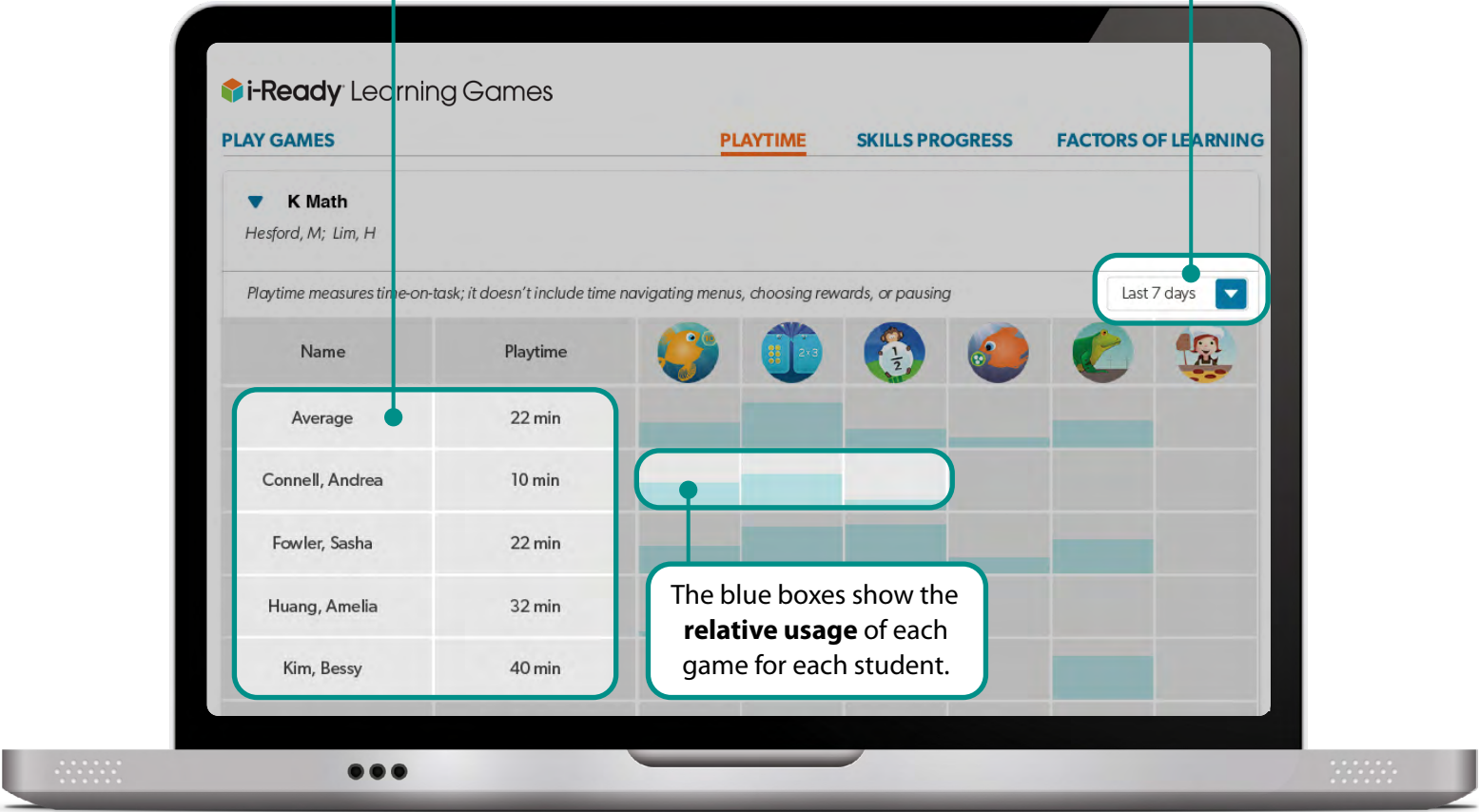
# Playtime

**This report measures the number of minutes a student has spent playing Learning Games.** Playtime only includes time in the games that is devoted to solving math problems—it does not include time navigating menus, choosing rewards, or pausing within the game.

*Note: Learning Games Playtime and Lesson Time-on-Task for Personalized Instruction are logged and reported separately. Use the Personalized Instruction Summary (Class) report to see the number of minutes your students have spent in their i-Ready Personalized Instruction. Only time spent in Personalized Instruction, not Learning Games Playtime, is included in the Time-on-Task visible to students under My Progress on the student dashboard.*

Here, you'll see the **average number of Playtime minutes** for the class as a whole, as well as the average playtime for each student.

Use this dropdown to **select the time frame** for which you'd like to view this report. You can view student Playtime over the last day, last week, last month, or the entire school year.



**Tip:** Using the Personalized Instruction Summary (Class) report and Learning Games Playtime report together will help you understand how students are spending their technology time and, when Lesson Time-on-Task is lower than expected, let you know whether students' focus on Learning Games is taking away from *i-Ready Personalized Instruction*. You can strategically turn Learning Games on or off for a whole class or for individual students (as needed) to keep time in both learning activities in balance.

# Skills Progress

The **Skills Progress** report provides a real-time snapshot of how students are performing across individual math skills. Fluency is determined by combining student performance on all game levels relevant to the skill. Whether a student is “demonstrating fluency,” “approaching fluency,” or “not yet demonstrating fluency” in this report is based on how relevant game levels are to a specific skill and how a student performs in those specific levels. “Not enough gameplay data” means that the student has not spent enough time in games related to a skill to report on fluency.

The **Details** view will show you student performance on a given skill. The Overview view (not pictured) will allow you to see your students’ performance on a given topic.

You can use this **grade dropdown** to see how students are performing on skills for different grades.

Fluency Key

☐ Not enough gameplay data

☐ Not yet demonstrating fluency

☐ Approaching fluency

☒ Demonstrating fluency

Grade 5, Section 1

Moore, R.

Details

Grade 5

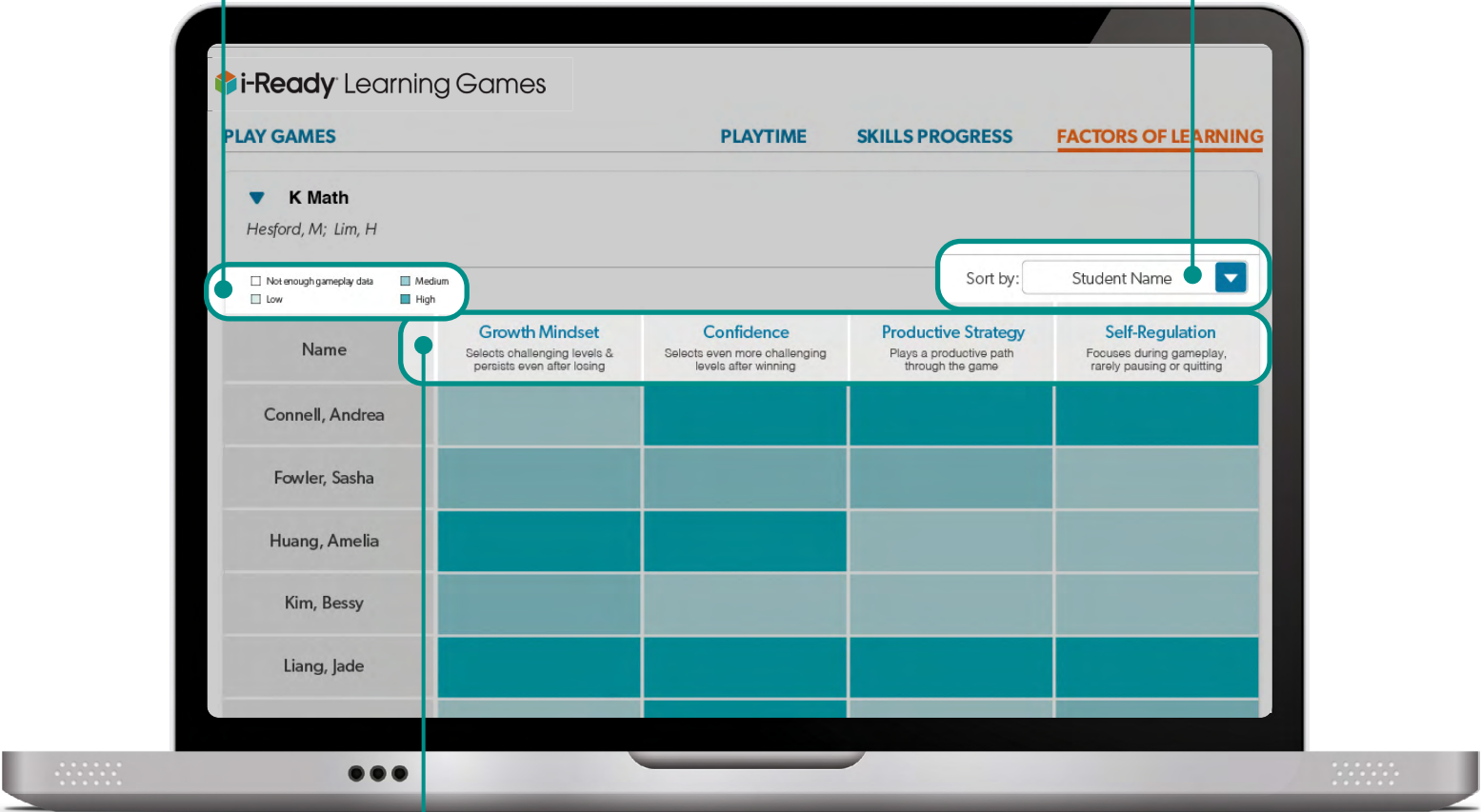
Name	Apply the coordinate system to problems	Compare decimals to thousandths	Round decimals to any place	Fluently multiply multi-digit numbers	Add, subtract decimals to hundredths	Add, subtract fractions with unlike denominators
Tan, Melanie						
Sanchez, Abby						
Stanton, Geena						
Warren, Santino						
McDonald, Kal						
Vo, Isaiah						

# Factors of Learning

The **Factors of Learning** report provides an assessment of how students approach games across four key factors of learning based on the choices students make in the games. Teachers can see whether a student displays high, medium, or low levels of a factor of learning based on how often they make a certain choice relevant to that factor. “Not enough gameplay data” means that the student has not spent enough time in the games to report on this factor of learning.

Factors of Learning Key

You can use this dropdown to sort by student name or by each factor of learning.



Click on the name of any **Factor of Learning** to view more information, related research, and tips.

**Growth Mindset**

Selects challenging levels and persists even after losing

**Confidence**

Selects even more challenging levels after winning

**Productive Strategy**

Plays a productive path through the game

**Self-Regulation**

Focuses during gameplay, rarely pausing or quitting

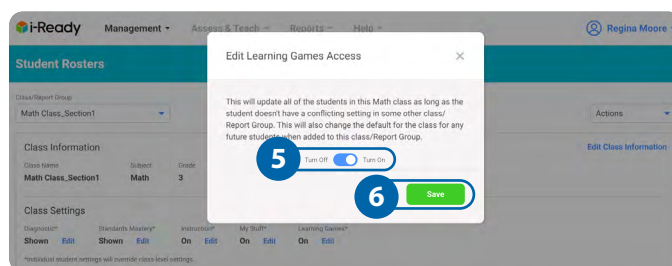
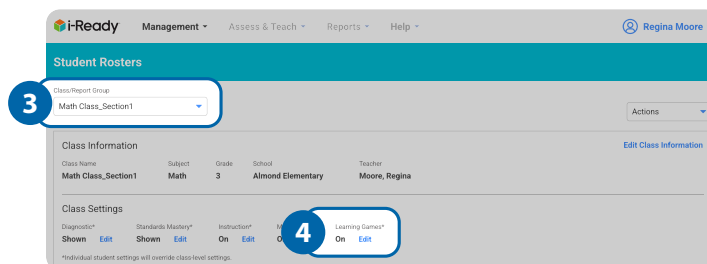
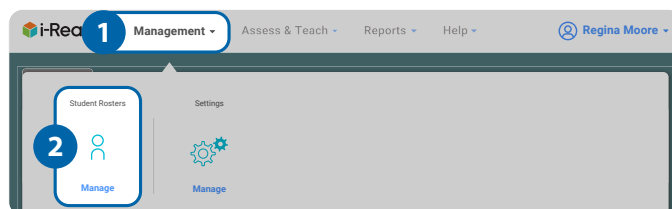
# Settings for Teachers

## Turning Learning Games On or Off for Whole Class or Individual Students

Once your district has decided to give Grades K–8 students access to Learning Games, you can still turn game settings on or off for a whole class or individual students as needed. Consider this option if you have found Personalized Instruction Lesson Time-on-Task is lower than expected and Learning Games Playtime is higher than expected, as this may be an indication that students are not spending scheduled technology time as planned.

### Whole Class:

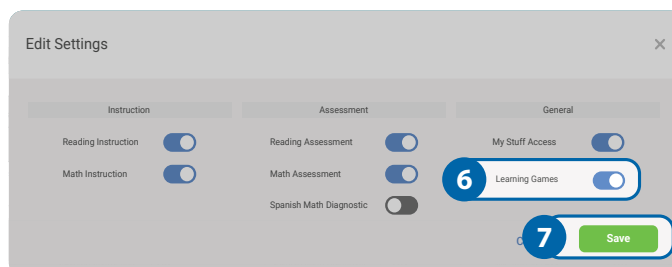
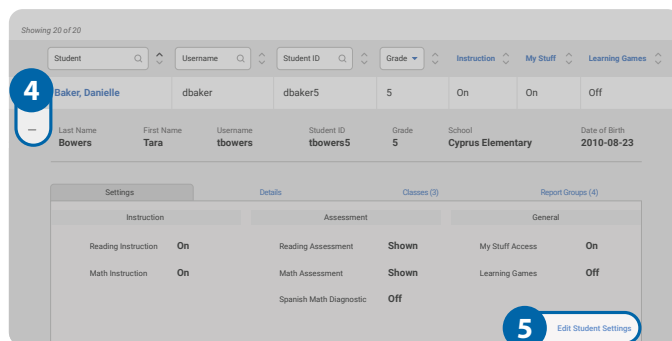
1. Select **Management** from the top navigation.
2. Select **Manage** under *Student Rosters*.
3. Select a **Class or Report Group** from the Class/Report Group dropdown.
4. Under *Class Settings*, select **Edit** under *Learning Games*.
5. Use the **toggle** to turn Learning Games **on or off** for the whole class.
6. Click **Save**.



### Individual Students:

Follow Steps 1–3 from Turning Learning Games On or Off for the Whole Class (above).

4. Select the **+** icon next to the student's name to expand the drawer. When expanded, it will change to a **–** icon.
5. Select **Edit Student Settings**.
6. Use the **toggle** to turn Learning Games **on or off**.\*
7. Click **Save**.



\*The individual student on/off feature will allow Learning Games to be enabled for an individual student, even when Learning Games have been turned off for the entire class.

# Settings for Leaders

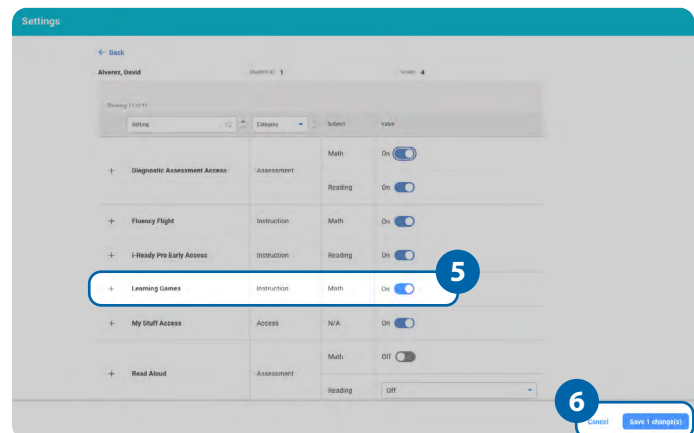
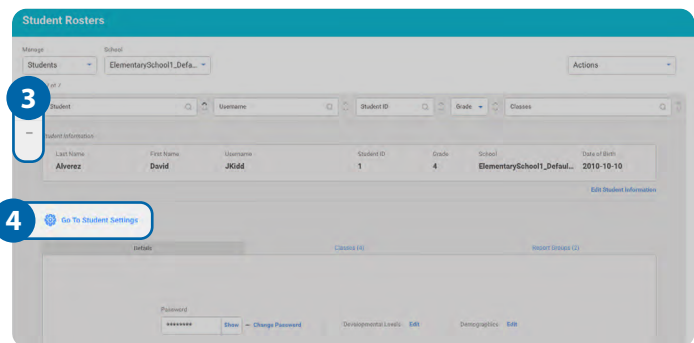
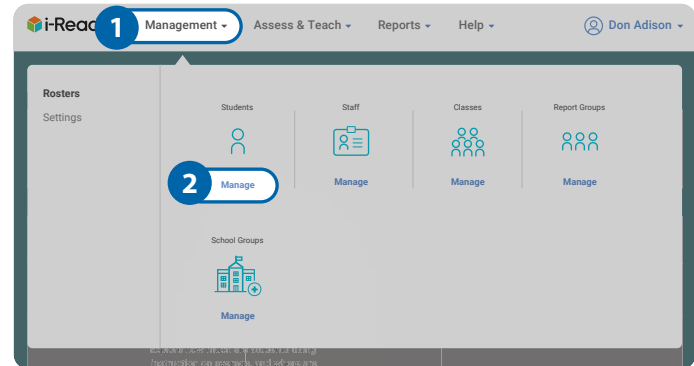
Leaders can restrict or allow student access to dashboard resources—including Learning Games—during the Diagnostic, Standards Mastery, and Growth Monitoring assessments. By default, access will be restricted.

## Turn Learning Games On or Off at the Student Level

1. Select **Management** from the top navigation. **Rosters** will be selected by default.
2. Select **Manage** under **Students**.
3. Select the **+** icon to expand the row. When expanded, it will change to a **–** icon.
4. Select **Go to Student Settings**.
5. Use the **toggle** to turn Learning Games **on** or **off**.
6. Click **Save changes**.

### Notes:

- If your district has given school administrators discretion to adjust settings, you may make your own selection or revert to district settings.
- The individual student on/off feature will allow Learning Games to be enabled for an individual student even when Learning Games have been turned off for the entire class.







WORKSHEET

# Learning Games Planning

Use this worksheet to plan how your core math instruction, *i-Ready Personalized Instruction*, and *i-Ready Learning Games* work together for your class(es). Complete this scheduling worksheet once and use it as a guide for the rest of the year, or duplicate the form and complete it weekly.

Week(s) of: \_\_\_\_\_ Class/Group/Students: \_\_\_\_\_

**Game Play Options:** Check all that you will use.

- ☐ Independent math centers/rotation stations
- ☐ Before-school programming
- ☐ Homework\*
- ☐ After-school programming
- ☐ Weekend enrichment\*
- ☐ Other: \_\_\_\_\_

**Skills and Game Selections:** If using Learning Games to address specific skills, indicate skills and the game(s) students should play. Different students or groups may focus on different games based on their instructional priorities.

Group or Student(s)	Focus Skills	Game(s) and/or Level Student(s) Will Select

\*For students who have computer or iPad and internet access at home

*Learning Games Planning Worksheet, Cont'd.*

**Scheduling Gameplay:** Map out your typical weekly schedule for teacher-led instruction, center rotations, *i-Ready Personalized Instruction*, etc. Then indicate where the gameplay options you've selected can be used, given student access to technology, to incorporate Learning Games. You can type or write in times that correspond to your schedule under Class Time.

	Monday	Tuesday	Wednesday	Thursday	Friday	Weekend
Before School						
Class Time						
After School						
Homework/ Enrichment						
Other						