i-Ready Classroom Mathematics

Integrating Social-Emotional Learning (SEL) into Mathematics Curriculum

Educators know that math education isn't just about math.

As students learn new mathematical concepts, they also learn about:

- **Themselves:** how to reflect on their own understanding, persist through challenges, and respond to critical feedback
- **Other math students:** how to interpret their actions and emotions, communicate clearly and kindly, and support each other as they learn
- **The communities and relationships that link them together:** how their actions impact the group, how systems and routines create progress, and how different perspectives create a whole greater than its parts

Because SEL is a complex, nuanced topic, it's important to establish a shared frame of reference when you talk about it. We chose to use the five core SEL competencies as defined by the Collaborative for Academic, Social, Emotional Learning (CASEL)* because of its asset-based language and focus on equity.

The Collaborative for Academic, Social, and Emotional Learning (CASEL) describes five areas of SEL:

Self-Awareness

Self-Management

Responsible Decision-Making

Social Awareness

Relationship Skills

i-Ready Classroom Mathematics, facilitated in a kind, compassionate way, addresses all five core competencies.

i-Ready Classroom Mathematics* Asset/Feature Name*
Try–Discuss–Connect routine
Self Check
Interactive Learning Games
Assessments (Formal and Informal) (e.g., Exit tickets, End-of-Lesson Checklists, Math Journal questions, Unit Review, Diagnostic, Lesson Quizzes, and Mid-Unit Assessments)
English Learner Supports
My Progress
End-of-Unit Self-Reflections
Data Chats
Comprehension Checks
Reflect prompts
Lesson 0
Select and Sequence Student Solutions
Deepen Understanding
Discourse Cards/Discourse Cube
Pair/Share prompts
Ask/Listen For guidance
Connect to Community and Cultural Responsiveness
Small Group Differentiation (e.g., Math Center Activities, Unit Games)
Family Letters
Real-World Connection
Develop Language
Language Objectives
Math in Action Lessons
Digital Math Tools
Reflect Questions

**i-Ready Classroom Mathematics* is not an SEL program, but it integrates aspects of SEL into its instructional design. The program has no affiliation with or endorsement from CASEL.

Self-Awareness	Self-Management	Responsible Decision-Making	Social Awareness	Relationship Skills
●	●	●	●	●
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**To see where these assets/features appear in the program, see pp. 10–11.

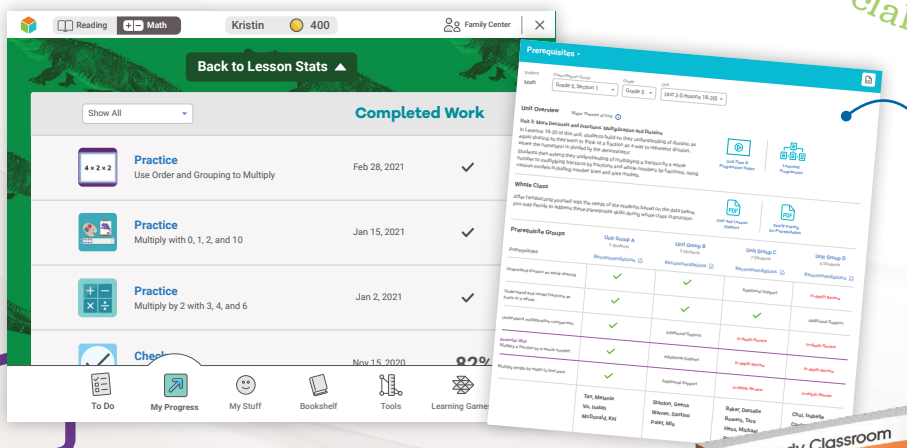
All Five SEL Competencies

SEL is an inextricable part of math education. *i-Ready Classroom Mathematics*' routines, supports, and philosophy embrace this union and seek to cultivate a path for academic and SEL growth at the same time.

Instructional Routine:

The **Try–Discuss–Connect routine** builds the social-emotional aspects of students' education while creating a community of interconnected learners. In *i-Ready Classroom Mathematics*, every student has a voice and an opportunity to engage with the content in a way that is meaningful to them.

Watch classroom videos of the Try–Discuss–Connect instructional routine: CurriculumAssociates.com/TDC.

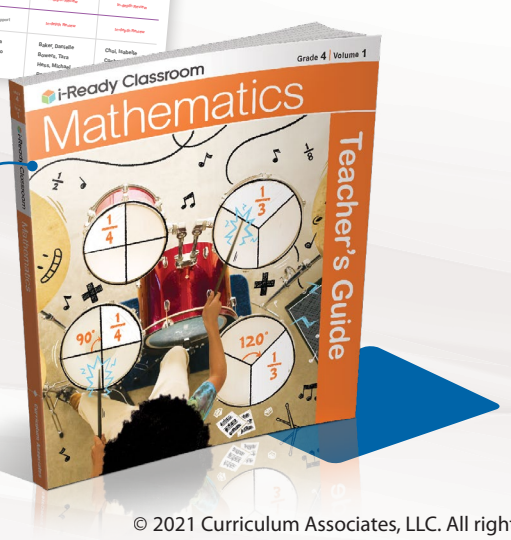


In-Depth Data:

Students, teachers, and families have the data they need to reflect meaningfully on students' progress, set appropriate goals, and celebrate students' achievements.

Embedded Teacher Support:

The Teacher's Guide includes support that promotes broader SEL integration and equips every educator to create a more inclusive and productive classroom.

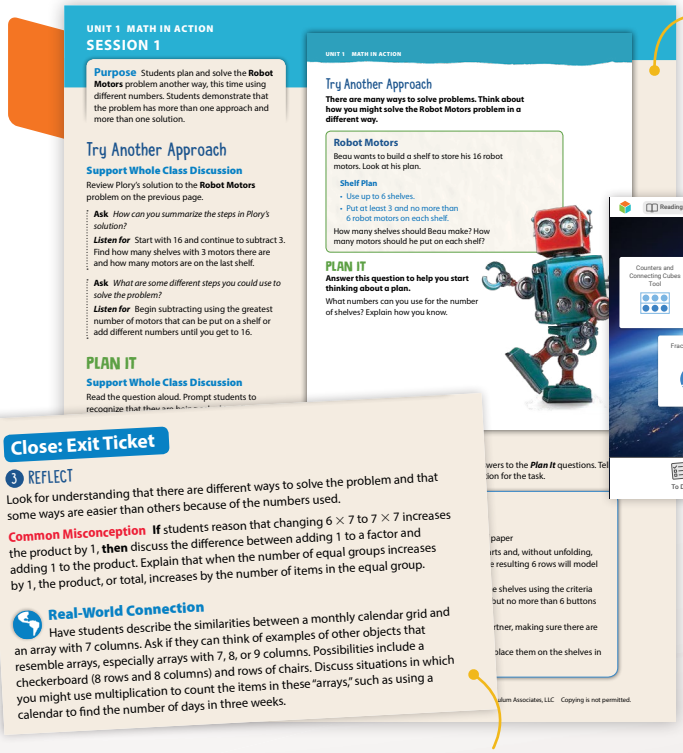


Responsible Decision-Making

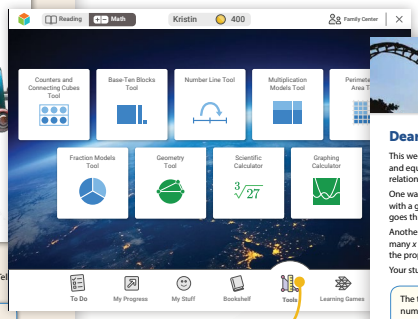
Responsible decision-making is students' "abilities to make caring and constructive choices about personal behavior and social interactions across diverse situations" (CASEL, 2020).* This includes demonstrating curiosity and open-mindedness, learning to make a reasoned judgment based on the facts, and evaluating and anticipating the consequences of one's actions. *i-Ready Classroom Mathematics* provides opportunities for students to learn about and practice responsible decision-making and to build the context needed to apply their practice broadly.

Students practice responsible decision-making in every part of the Try–Discuss–Connect routine.

- **Try It:** Students independently choose the best strategy to solve a problem.
- **Discuss It:** Students demonstrate curiosity and open-mindedness as they choose what to say as they share their thinking.
- **Connect It:** Students evaluate methods and can consider the merits of different solution strategies.

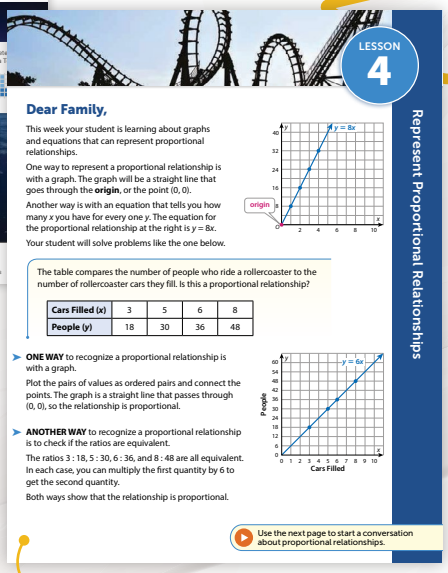


Math in Action lessons *for Grades 2–8 offer a rich, multifaceted experience that lets students practice evaluating a plan after taking in relevant information. Frequent reflection questions scaffold students' thinking and encourage them to make rational, well-reasoned arguments.*



Digital Math Tools *are available for students to use at any time, giving them the opportunity to choose which tool best fits the job at hand.*

Real-World Connection *prompts offer questions and practical, relatable examples that show students why their new knowledge is meaningful outside the classroom.*



Family Letters *clearly communicate what students will be learning and offer activities for families and students to try together.*

*Collaborative for Academic, Social, and Emotional Learning. (2020). *CASEL's SEL framework: What are the core competence areas and where are they promoted?* CASEL. https://casel.org/wp-content/uploads/2020/12/CASEL-SEL-Framework-11.2020.pdf

Self-Awareness

Self-awareness includes students' abilities to recognize their strengths and limitations, understand their own thoughts and emotions, have a growth mindset, and experience self-efficacy. *i-Ready Classroom Mathematics* promotes self-awareness by providing frequent opportunities for students to reflect on their knowledge, giving them time to think independently, and equipping teachers with rich data from informal assessments to share with them.

Self Check *lets students check off skills they already know before starting a unit, and then reflect on their progress at the end of a unit.*

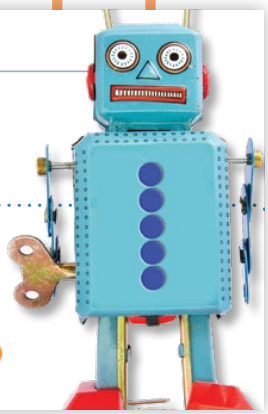
SELF CHECK

Before starting this unit, check off the skills you know below. As you complete each lesson, see how many more skills you can check off!

I can . . .	Before	After
Understand area and find area by tiling and by multiplying.	☐	☐
Find the area of a combined rectangle or a non-rectangular shape by adding the areas of the rectangles that make up the shape.	☐	☐
Use multiplication or division to solve one-step word problems.	☐	☐
Use addition, subtraction, multiplication, or division to solve two-step word problems	☐	☐
Solv		
Draw		

Read and try to solve the problem below.

A company makes a toy robot that has 2 antennas and 5 buttons. How many antennas and buttons are needed for 6 robots?



TRY IT

Math Toolkit

- counters
- cups
- 1-centimeter grid paper
- multiplication models

During the ***Try It****, students work independently, letting them better understand their own abilities and prepare to take academic risks.*

8 REFLECT

Look back at your **Try It**, strategies by classmates, and **Picture It** and **Model It**. Which models or strategies do you like best for mulitplying to find the area of a rectangle? Explain.

Connect It *questions ask students to reflect and apply what they have learned to novel problems and situations.*

9 MATH JOURNAL

Missy wants to hang 12 pictures on her bedroom wall. She hangs 3 pictures in each row. How many rows of pictures are there? Explain two ways to find the answer.

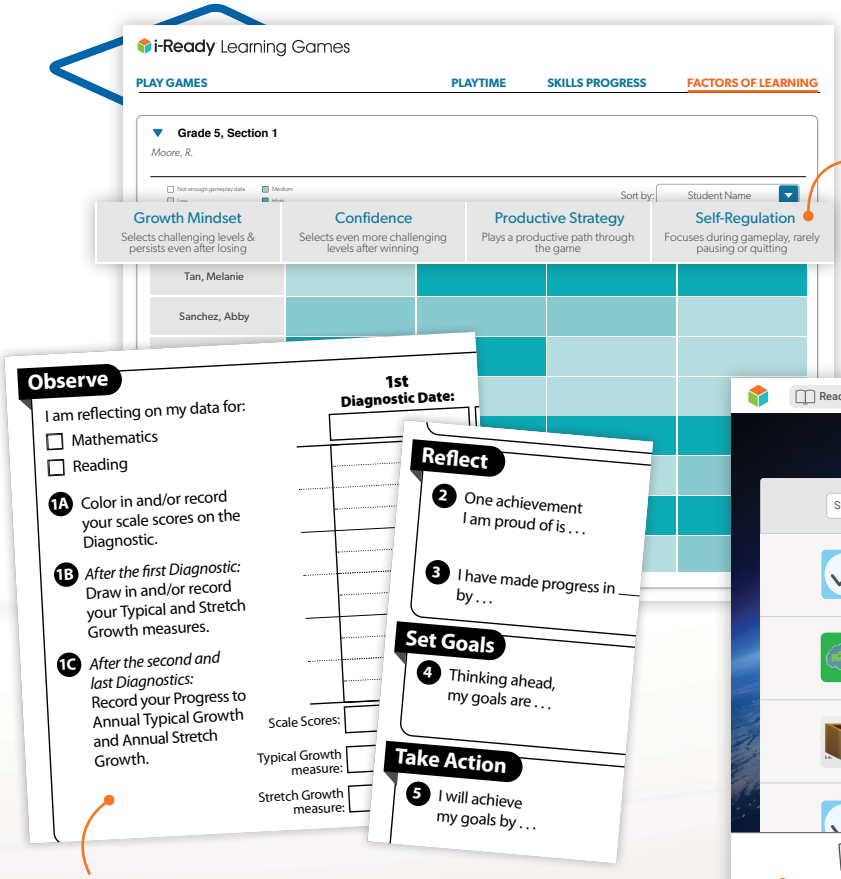
Frequent, informal ***checks for understanding*** *allow students to gather data on their abilities and set new goals for growth.*

Self-Management

CASEL defines self-management as students' abilities to "manage [their] emotions, thoughts, and behaviors effectively in different situations to achieve goals and aspirations," including setting personal and collective goals, taking initiative, and using planning and organizational skills (CASEL, 2020).* *i-Ready Classroom Mathematics*' daily routine, online activities, and robust, accessible data help students build this crucial skill.

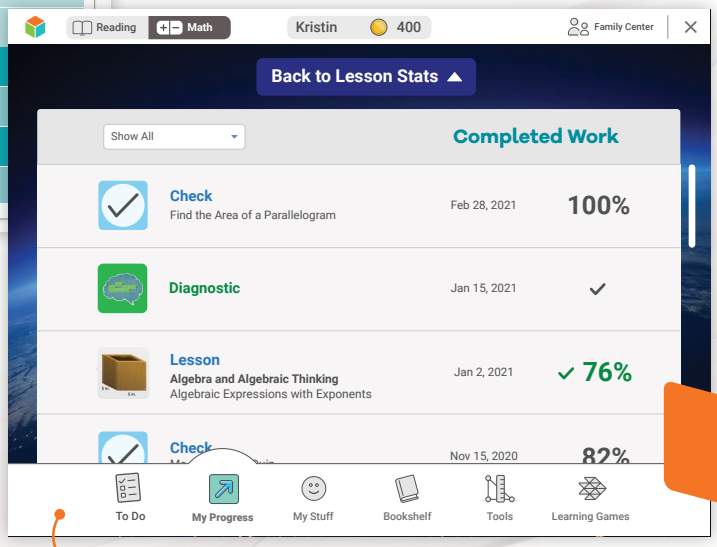
Using the **Try–Discuss–Connect routine** creates opportunities for students to learn and demonstrate self-management.

- **Try It:** As students persevere through a novel problem independently, they practice managing their emotions, such as excitement to share their thinking or frustration with a tough question.
- **Discuss It:** Students learn how to manage their emotions and actions in response to potentially challenging situations, such as someone disagreeing with their answer or feeling embarrassed about a mistake.



Interactive Learning Games *give students immediate feedback they can use to test strategies as they learn to manage their emotions. After completing a level, students can choose whether the next round is harder or not, giving them agency over their learning.*

Teachers can use students' data and implementation resources to plan ***data chats*** *with students, school leaders, and families. These help students examine their growth and see their teachers and families as allies.*

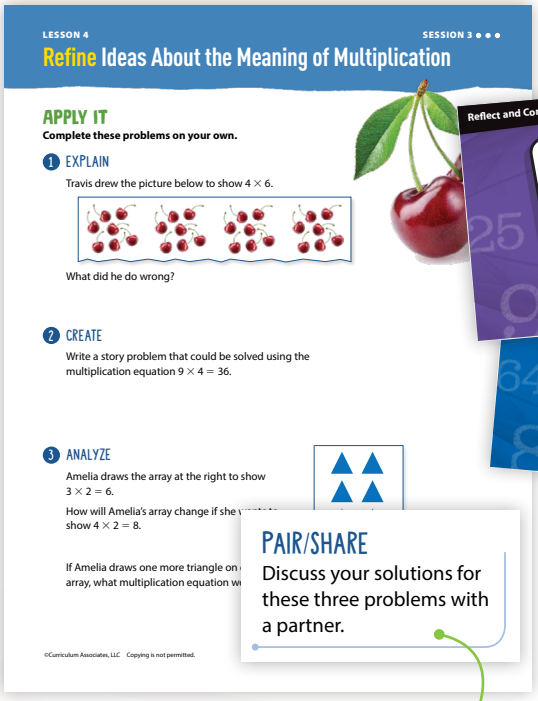


My Progress *shows students their completed work, including their scores on Comprehension Checks. This keeps students on track and helps them understand their progress.*

*Collaborative for Academic, Social, and Emotional Learning. (2020). *CASEL's SEL framework: What are the core competence areas and where are they promoted?* CASEL. https://casel.org/wp-content/uploads/2020/12/CASEL-SEL-Framework-11.2020.pdf

Social Awareness

Social awareness encompasses students' abilities to understand the perspectives of others and empathize with them. This includes recognizing others' strengths, understanding how one's own behavior impacts others, and demonstrating empathy and compassion. *i-Ready Classroom Mathematics* provides daily opportunities for students to learn about and practice social awareness.


LESSON 4 SESSION 3

Refine Ideas About the Meaning of Multiplication

APPLY IT

Complete these problems on your own.

1 EXPLAIN

Travis drew the picture below to show 4 × 6.

What did he do wrong?

2 CREATE

Write a story problem that could be solved using the multiplication equation 9 × 4 = 36.

3 ANALYZE

Amelia draws the array at the right to show 3 × 2 = 6.

How will Amelia's array change if she … show 4 × 2 = 8.

If Amelia draws one more triangle on … array, what multiplication equation w…

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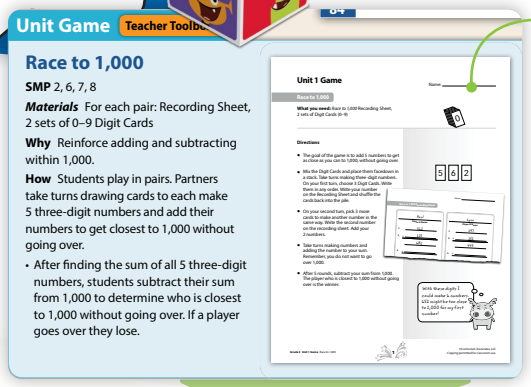
PAIR/SHARE

Discuss your solutions for these three problems with a partner.

*In the **Discuss It**, students share their thoughts and strategies with their peers. This communication builds students' capacity for empathy and fosters the trust and security needed for them to feel safe taking academic risks. Students learn how to infer their partners' emotions, what impact their reaction to someone's work has on them, and how to better understand their classmates' thinking.*

***Discourse Cards** and the **Discourse Cube** provide questions and sentence starters that scaffold conversations to help students be a part of an honest and healthy academic discussion that shows respect for classmates' perspectives.*


Unit Game Teacher Toolbox

Race to 1,000

SMP 2, 6, 7, 8

Materials For each pair: Recording Sheet, 2 sets of 0–9 Digit Cards

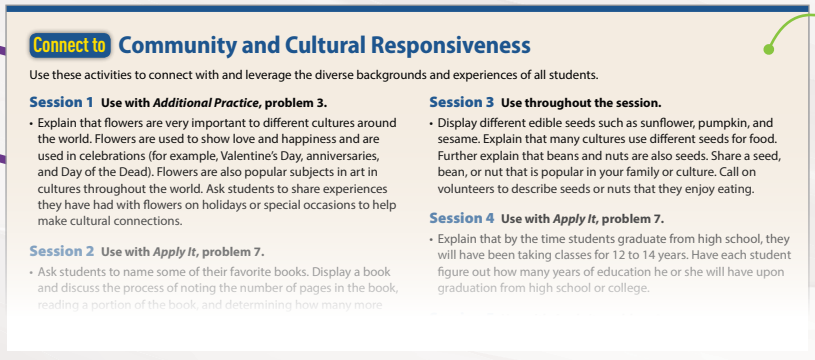
Why Reinforce adding and subtracting within 1,000.

How Students play in pairs. Partners take turns drawing cards to each make 5 three-digit numbers and add their numbers to get closest to 1,000 without going over.

- After finding the sum of all 5 three-digit numbers, students subtract their sum from 1,000 to determine who is closest to 1,000 without going over. If a player goes over they lose.

Unit 1 Game

***Unit Games (K–8) and Grade Level Games (K–2)** use play to reinforce academic and social-emotional learning.*


Connect to Community and Cultural Responsiveness

Use these activities to connect with and leverage the diverse backgrounds and experiences of all students.

Session 1 Use with *Additional Practice*, problem 3.

- Explain that flowers are very important to different cultures around the world. Flowers are used to show love and happiness and are used in celebrations (for example, Valentine's Day, anniversaries, and Day of the Dead). Flowers are also popular subjects in art in cultures throughout the world. Ask students to share experiences they have had with flowers on holidays or special occasions to help make cultural connections.

Session 2 Use with *Apply It*, problem 7.

- Ask students to name some of their favorite books. Display a book and discuss the process of noting the number of pages in the book, reading a portion of the book, and determining how many more

Session 3 Use throughout the session.

- Display different edible seeds such as sunflower, pumpkin, and sesame. Explain that many cultures use different seeds for food. Further explain that beans and nuts are also seeds. Share a seed, bean, or nut that is popular in your family or culture. Call on volunteers to describe seeds or nuts that they enjoy eating.

Session 4 Use with *Apply It*, problem 7.

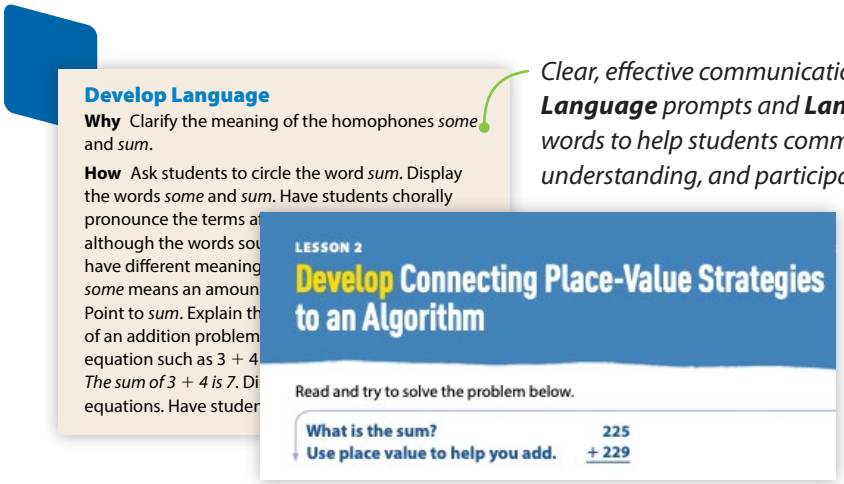
- Explain that by the time students graduate from high school, they will have been taking classes for 12 to 14 years. Have each student figure out how many years of education he or she will have upon graduation from high school or college.

***Connect to Community and Cultural Responsiveness** sections offer context and suggestions on how to honor students' diverse perspectives and experiences, bring them into the lesson, and give problems broader context. This helps students develop an appreciation for different worldviews and customs.*

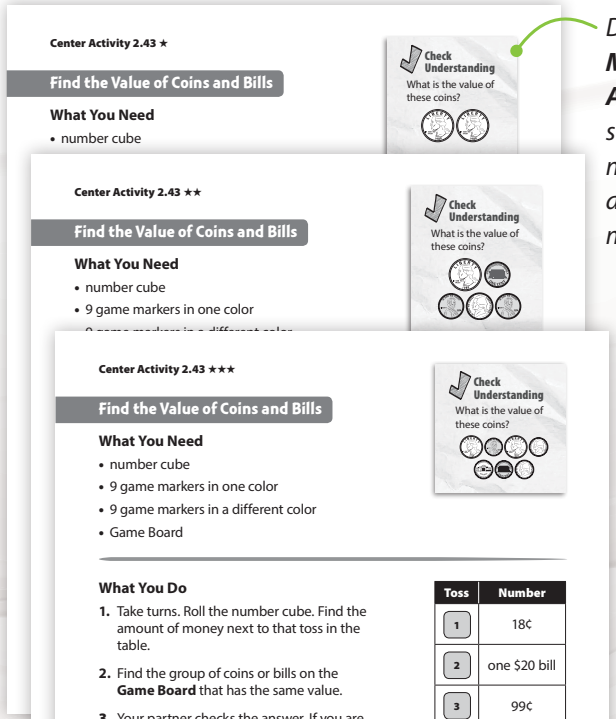
Relationship Skills

Relationship skills are students' abilities to establish and maintain healthy and supportive relationships. This includes communicating effectively, practicing teamwork, and seeking or offering support when it's needed. In *i-Ready Classroom Mathematics*, relationship skills are put to the forefront of each session.

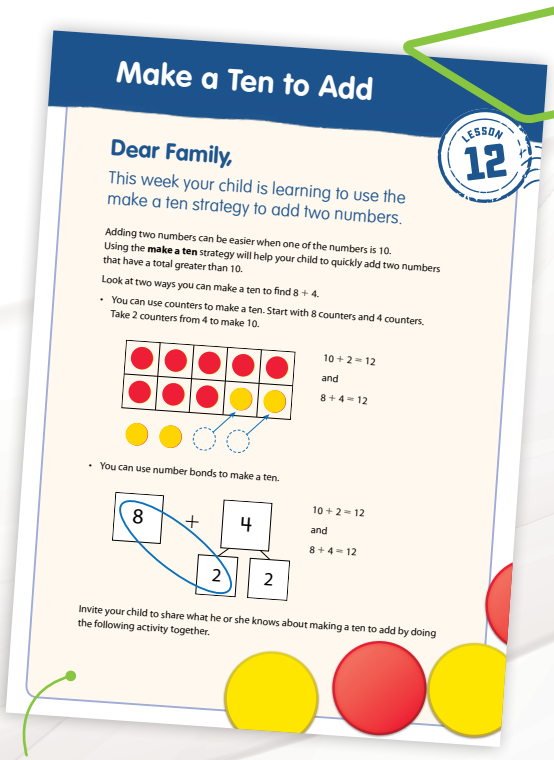
The Discuss It questions help students practice crucial relationship skills. They learn what questions to ask to better understand their classmates' thinking and how to support each other through challenging work. These empathic bridges build toward an understanding of how to maintain positive, healthy connections with peers and teachers.



*Clear, effective communication is a crucial relationship skill. The **Develop Language** prompts and **Language Objectives** target specific, relevant words to help students communicate effectively, demonstrate their understanding, and participate in mathematical discourse.*



*Differentiated **Math Center Activities** let every student participate meaningfully and be a valued member of a team.*

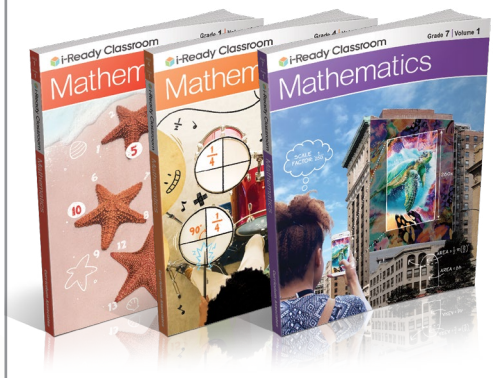


***Family Letters** bring the concepts from class into the home and encourage students to practice academic communication with a broader audience.*

It's All Here

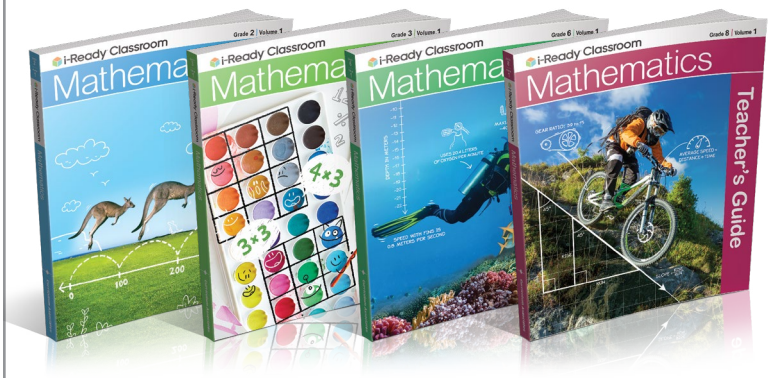
i-Ready Classroom Mathematics' features work together to support rich, interconnected learning. Whether you're looking at the Student Worktext, the Teacher's Guide, the Student Digital Experience, or the Teacher Digital Experience, you'll see our commitment to SEL integration.

Student Worktext



- Assessments (Formal and Informal)
- End-of-Lesson Checklist (6–8)
- End-of-Unit Self-Reflections
- English Learner Supports
- Family Letters
- Math in Action lessons
- Math Journal questions
- Try–Discuss–Connect routine
- Reflect prompts
- Reflect Questions
- Self Check
- Unit Review

Teacher's Guide



- Ask/Listen For guidance
- Assessments (Formal and Informal)
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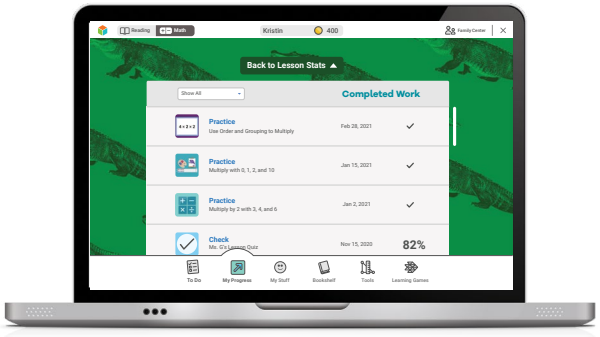
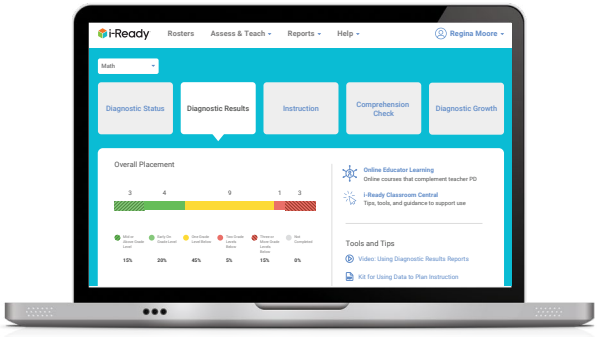
Student Digital Experience



- Assessments (Formal and Informal)
- Digital Math Tools
- English Learner Supports
- Family Letters
- Interactive Learning Games
- Lesson 0
- My Progress

Teacher Digital Experience



- Assessments (Formal and Informal)
- Comprehension Checks
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- Mid-Unit Assessments
- Small Group Differentiation
- Unit Games

i-Ready Classroom Mathematics

For more information:

Contact your educational consultant at

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