

# Carnegie Learning

**6-12 Math**

**Family Curriculum Resource Night**

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# What's HQIM?

## High-Quality Instructional Materials

Carnegie Learning has been designated as a High-Quality Instructional Material for 6-12 Math by TEA. TEA defines them as materials that ensure full coverage of the TEKS, align with research-based instructional strategies, and support all learners.

## Why are HQIM Important?

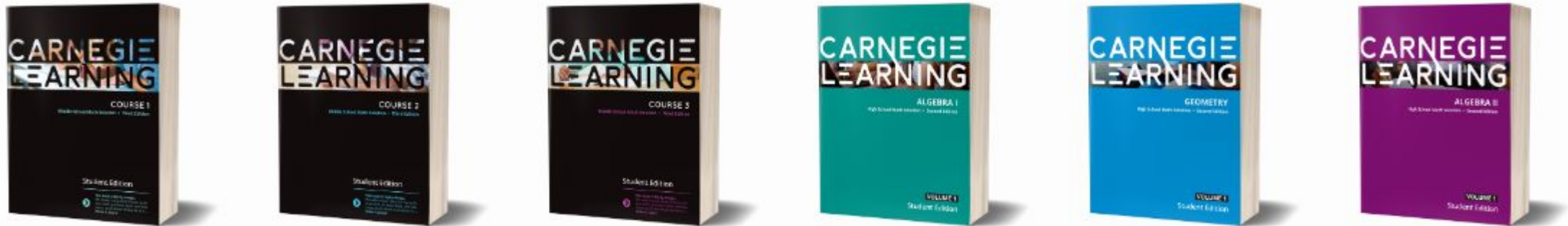
Student outcomes improve with grade-appropriate assignments, strong instruction, and deep engagement. They provide teachers with foundational resources that ensure all students have access to rigorous, grade level content.

[Link](#) to TEA's Website on HQIM



# Learning Together

## Carnegie Learning Workbook



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In the classroom, students become active participants in the mathematics. They work with different group settings to engage in the mathematics presented in the textbook. Students will apply math to real-world situations to understand why it is meaningful. In addition to developing their math skills, they will learn how to collaborate, create, communicate, and problem-solve.

The workbook is for each student and they are able to write, sketch, calculate and construct new mathematical ideas inside. They are highly encouraged to make it their own and highlight and take notes throughout the book.

# Rocket Strips

Dividing a Whole into Fractional Parts

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## WARM UP

1. If two people equally split one donut, how much of the donut does each person receive?
2. If three people equally split one donut, how much of the donut does each person receive?
3. If  $n$  people equally split one donut, how much of the donut does each person receive?

## LEARNING GOALS

- Create equal parts of a whole.
- Determine whether fractions are equal.

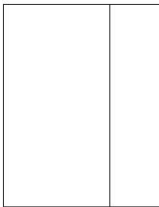
## KEY TERMS

- unit fraction
- equivalent fractions

You have used concrete models to determine 1 fraction strips to represent and compare fractions.

## Getting Started

### Newspaper Column Preparation



You signed up to participate in the school newspaper club. During the first meeting, faculty advisors Ms. Foster and Ms. Shu showed everyone copies of last year's publication of the *Rocket*. The teachers have already planned out the sections for this year's *Rocket*.

Matthew volunteered to create the "Random Acts of Kindness" section of the school newspaper, the *Rocket*. The section will appear along the right side of the paper's back page. The newspaper is printed on  $8\frac{1}{2}$ -inch by 11-inch paper.

Matthew plans to put a box in each homeroom and ask students to nominate classmates for the monthly recognition of random acts of kindness. Students must tell what nice act their nominee performed on a nomination slip.

In preparation for completing his section, help Matthew plan the layout of the column; do not worry about the top or bottom margin of the page.



The strips are provided for you at the end of this lesson.



1. To begin, cut eight strips of paper the length of a newspaper page. Remember, the *Rocket* is printed on  $8\frac{1}{2}$ -inch  $\times$  11-inch paper. Each strip of paper should be 1 inch wide. The strip represents one whole column. Do not fold the first strip, and label it as "1," to represent one whole.

2. How many students can be recognized on a whole strip?

# Student Lessons

Every lesson follows Carnegie Learning's proven methodology of learning: Engage, Develop, and Demonstrate.

The warm up, learning goals, key terms, and essential questions are designed to activate prior knowledge and **engage** your interest along with the Getting Started activity. **Development** of mathematical content is emphasized during the activities in the lesson, and you will be required to **demonstrate** understanding of the lesson content when completing the Talk the Talk.

# Learning Individually

MATHia- A Blended Learning Approach

The screenshot shows a MATHia workspace for "Problem Solving with Equivalent Ratios and Rates using Double Number Lines". It features a text problem about a freelance writer named Montell, a question asking for the number of months based on the number of jobs, and a double number line. The top number line is labeled "Number of Jobs" with tick marks at 0, 48, 96, 144, 192, 240, 288, 336, and 384. The bottom number line is labeled "Time (months)" with tick marks at 0, 6, 12, 18, 24, 30, 36, 42, and 48. A point is plotted on the "Number of Jobs" line at 336, and a corresponding point is plotted on the "Time (months)" line at 24. A tooltip message says: "Not quite. Try plotting 336 on the Number of Jobs number line." There are also navigation buttons like "Unit Overview", "Step-by-Step", "Hints", and "I'm Done".

The screenshot shows a MATHia workspace for "Commutative and Associative Properties". It includes a "Progress Meter" showing "2 of 6 problems complete" and "7 of 7 steps complete". The main content is titled "Associative Property of Addition" and explains that the order of grouping numbers in an addition expression does not change the sum. It provides a worked example for the expression  $(29 + 17) + 13 = 29 + (17 + 13)$ . The text states: "In the worked example, the Associative Property was used so that  $(17 + 13)$  could be added first. That result is a number ending with 0 in the ones place. The Associative Property of Addition states that changing the grouping of numbers in an addition expression does not change the sum." There are also navigation buttons like "Unit Overview", "Step-by-Step", "Hints", and "I'm Done".

## What is MATHia?

MATHia is the blended-learning component of Carnegie Learning. The platform offers an adaptive, 1-on-1 math learning experience that mirrors a human coach. Students get real time feedback and personalized coaching based on how they are working through the MATHia Workspaces. Students work at their own pace to achieve mastery of the concepts and standards they are learning. Students are able to track their progress as they work through the workspaces.



# Parent Access

Texas Gateway now has a viewable version of all print materials for grades 6-8, Algebra 1, Geometry, and Algebra 2 which include program and pacing guides, standards alignment documents, module and topic overviews, and student versions of lessons, assignments, skills practice and assessments.

## Accessing Materials

- Visit [TexasGateway.org](https://TexasGateway.org)
- Under “**Featured Resources**” select “**Full-Subject OER Materials 6-12 Math**”

