Oregon educators hold high expectations for all students. And so does Curriculum Associates. We created *i-Ready Classroom Mathematics, Oregon Edition* to enable educators to drive grade-level access and grade-level outcomes for all students, equitably. *i-Ready Classroom Mathematics, Oregon Edition* is built on a student-centered and culturally responsive instructional framework. It is research based and reflects best practices in data and instructional strategies.

We have been so fortunate to lean on the wisdom of our partners, such as Dr. Sharokky Holli and Center for Culturally Responsive Teaching and Learning, and the English Learners Success Forum. To guide our work, we established an authenticity review panel made up of employees representing diverse backgrounds and identities. While we are excited about our work, we fully acknowledge that we have more to do. We are working towards making sure that our programs promote an asset-based philosophy, like promoting validation and affirmation of student cultures in classrooms.

Through a balanced representation of cultures and groups in multiple settings, occupations, careers, and lifestyles, our proposed curriculum's support equal opportunity without regard for age, color, gender, disability, national origin, race, or religion. The portrayal of individuals and situations are free of biases/stereotypes and in many cases promote an understanding/appreciation of the contributions made by diverse cultures and heritage.

Curriculum Associates understands that effective treatment of multicultural issues requires consideration of the age and ability levels of students, and whether or not it is appropriate to include multicultural issues in the study of a particular topic. The overall design used reflect both multicultural fairness and advocacy.

Student-Centered and Culturally Responsive Instructional Framework

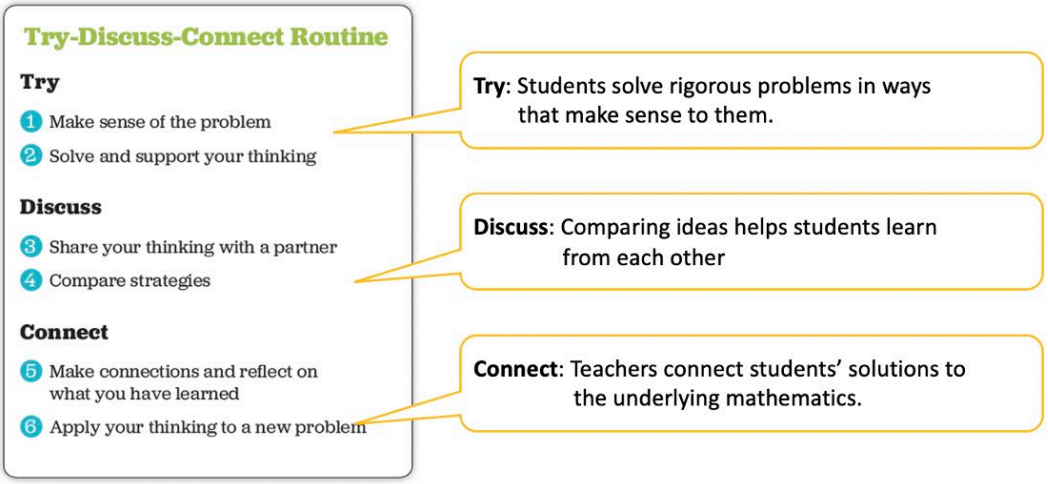
Make Every Second Count

i-Ready Classroom Mathematics, Oregon Edition has a unique lesson structure that spans multiple days, giving educators the gift of time–time to address unfinished learning strategically without losing valuable time for grade-level instruction, and time to ensure that students gain conceptual understanding, procedural fluency, and application. Historically, math curriculum has encouraged educators to address rigorous standards in one day and quickly move on to the next. This results in over-indexing for procedural fluency and memorization at the expense of conceptual understanding and application. Over time the lack of conceptual understanding dehumanizes mathematics while perpetuating inequitable results. We want to inspire educators to implement practices that do the opposite. With *i-Ready Classroom Mathematics, Oregon Edition*, we've shifted the design structure, allowing educators to dig deeper into a single lesson, setting all students up for grade-level success.

Structure of a Lesson				
Day 1	Day 2	Day 3	Day 4	Day 5
Explore SESSION	**Develop** SESSION	**Develop** SESSION	**Develop** SESSION	**Refine** SESSION
• Connect prior knowledge. • Introduce new lesson content. • Address unfinished learning.	• Standards-based instruction • Try–Discuss–Connect discourse routine • Build understanding, practice new skills, and apply new learning • Embedded differentiation options to meet all students' learning needs			• In-class time to practice and strengthen skills and understanding • Reteach, remediate, reinforce, and extend the learning

Every lesson is broken down into multiple sessions: Explore, Develop, and Refine. It begins with our Explore session, which allows educators to address prerequisites based on data and help students connect prior learning to what they are learning that day. The Develop session(s) gives students multiple opportunities to develop conceptual understanding, procedural fluency, and application through a discourse routine. Students focus on building understanding, practicing new skills, and applying them to new learning. The Refine sessions are in-class practice days that allows additional time for educators to use provided resources for differentiation, and also provides students time to deepen their understanding of the concepts and skills.

Try–Discuss–Connect Puts Students' Ideas at the Center of Their Learning

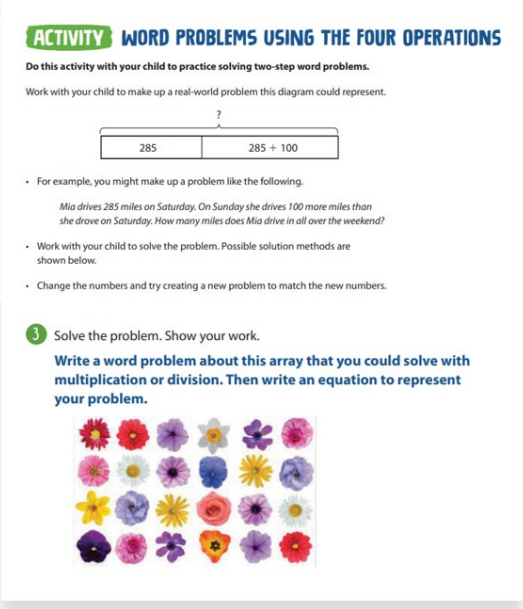


The *i-Ready Classroom Mathematics, Oregon Edition* Try-Discuss-Connect Instructional Framework puts student thinking at the center of learning, while elevating the humanity of mathematics. Try-Discuss-Connect uses students' ideas to teach about mathematical concepts and relationships. We know that when students do the thinking and the talking, they process ideas better.

Students first try to solve problems in ways that make sense to them, even if they are not the most efficient or sophisticated. They discuss the solutions with partners and then the class. The teacher facilitates a discussion in which students think about why different solution methods can give the same correct answer and make connections to the underlying mathematics. This fosters meaningful discourse about math, while developing language, and helps students build community with their peers.

With the Try-Discuss-Connect Instructional Framework, every student has the opportunity to find their own entry way. Being deemed a below-level math student does not mean the student is a below-level thinker. The Try-Discuss-Connect Instructional Framework invites all students to participate using what they know from previous learning, which validates student voice, and gives educators greater insight into student thinking.

Student-Generated Word Problems Allow Learners to Draw on Their Own Unique Experiences



ACTIVITY **WORD PROBLEMS USING THE FOUR OPERATIONS**

Do this activity with your child to practice solving two-step word problems.

Work with your child to make up a real-world problem this diagram could represent.

- For example, you might make up a problem like the following.

  Mia drives 285 miles on Saturday. On Sunday she drives 100 more miles than she drove on Saturday. How many miles does Mia drive in all over the weekend?

- Work with your child to solve the problem. Possible solution methods are shown below.
- Change the numbers and try creating a new problem to match the new numbers.

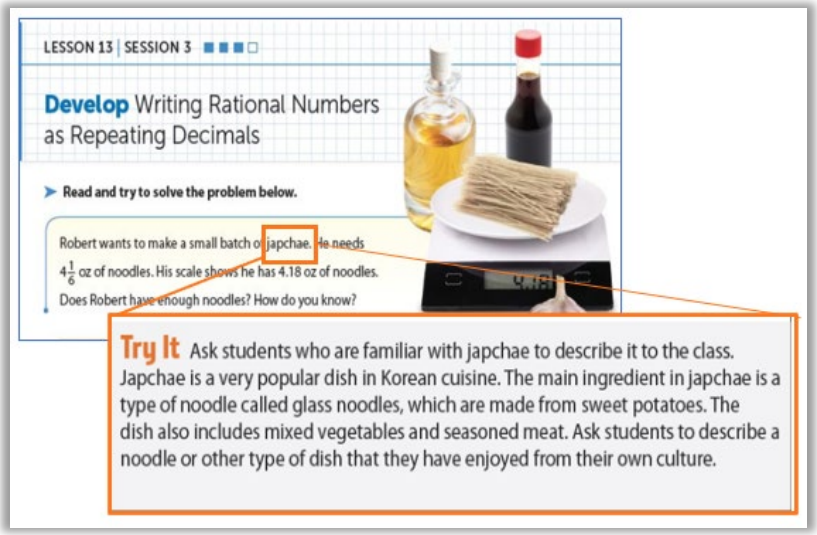
3 Solve the problem. Show your work.

Write a word problem about this array that you could solve with multiplication or division. Then write an equation to represent your problem.

Another way *i-Ready Classroom Mathematics, Oregon Edition* puts students' ideas at the center of their learning is by asking students to write their own word problems. Classmates are engaged when they solve one another's problems—and they take the role of expert when they give feedback to the writer about how clear the problem is or even whether there is enough information to solve it. It allows the educator to use each student's experiences as an asset to continue to build community within the classroom.

Culturally Responsive Curriculum Design

Students' Cultural and Linguistic Backgrounds Are Assets To Learning Rigorous Grade-Level Content



LESSON 13 | SESSION 3

Develop Writing Rational Numbers as Repeating Decimals

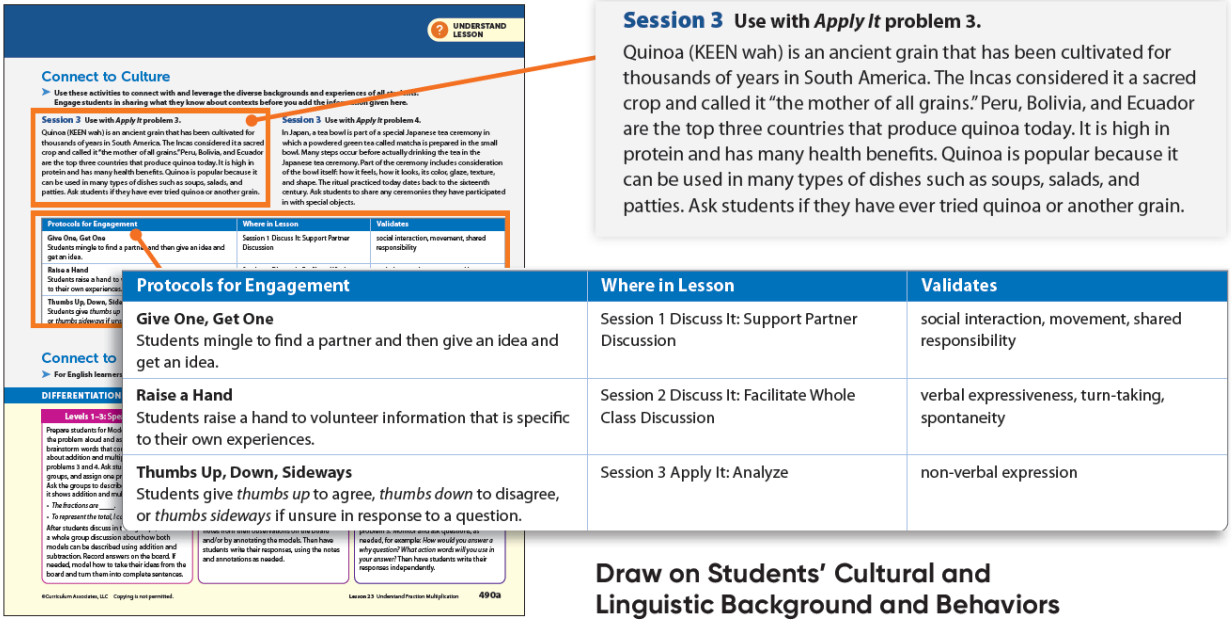
Read and try to solve the problem below.

Robert wants to make a small batch of japchae. He needs $4\frac{1}{6}$ oz of noodles. His scale shows he has 4.18 oz of noodles. Does Robert have enough noodles? How do you know?

Try It Ask students who are familiar with japchae to describe it to the class. Japchae is a very popular dish in Korean cuisine. The main ingredient in japchae is a type of noodle called glass noodles, which are made from sweet potatoes. The dish also includes mixed vegetables and seasoned meat. Ask students to describe a noodle or other type of dish that they have enjoyed from their own culture.

i-Ready Classroom Mathematics, Oregon Edition promotes an asset-based mindset: Students' backgrounds and first languages are not barriers to learning, but rather experiences and ideas that teachers can use to engage students and help them learn. Educators must know their students' cultural backgrounds and use instructional practices that draw on those familiar norms and expectations. It is evident in the Try—Discuss--Connect Instructional Framework, and in other ways, too. For example:

Connect to Culture features in every lesson help classrooms become more inclusive and welcoming and help teachers use students' funds of knowledge to engage and motivate.



Session 3 **Use with *Apply It* problem 3.**

Quinoa (KEEN wah) is an ancient grain that has been cultivated for thousands of years in South America. The Incas considered it a sacred crop and called it "the mother of all grains." Peru, Bolivia, and Ecuador are the top three countries that produce quinoa today. It is high in protein and has many health benefits. Quinoa is popular because it can be used in many types of dishes such as soups, salads, and patties. Ask students if they have ever tried quinoa or another grain.

Protocols for Engagement	Where in Lesson	Validates
Give One, Get One Students mingle to find a partner and then give an idea and get an idea.	Session 1 Discuss It: Support Partner Discussion	social interaction, movement, shared responsibility
Raise a Hand Students raise a hand to volunteer information that is specific to their own experiences.	Session 2 Discuss It: Facilitate Whole Class Discussion	verbal expressiveness, turn-taking, spontaneity
Thumbs Up, Down, Sideways Students give *thumbs up* to agree, *thumbs down* to disagree, or *thumbs sideways* if unsure in response to a question.	Session 3 Apply It: Analyze	non-verbal expression

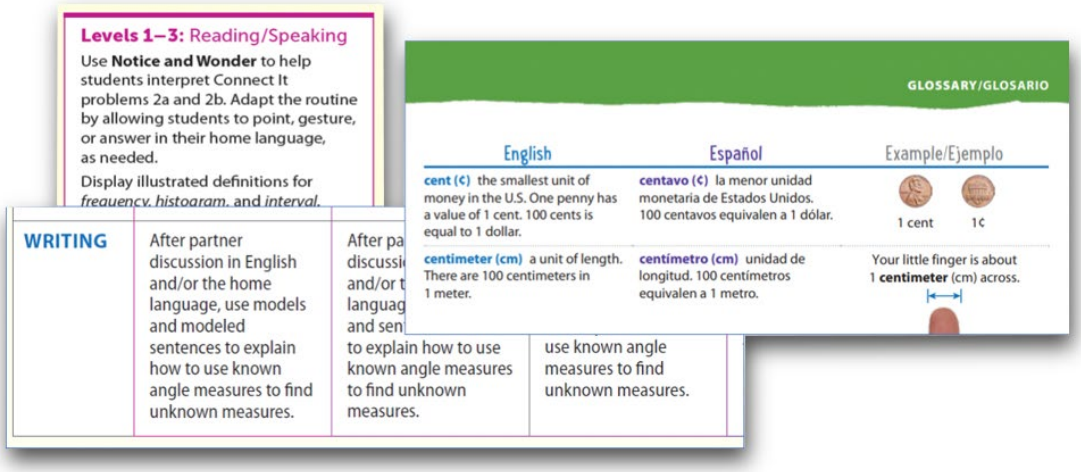
Draw on Students' Cultural and Linguistic Background and Behaviors

Every lesson includes instructional protocols to engage students while affirming and validating their identities. To learn more about the Protocols for Engagement,

Support English Learners

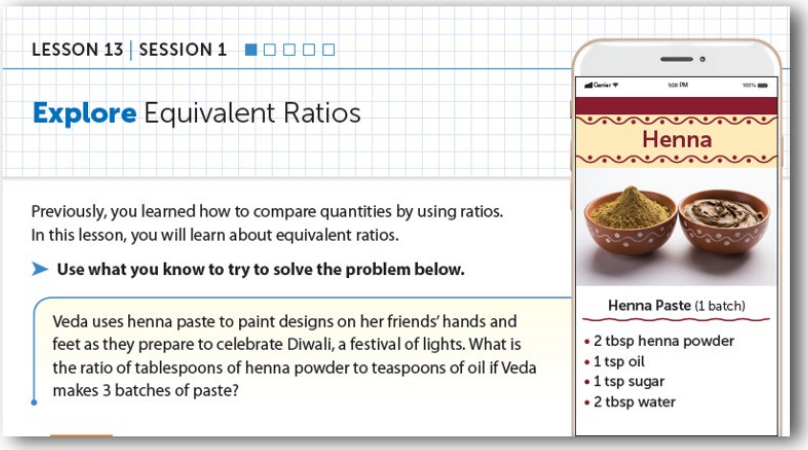
Language Routines are integrated at appropriate places throughout lessons in the *i-Ready Classroom Mathematics, Oregon Edition* Try–Discuss–Connect Instructional Framework. These research-based language routines support students as they use the specialized language of mathematics and academic language. The language routines promote opportunities for students to speak, listen, read, and write about mathematical concepts, situations, and ideas.

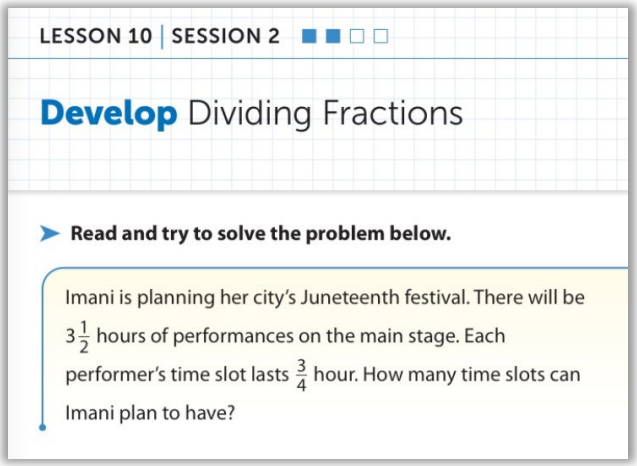
Every Session includes differentiated support for a continuum of English proficiency levels. Differentiation suggestions focus on a specific problem so that teachers can scaffold language, as needed, to ensure that English learners access and engage with the mathematics



In *i-Ready Classroom Mathematics, Oregon Edition* we support English Learners by supporting the language in the instruction—not by simplifying instruction.

Inclusion and Engagement are Critical to Student Success

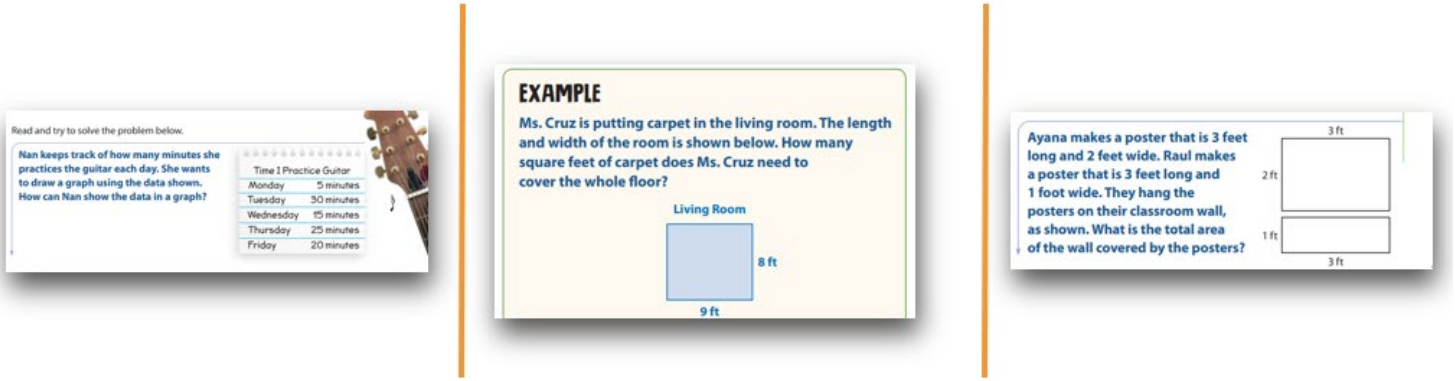




Dr. Hollie, Zaretta Hammond, and others teach us that in order to foster the Academic Mindset the first thing we need to do is enable children to feel like they belong in the academic community. One of the most profound and impactful ways we can do this is by enabling students to see themselves reflected in their academic content.

When students see themselves and feel that they belong, productive struggle can take place and students work through the so-called learning pit. That's when students tackle a problem by using what they know to figure out an unfamiliar or complex problem. In *i-Ready Classroom Mathematics, Oregon Edition*, all students engage in productive struggle with focus problem of a lesson.

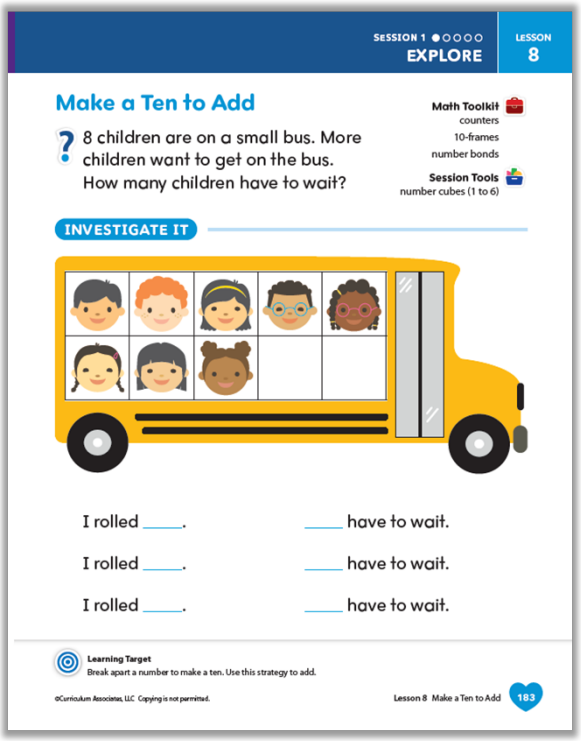
When Students See Themselves in Materials,
It Can Make Accessing Grade Level Content More Feasible

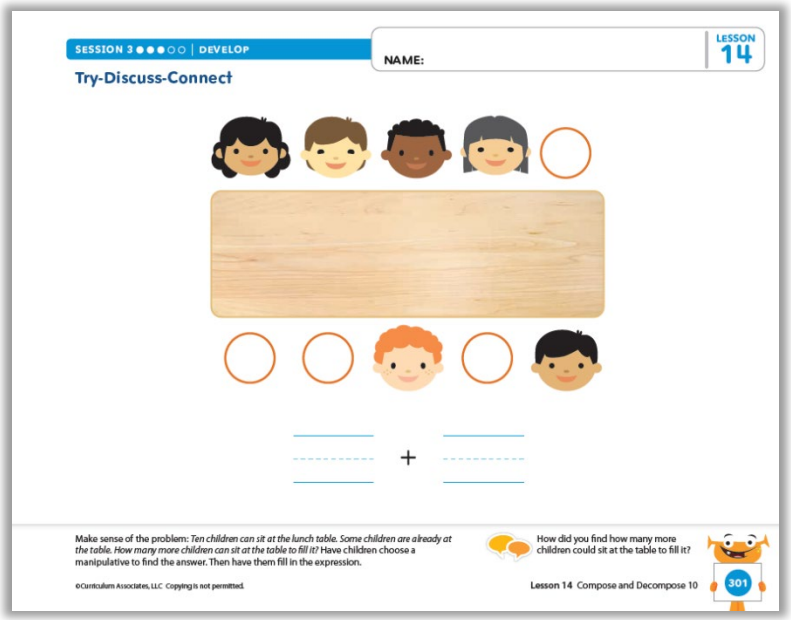


Finally, in *i-Ready Classroom Mathematics, Oregon Edition* we support students in accessing the rigor of their grade level by ensuring the content is accessible and relevant to them.

When students see something of themselves in the people and situations of their math problems, they are more likely to feel like they belong. That feeling of belonging and familiarity helps them be relaxed and ready to learn. *i-Ready Classroom Mathematics, Oregon Edition* problems use contexts that are familiar to students and relate to different rings of culture.

Problems in the early grades include scenes in which students see themselves and their lived experiences, names from different ethnic backgrounds, and topics from youth culture.





SESSION 3 ●●●○○ | DEVELOP

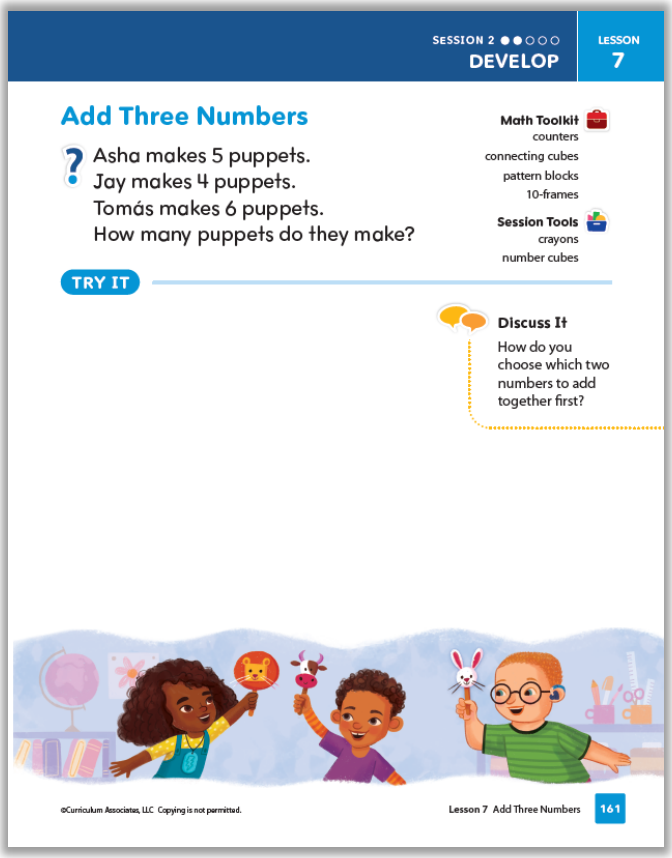
NAME:

LESSON 14

Try-Discuss-Connect

Make sense of the problem: *Ten children can sit at the lunch table. Some children are already at the table. How many more children can sit at the table to fill it?* Have children choose a manipulative to find the answer. Then have them fill in the expression.

How did you find how many more children could sit at the table to fill it?



SESSION 2 ●●○○○ DEVELOP

LESSON 7

Add Three Numbers

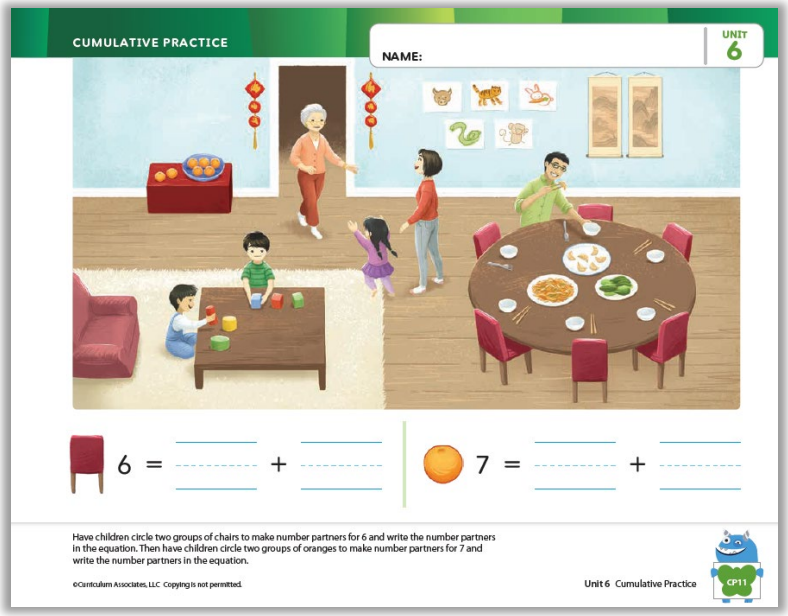
Asha makes 5 puppets.
Jay makes 4 puppets.
Tomás makes 6 puppets.
How many puppets do they make?

Math Toolkit
counters
connecting cubes
pattern blocks
10-frames

Session Tools
crayons
number cubes

TRY IT

Discuss It
How do you choose which two numbers to add together first?



CUMULATIVE PRACTICE

NAME:

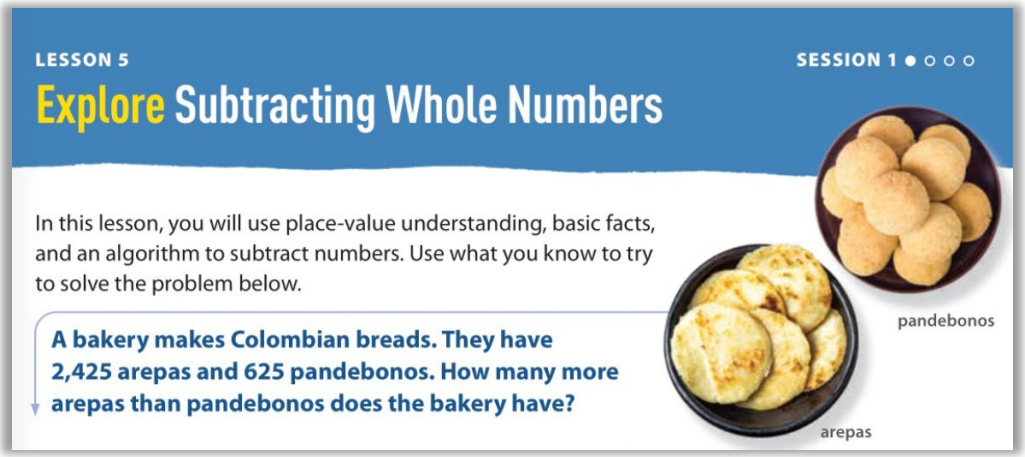
UNIT 6

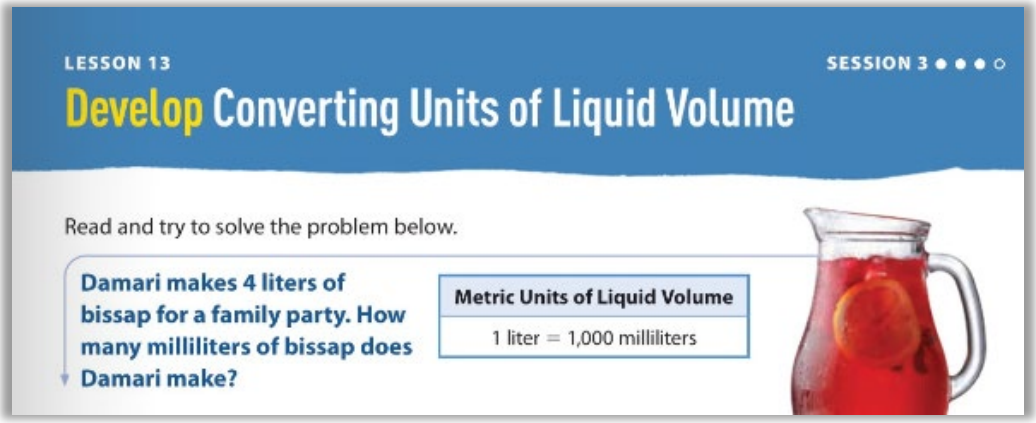
6 = ____ + ____

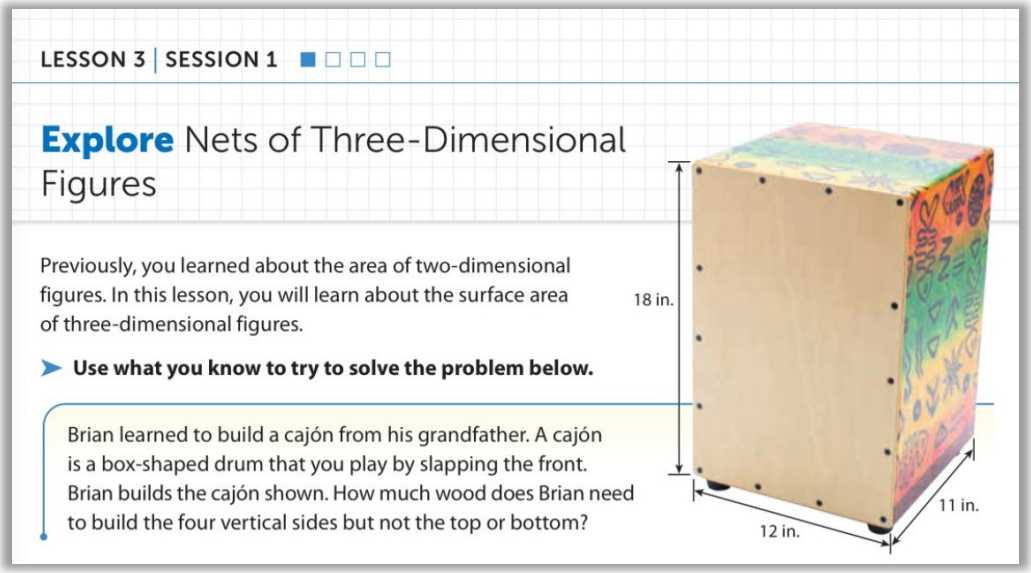
7 = ____ + ____

Have children circle two groups of chairs to make number partners for 6 and write the number partners in the equation. Then have children circle two groups of oranges to make number partners for 7 and write the number partners in the equation.

As students mature, so do the graphics, and situations. Problems represent more, different rings of culture and include details which are authentic to each particular culture.







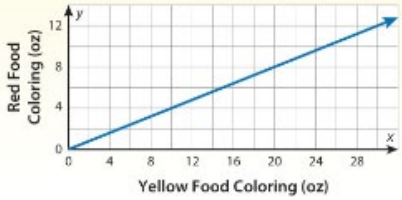
LESSON 8 | SESSION 3

Develop Finding the Slope of a Line

Holi Festival–a festival of color to welcome spring

➤ **Read and try to solve the problem below.**

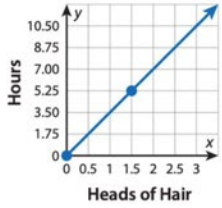
Ashwini's family is getting ready for the local Holi festival. Ashwini mixes yellow and red food coloring to make orange food coloring. She uses the graph to find how many ounces of yellow and red to mix. What is the slope of the line? What does the slope represent?



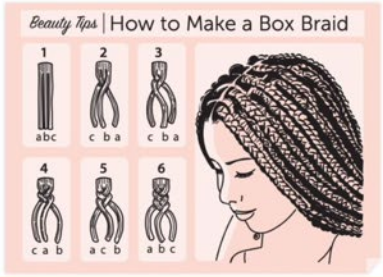
Diane Choe Moon @MrsDianeMoon · Nov 4

Thanks @CurriculumAssoc for supporting inclusivity/diversity with problems like this! A student who has gotten box braids spoke of her experience and let us know that 3.5 hrs per head of hair is actually a fast rate compared to the five hours it took to get her own braids!

10 Ellema's little sisters want box braids. They complain that Ellema braids too slowly. So, she makes a graph to show them how fast she is.



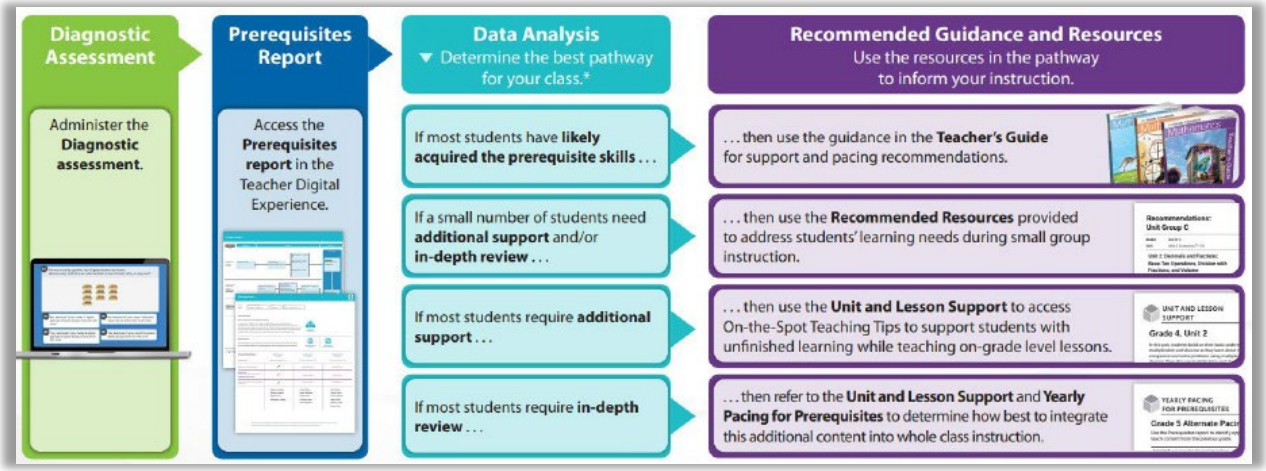
a. What does the point (0, 0) mean?



Equity Based Data Practices

All educators want their students to participate in grade-level curriculum and achieve grade level results, but there are many students today struggling with unfinished learning. Unfinished learning is commonly viewed as an insurmountable barrier to grade-level engagement. Addressing unfinished learning often robs the classroom of vital grade-level instructional time. The prevailing habit is to address as much unfinished learning as possible, often by providing below grade-level instruction or below grade-level homework. However, research shows that the most effective and equitable way to address unfinished learning is to strategically organize unfinished learning topics by their relationship to the grade level lesson about to be taught. This requires valid and reliable assessment data and innovative reports. The Prerequisites report, driven by insights from the *i-Ready Diagnostic* assessment, automatically identifies the prerequisite topic necessary to enable all students to fully engage in the grade level lesson and provides teachers with the necessary supports.

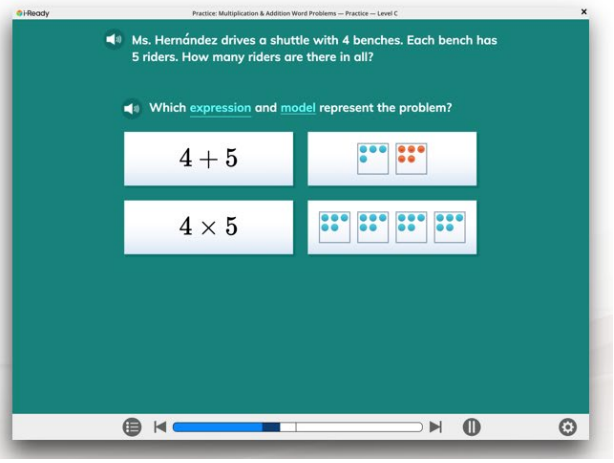
To combat this common challenge, *i-Ready Classroom Mathematics, Oregon Edition* provides educators with a Prerequisite report that prioritizes the prerequisite knowledge necessary to access each lesson. It identifies the students who lack this essential prerequisite knowledge. Within the Prerequisites report, educators can find Learning Progressions to demonstrate coherence of the standards from previous grades to help uncover students' learning needs. The Prerequisites report is designed to help teachers be precise and focus efforts on the most critical essential skills. In addition, On-the-Spot Teaching Tips suggest additional scaffolding to support students with unfinished learning as they engage in grade-level work.



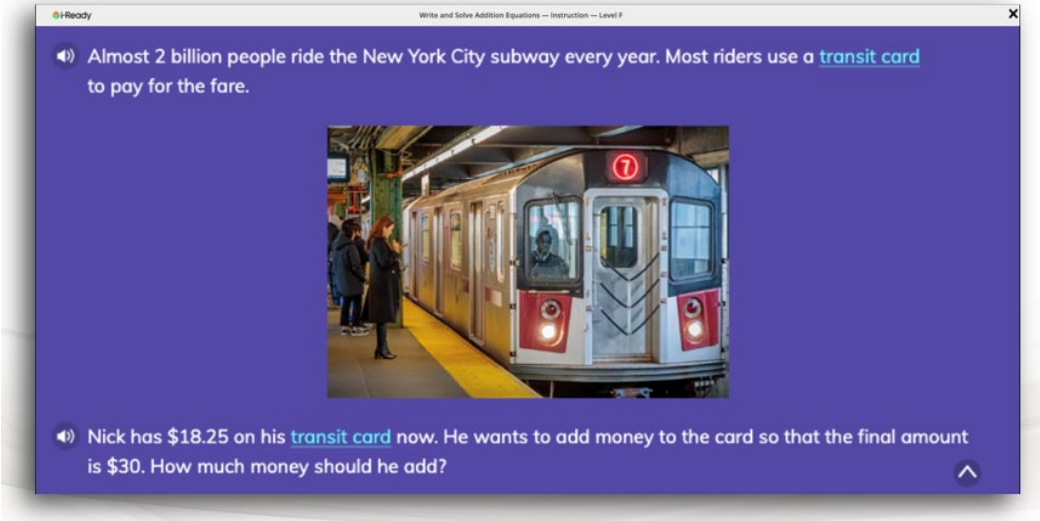
The completion of the *i-Ready Diagnostic* also places students into a personalized online instructional path customized to each student's placement level in each domain. *i-Ready* addresses Cultural Responsiveness for students is through these highly scaffolded, engaging, interactive digital lessons. We strive to ensure that students see themselves in the math problems they practice. In other words, our team is constantly drawing on student cultures to shape the curriculum we provide students and the instructional support materials that we provide teachers.

There are several ways students can see themselves in the content they are immersed within.

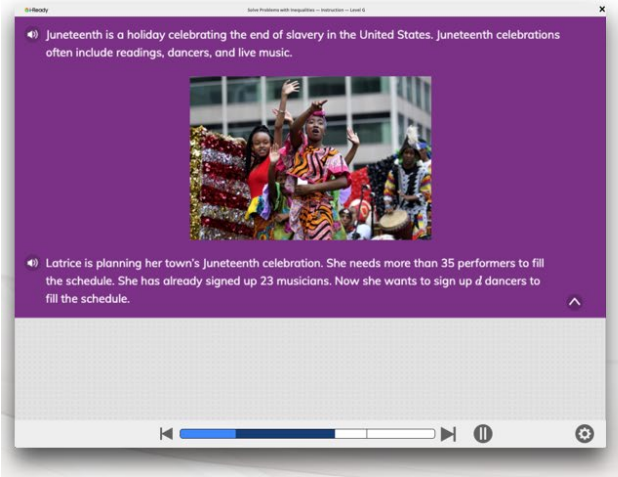
- **Culturally Neutral- visual representation, the minimum, which simply shows appearance.**

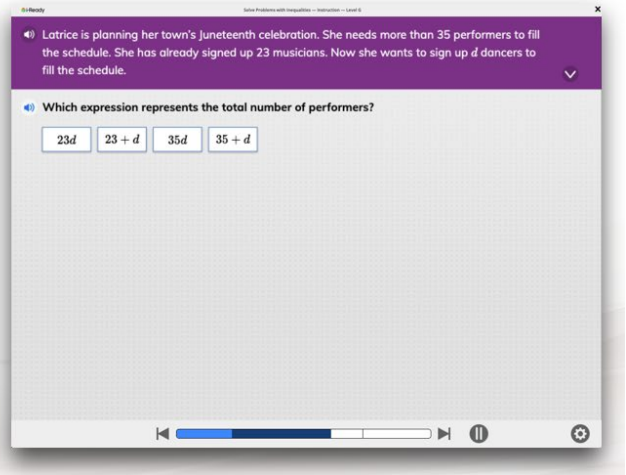


- **Culturally Generic content, while is loosely connected to a culture, includes details in the content that could fit more than one culture.**



- **Culturally Authentic content uses specific surface and deeper cultural elements to create strong resonance and connections with students.**





All 3 are important. You will see all three within *i-Ready* instruction and we strive to increase examples of Cultural Authenticity.