

The final piece of a *fully aligned* K-12 math curriculum.

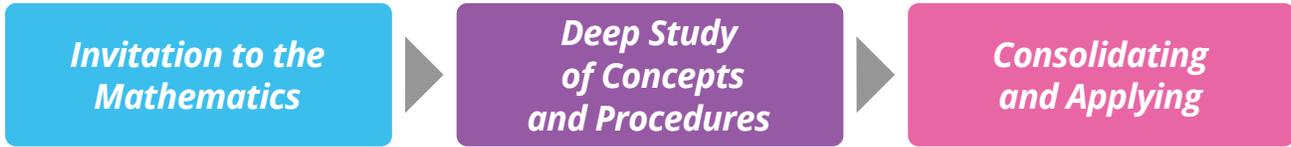


Students enjoy mathematics, make mathematical connections, and develop conceptual understanding.

Teachers orchestrate productive discussions, synthesize understanding, and facilitate lessons with confidence.



Design Structure of LearnZillion IM K-5 Math™



LearnZillion IM K-5 offers the highest quality curricula powered by a best-in-class digital experience:

Coherent, grade-level progressions and learning trajectories

Every routine, activity, and lesson has a place in the mathematical story across units and grade levels, based on standards and research-based learning trajectories.

Section overview

Goals

- Understand that fractions are built from unit fractions such that a fraction $\frac{a}{b}$ is the quantity formed by a parts of size $\frac{1}{b}$.
- Understand that unit fractions are formed by partitioning shapes into equal parts.

Section narrative

In this section, students are introduced to fractions through area diagrams and fraction strips. Students use their prior knowledge of halves, thirds, and fourths as they partition rectangles into six or eight equal parts and describe the parts as sixths or eighths. Students learn that the notation $\frac{1}{b}$ means the whole is partitioned into b parts and each part has size $\frac{1}{b}$. Students then use the fraction notation they learned for unit fractions to write non-unit fractions and use area diagrams to see that a fraction $\frac{a}{b}$ is formed by a parts of size $\frac{1}{b}$. Students extend their understanding by using fraction strips to solidify the idea that non-unit fractions are built from unit fractions.

The section wraps up with an activity in which students use fraction strips to represent situations involving fractional lengths to prepare for locating fractions on the number line in the next section.

Card 2 of 4

K.5.3.Cooldown ▾

Mai and Noah shake and spill 7 counters.
They look like this.

Show another way that the 7 counters could look.

Formative assessments

Teachers are equipped to monitor student progress through innovative staged centers, cool-downs with clear pathways to address student understanding, monitoring sheets, and section quizzes.

Embedded teacher learning

Teacher reflection questions, embedded curriculum narratives, a PLC framework, and math community structures continually support teacher learning.

The screenshot shows a lesson plan interface. At the top, there are tabs for 'Lesson plan', 'Additional materials', and 'About this lesson'. Below the title '10.1 Synthesis: Equivalent to 1/2', there is a question: 'How can these each show 1/2 when the squares have been partitioned into a different number of equal parts?'. Two squares, labeled C and D, are shown. Square C is a square divided into 2 equal horizontal halves, with the top half shaded blue. Square D is a square divided into 4 equal quadrants, with the top-left and top-right quadrants shaded blue. To the right of the question, there are several informational boxes: 'Advancing Misconceptions' (prompting students to find other shapes for 1/2), 'Access for English Learners' (MLR7 Compare and Connect), 'Access for students with disabilities' (Engagement: Provide Access by Recruiting Interest), and 'Advances: Representing, Conversing'.

Deep focus on conceptual understanding, procedural fluency, and application

Instructional routines, representations, and math tools are carefully utilized to help students develop an understanding of concepts and procedures.

The screenshot shows a 'Full unit narrative' page. It contains text explaining that students are introduced to fractions as numbers and that they can apply their understanding of operations with whole numbers to operations with fractions. It also mentions that throughout the unit, students are introduced to increasingly abstract representations of fractions. Below the text, there are two diagrams. The first is a square divided into 4 equal quadrants, with the top-left and top-right quadrants shaded blue. The second is a square divided into 8 equal vertical strips, with the first two strips on the left shaded blue. Below the diagrams, there is a caption: 'Students move from area diagrams to fraction strips that they create from pieces of paper. Fraction strips are represented by the tape diagram.'

Equity and access for all learners

Teacher support for English learners, students with disabilities, addressing common misconceptions, and enriching instruction are embedded at point-of-use throughout every lesson.

The screenshot shows a 'K.5.A Problem 1' page. The question is: '1. How can you break apart 3 connecting cubes into two parts?'. Below the question, there are three blue connecting cubes. Below the cubes, there is a text box: 'Drag the connecting cube to each box to show your thinking.' Below the text box, there are two empty boxes. To the right of the problem, there is a 'Base Ten Blocks' interface. It shows a grid with columns for Thousands, Hundreds, Tens, and Ones. The grid contains 100 (represented by a large orange square), 20 (represented by two blue vertical bars), and 5 (represented by five yellow vertical bars). The number '125' is written in red at the bottom right of the grid.

Hear from our LZ IM K-5 Math Beta Pilot Districts

"The purposeful structure of routines, activities, and centers encourages rich math discourse and students doing math. The integration of fluency is noteworthy. I love its rigor and accessibility. Each lesson begins with an invitation to the math designed to welcome every student into its artfully designed mathematical story."

—Maureen O., Math Specialist, Ipswich, Massachusetts

Teachers are so impressed with the LearnZillion IM K-5 Student Journals AND the LearnZillion platform. I am so thrilled with how intuitive the site is and how thoughtfully it works for teachers. It is the most inviting, rigorous, and exciting curriculum I've ever taught and it's amazing how much students can learn and feel successful in math.

-Nancy S., K-5 Math Coach, Portland, Maine

Contact your Edgenuity or LearnZillion Sales Consultant to preview LearnZillion Illustrative Mathematics K-5 Math

 **LearnZillion**
To get started, visit [learnzillion.com](https://www.learnzillion.com)

