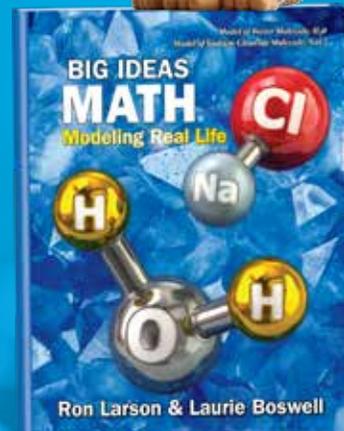
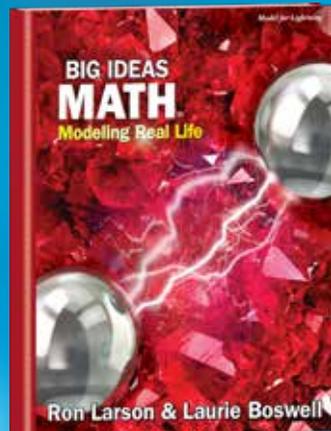
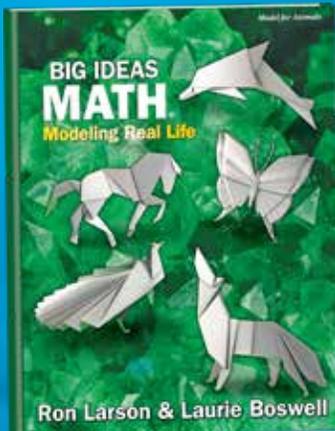
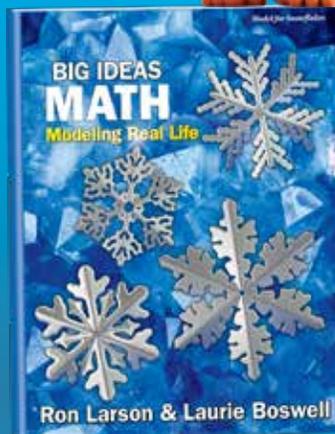
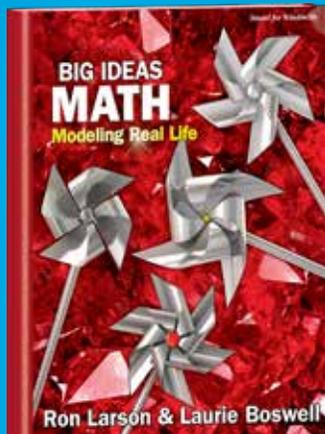
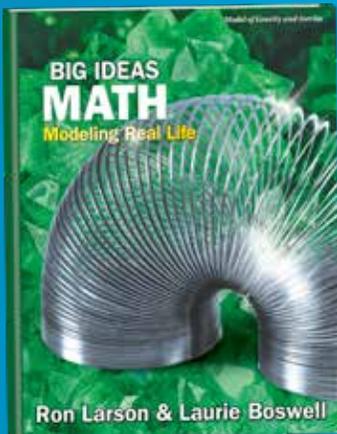


BIG IDEAS MATH[®]

Grades K-5

Ron Larson & Laurie Boswell



Modeling Real Life



Authors and Research

Big Ideas Learning is pleased to introduce a new, research-based K–8 series, **Big Ideas Math®: Modeling Real Life**. Written by renowned authors Dr. Ron Larson and Dr. Laurie Boswell, this series uses an exploratory approach to engage students’ inquiring minds through rich explorations and in-class problem solving. With one voice from Grade K through Grade 8, students make connections through cohesive progressions and consistent, dependable instruction.

The pedagogical approach used in this program follows the best practices outlined in the most prominent and widely accepted educational research including John Hattie’s *Visible Learning*, NCTM’s *Principles to Actions*, Jo Boaler’s *Mathematical Mindsets*, Wiggins and McTighe’s *Understanding by Design*, and others.

We created Big Ideas Math because we recognized the need for a truly balanced approach to learning, using discovery learning and scaffolded instruction.

—Ron Larson, Ph.D.



Ron Larson, Ph.D., is well known as the lead author of a comprehensive program for mathematics that spans school mathematics and college courses. He holds the distinction of Professor Emeritus from Penn State Erie, The Behrend College, where he taught

for nearly 40 years. He received his Ph.D. in mathematics from the University of Colorado. Dr. Larson’s numerous professional activities keep him actively involved in the mathematics education community and allow him to fully understand the needs of students, teachers, supervisors, and administrators.



Laurie Boswell, Ed.D., is the former Head of School at Riverside School in Lyndonville, Vermont. In addition to textbook authoring, she provides mathematics consulting and embedded coaching sessions. Dr. Boswell received her Ed.D. from the University of Vermont in 2010.

She is a recipient of the Presidential Award for Excellence in Mathematics Teaching and is a Tandy Technology Scholar. Laurie has taught math to students at all levels, elementary through college. In addition, Laurie has served on the NCTM Board of Directors and as a Regional Director for NCSM. Along with Ron, Laurie has co-authored numerous math programs and has become a popular national speaker.

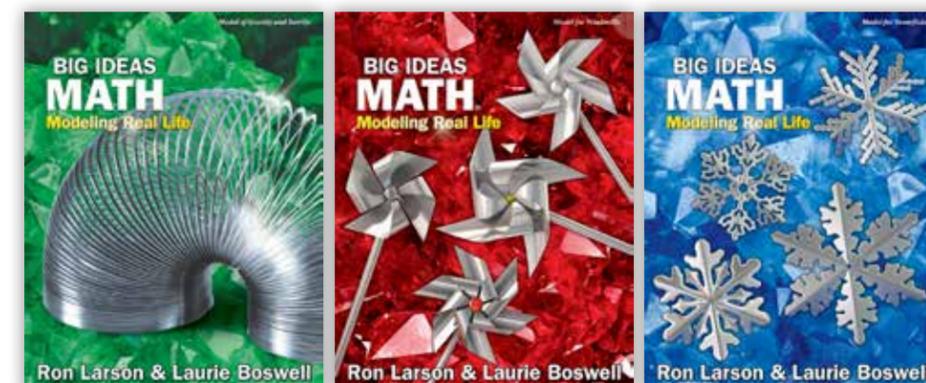
Students go deeper in their learning when they are motivated to dig in. My passion is to provide effective ways for teachers to begin each lesson.

—Laurie Boswell, Ed.D.

Big Ideas Math: Modeling Real Life fits the needs of today’s elementary classrooms!



- Uses learning targets and success criteria for student self-assessment
- Incorporates literacy strategies, encouraging students to read, write, and talk about math
- Helps teachers recognize the impact they have on students
- Empowers students to grow as independent learners and experience the delight of mathematics

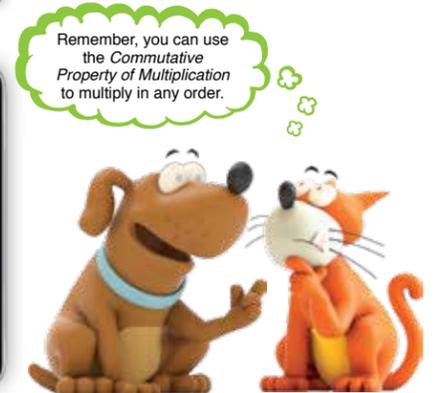


Grades K–5



Online Resources

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Instructional Design	2–3
Teaching Support	4–5
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Assessment	8–9
Technology	10–11
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Instructional Design

The **Big Ideas Math: Modeling Real Life** program uses a Universal Design for Learning to create an engaging and innovative program that uses hands-on activities and scaffolded instruction.

The instructional design guides students through concepts from surface-level to deep-level learning and allows them to transfer these skills to new concepts in a complete and comprehensive way. This allows for balanced lessons with built-in differentiation, as well as RTI support, that appeals to students and teachers alike.

Name _____

Use the Distributive Property to Multiply 3.4

Learning Targets: Use the Distributive Property to multiply.

Success Criteria:

- I can draw an area model to multiply.
- I can use known facts to find a product.
- I can explain how to use the Distributive Property.

Explore and Grow

Use base ten blocks to model 4×16 . Draw your model. Then find the area of the model.

$4 \times 16 = \underline{\hspace{2cm}}$

Break apart 16 to show two smaller models. Find the area of each model. What do you notice about the sum of the areas?

Area = $\underline{\hspace{2cm}}$ Area = $\underline{\hspace{2cm}}$

Reasoning How does this strategy relate to the Distributive Property? Explain.

Chapter 3 | Lesson 4

Learning Targets and Success Criteria¹ encourage students to self-assess and evaluate their learning.

Name _____

Apply and Grow: Practice

2. You collect 16 red leaves, 21 orange leaves, and 14 yellow leaves. How many leaves do you collect in all?

_____ leaves

3. A dentist has 41 toothbrushes. She buys some more. Now she has 85. How many toothbrushes did the dentist buy?

_____ toothbrushes

4. You make 17 origami dogs and 13 origami fish. Your friend makes 12 more origami animals than you. How many origami animals does your friend make?

Step 1: How many origami animals do you make?

$\begin{array}{r} \square \\ + \square \\ \hline \square \end{array}$

Step 2: How many origami animals does your friend make?

$\begin{array}{r} \square \\ + \square \\ \hline \square \end{array}$

_____ origami animals

one hundred ninety-one | 91

Chapter 4 | Lesson 7

Apply and Grows provide independent practice to help students monitor their own understanding of concepts.

Explore and Grows give students a hands-on approach to develop conceptual understanding.

Learning targets and success criteria help to focus student learning and make learning visible to teachers and students. With a strong emphasis on problem-solving in the classroom, students can transfer their mathematical knowledge to new concepts and apply their understanding to real-life situations. Through in-class practice and activities, students become more comfortable with the problem-solving process to become strategic mathematical thinkers.

Think and Grow

You find 19 objects in a scavenger hunt.
You find 13 fewer objects than your friend.
How many objects does your friend find?

Circle what you know. Underline what you need to find.

Solve:

Friend: $\underline{\hspace{2cm}}$

You: $\underline{19}$ $\underline{13}$

$\begin{array}{r} 19 \\ + 13 \\ \hline 32 \end{array}$

$\underline{32}$ objects

Write and solve an addition problem.

Use a model to help organize the information.

Show and Grow

1. You have 66 marbles. You have 26 fewer marbles than your friend. How many marbles does your friend have?

_____ marbles

90 one hundred ninety

Think and Grows offer scaffolding to ensure all levels of learners attain procedural fluency.

Show and Grows give teachers the opportunity for continual formative assessment and student discourse.

Think and Grow: Modeling Real Life

Your teacher divides the items shown equally among 9 students. Write two equations that you can use to show how many straws each student gets.

Item	Number
Toothpicks	72
Containers of clay	27
Straws	54

Division equation: _____

Multiplication equation: _____

Show and Grow

11. Use the table above to write two equations that you can use to show how many containers of clay each student gets.

12. Use the table above to find how many more toothpicks students will get than straws.

13. Explain how a multiplication fact can help you solve $30 \div 3 = \underline{\hspace{2cm}}$.

166

Think and Grow: Modeling Real Life brings problem solving into the classroom, promoting transfer of concepts and skills into real-life situations.

¹ Success Criteria only appear on the Student Edition pages in grades 3 to 5.

Teaching Support

The *Big Ideas Math: Modeling Real Life* Teaching Edition is a comprehensive resource that guides teachers throughout instruction.

4 Fluently Add within 100

Chapter Overview

Lesson	Learning Target	Success Criteria
4.1 Use Partial Sums to Add	Use partial sums to add.	• Write an addition equation to add the tens. • Write an addition equation to add the ones. • Add the partial sums.
4.2 More Partial Sums	Use partial sums to add.	• Add the tens from each number. • Add the ones from each number. • Add the partial sums.
4.3 Regroup to Add	Use regrouping to add.	• Make quick sketches to show regrouping. • Show 10 ones regrouped as 1 ten. • Solve the addition problem.
4.4 Add Two-Digit Numbers	Use regrouping when needed to add.	• Use place value to rewrite an addition problem. • Show 10 ones regrouped as 1 ten. • Solve the addition problem.
4.5 Practice Adding Two-Digit Numbers	Add two-digit numbers.	• Choose a strategy to solve. • Find the sum.
4.6 Add Up to 3 Two-Digit Numbers	Add up to 3 two-digit numbers.	• Choose two of the ones digits to add first. • Add the other ones digit. • Add the tens to find the sum.
4.7 More Problems Solving Addition	Solve one- and two-step addition problems.	• Identify what information is given in the word problem. • Identify what the question is asking. • Choose a strategy to solve. • Explain the strategy I used to solve.

4.1 Laurie's Notes

Learning Target
Use partial sums to add.

Success Criteria

- Write an addition equation to add the tens.
- Write an addition equation to add the ones.
- Add the partial sums.

Warm-Up
Practice opportunities for the following are available in the Fluency by Chapter or at [BigIdeasMath.com](https://bigideasmath.com).

- Daily skills
- Vocabulary
- Prerequisite skills

ELL Support
Explain that this lesson will focus on partial sums, using partial sums is a strategy for adding numbers with more than one digit. Remind them that the base-ten blocks means "ones" or "1 ten" when you add numbers the answer is the sum. Point out that there are two different words with completely different meanings.

The **Chapter Overview** chart and the **first page of each lesson** highlight the learning targets and success criteria that guide student learning.

They encourage self-assessment and give students and teachers benchmarks for each lesson.

Chapter Materials and Resources
The primary materials and resources needed for this chapter are listed below. Other resources may be needed for the additional support items provided throughout the chapter.

Lesson	Chapter Overview	4.1	4.2	4.3	4.4	4.5	4.6	4.7	Connect and Close
Lesson Materials									
Base ten blocks									
Whiteboards and markers									
Handwriting paper									
Ice cream cones									
Transparency acetate or paper clips									

Suggested Pacing

Day	Chapter Overview	Performance Test Practice	Fluency	Apply Practice	Think: Modeling Real Life
Day 1	Lesson 4.1				
Day 2	Lesson 4.2				
Day 3	Lesson 4.3				
Day 4	Lesson 4.4				
Day 5	Lesson 4.5				
Day 6	Lesson 4.6				
Day 7	Lesson 4.7				
Day 8	Connect and Close				
Day 9	Chapter Assessment				

Chapter Materials, Resources, and Suggested Pacing are clearly laid out for each chapter to support teachers and save planning time.

Coherence

Progressions

Grade 1	Grade 2	Grade 3
• Solve addition and subtraction word problems within 20.	• Solve one- and two-step word problems within 100.	• Solve one-step word problems involving multiplication.
• Represent unknown number in complete addition and subtraction equations within 20.	• Use strategies to add up to 4 two-digit numbers.	• Solve one- and two-step word problems involving division.
• Use strategies to add.		• Solve one- and two-step word problems involving multiplication.
		• Use strategies to identify and subtract within 100.

Through the Chapter

Standard	4.1	4.2	4.3	4.4	4.5	4.6	4.7
Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of addition to, taking from, putting together, being apart, and comparing, with unknowns in all positions, e.g., for using drawings and equations with a symbol for the unknown number to represent the problem.	•	•	•	•	•	•	•
Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	•	•	•	•	•	•	•
Add up to four two-digit numbers using strategies based on place value and properties of operations.	•	•	•	•	•	•	•

Key: • = Preparing, • = Learning, • = Complete

The **Progressions** table highlights the program coherence from grade to grade. Teachers will find this useful because they can see what was covered in the previous grade level and how it builds to the content they are teaching in their grade level. In addition, they can see further connections and applications in the next grade level.

The learning standards are called out for every chapter along with guidance on where students should be tracking on their conceptual development.

The table identifies with "Preparing," "Learning," and "Complete" for each lesson.

Laurie's Overview

About the Math
Students this year have worked with multiplication and most recently in Chapter 4, division. This chapter returns to multiplication, continuing to work towards fluency through further recognition of patterns. Students should be familiar with looking at sets of numbers and their patterns. They have spent much time studying patterns of the hundreds chart while learning addition, subtraction, skip counting, and multiples. Now as the multiplication table is introduced, students not only look for patterns within the table, but relationships between factors and products so that both multiplication and division equations can be solved. This chapter emphasizes the relationships between multiplication and division as students find missing factors or products within the multiplication table.

Properties of Multiplication
Patterns in the multiplication table reinforce the Commutative Property of Multiplication as students see the symmetry along diagonal lines caused by the interchange of row and column numbers. The table is also used to confirm how the Distributive Property produces an equivalent product. Students will use the table to confirm known or unknown facts:

- 8×6 is the same as 8×4 plus 8×2 .
- 6×7 is double the product of 3×7 since the factor 6 is double the factor 3.
- Extension to factors beyond those in the table, find 6×12 from the products of 6×10 and 6×2 .

In a later grade, the distributive process of partial products will be used to develop the algorithms for multiplication of double digit numbers. Thus, basic multiplication fact fluency will continue to be important.

Algebra Connection
The use of a place holder for missing factors or products informally introduces the idea of a variable. Familiarity with using $?$, x , and $□$ easily transitions to the use of a letter as simply another symbol to hold the place of an unknown value.

The visuals and representations presented in the overview are meaningful for the learning objectives in that specific chapter.

Laurie's Overview "About the Math" at the beginning of each chapter provides point-of-use professional development and math background. The information offers an efficient way to plan for the chapter and solidify content understanding.

4.1 Laurie's Notes

Learning Target
Use partial sums to add.

Success Criteria

- Write an addition equation to add the tens.
- Write an addition equation to add the ones.
- Add the partial sums.

Warm-Up
Practice opportunities for the following are available in the Fluency by Chapter or at [BigIdeasMath.com](https://bigideasmath.com).

- Daily skills
- Vocabulary
- Prerequisite skills

ELL Support
Explain that this lesson will focus on partial sums, using partial sums is a strategy for adding numbers with more than one digit. Remind them that the base-ten blocks means "ones" or "1 ten" when you add numbers the answer is the sum. Point out that there are two different words with completely different meanings.

Laurie's Notes appear at the chapter and lesson level for embedded professional development, implementation support, questioning strategies, and differentiation tips every step of the way.

Laurie's Notes offer guidance for building fluency with the mathematical processes and proficiencies.

Differentiation

The new elementary series offers options and resources to curate a unique instructional experience. There are a variety of opportunities for reteaching, remediation, practice, enrichment, and extension in the Teaching Edition, online, and in printed resources.

Laurie's Notes

Apply and Grow! Practice

Scaffolding Instruction

Students previously drew a quick sketch for adding 2 two-digit numbers in this lesson. The partial sum for the ones was a base number and students circled a group of ten. They learned to add one more to the ten to represent the 10 ones. The next step was to record this work in an addition problem. It is now possible that students have understood how to model the addition, draw a quick sketch, but are unsure of the steps of the recorded algorithm.

Emerging students are not sure with place value or may not recognize the need to regroup. In adding $46 + 20$ they might write 13. They have added the tens and ones correctly but do not understand place value when writing the sum.

- Exercises 2 and 3: Have students work with a partner or small group. Compare the quick sketches of each number first. Have them discuss if they need to regroup or not. One student can talk through the process aloud. Hearing someone explain the steps each time is helpful to the speaker and listener.
- Exercise 4: If students struggle to explain when regrouping is necessary, can they write a new problem where regrouping is necessary?

Proficient students are able to describe how regrouping is shown in an addition problem. They are able to explain what the 1 represents.

- Exercises 2 and 3: Have students explain how the quick sketch and addition problem are related. Where is the regrouping shown in both?

Additional Support

- Provide base ten blocks and a partial sums chart for students to model the problem before they draw the quick sketch. Help them recognize the partial sums in a quick sketch.

Extension

- Write an addition problem involving 2 two-digit numbers that does not involve regrouping. Explain why.

Embedded Differentiation

The Teaching Edition, along with the program's print and digital resources, offer support for all levels of learners.

The comprehensive guide for Scaffolding Instruction in the Teaching Edition was thoughtfully written with both students and teachers in mind.

Throughout every lesson, Laurie's Notes provide point of use differentiation for emerging, proficient, and advanced learners.

The modification suggestions relate directly to the specific content of the exercises.

Laurie's Notes

ELL Support

After completing the example, have students work in pairs to compare exercises 1a, 1b, 1c, 1d, 1e, 1f, 1g, and 1h. Ask them to explain to each other what they are doing. "What is your strategy? What is your goal? What is the problem? What is the answer? How do you know it is correct?"

Think and Grow!

Emerging Learners

- Discuss what the word "partial" means. Relate to making part of a meal or only having one of two wheels on a bicycle.
- Review the vocabulary used in the lesson. "When you combine your tens and ones, you are finding a partial sum. It is part of the answer before you combine your tens and ones. You are finding a partial sum. It is the other part of the answer."

Struggling Learners

- Students have regrouped two-digit addition problems when they used place value to break apart the addends.
- The problem is first presented horizontally. It is then written vertically in the same sum that shows where the ones are added to the tens and ones. Ask them to find the partial sum.
- Model: "The way to add $46 + 20$ is to add the ones and the tens separately." Explain that the expression $46 + 20$ means to take the partial sum of 46 and add 20 to it. "What does the 1 represent?" Explain that the expression $46 + 20$ means to take the partial sum of 46 and add 20 to it. "What does the 1 represent?" Explain that the expression $46 + 20$ means to take the partial sum of 46 and add 20 to it.

Proficient Learners

- It is necessary to determine if students are working fluently with the vertical structure, recording addition, tens, or some equal value of the place value. Have students tell what problem they are solving and they are trying to solve. How did you solve it? Did you use a strategy or a formula? How did you solve it? How did you solve it?

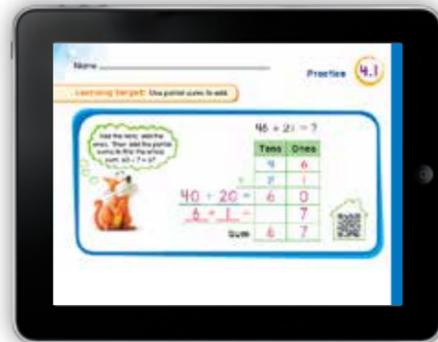
Supporting Learners

- Model the partial sum and ask to number lines on the number line. Have students write the partial sum and ask to number lines on the number line. Have students write the partial sum and ask to number lines on the number line.

Some of the ELL notes have differentiated levels of support to provide the most effective suggestions for these students.

School to Home Connections

The Resources by Chapter book includes Family Letters, and the Practice pages offer QR codes that link to lesson pages for guidance. Lesson Tutorial Videos are available for grades 3-5 to support practice and homework exercises.



Centers

Center 1: Solve and Cover: Addition

Materials: Student Edition page 194, 1 set of Solve and Cover, Addition Train Cards per pair, 1 set of Erase and Cover, Addition Problems Cards per pair. Have students complete the activity. See page 194 for the instruction.

Center 2: Skills Trainer

Materials: Computers or devices with internet access. Have students go to BigIdeasMath.com to access the Skills Trainer.

Center 3: Addition Tic-Tac-Toe

Materials per pair: 1 copy of Addition Tic-Tac-Toe, 9 two-color counters. Review the rules of tic-tac-toe. Have students use two-color counters as their X's and O's. Students take turns choosing a space on the board and solving the problem, stating the strategy they use to find the sum. Once the problem is solved correctly, they place a counter on it. Extension: Encourage students to create their own tic-tac-toe boards. Allow for time to play.

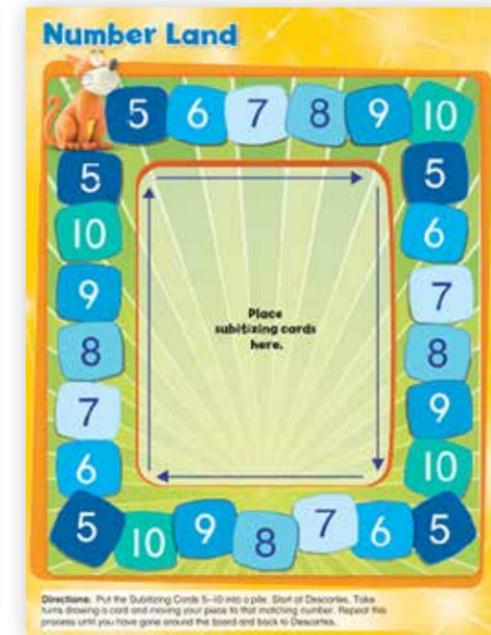
Center 4: Spin It!

Materials per pair: Spin It! board, transparent spinner or paper clip. Each student spins both spinners, writes down the numbers, and finds the sum. The student with the greater sum gets 10 or 100 points. Students play 5 rounds. The student with the most points wins the game.

Center 5: Add It Up

Materials per group: Add It Up Cards. Divide students into groups of 3. Shuffle the cards in three piles (light gray, dark gray, and white). Give each student one of the piles. Students will roll their cards and place them face down. Each student draws one card. The first student to correctly find the sum gets one point. The student with the most points after 10 rounds wins.

Centers offer engaging and fun games, as well as incorporating technology.



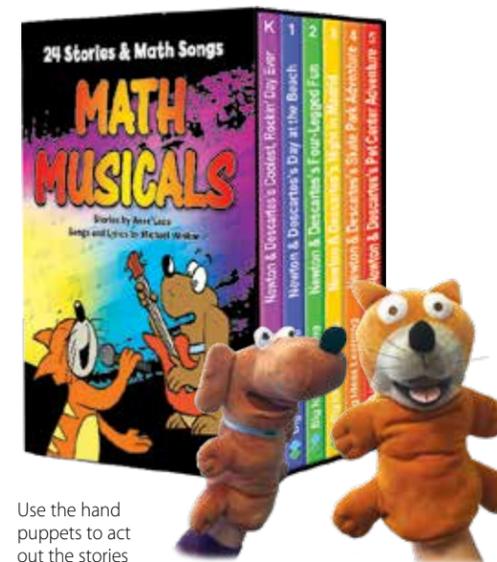
Print and interactive online games use skills from the chapter in a fun and engaging way.

Centers or Small Group Activities

Centers in the Teaching Edition are pre-planned, "ready to go", and include materials that come with the program. They align with chapter content, leading to more effective conceptual development and fluency.

Math Musicals

Storybooks and animations featuring Newton and Descartes help students see the mathematics that surrounds them in their everyday lives.



Use the hand puppets to act out the stories and songs!

Connect and Extend Learning

Practice Notes

- Review how to use regrouping to add with students.
- If additional support is needed, provide students with base ten blocks.

Prior Skills

- Exercises 6-8: Grade 1, Comparing Numbers Using Symbols

Cross-Curricular Connections

Language Arts

- One Hundred Hungry Ants by Elinor J. Pincus; Read the story aloud to students. Then, ask students to draw a picture with 10 red and more than 5 black ants. Have students write the total number of ants on their picture. Then, have students work with a partner to add their 2 sums together.

Connect and Extend Learning

Extend Student Learning

Bodily-Kinesthetic

- Write 2 two-digit numbers on the board. Have students represent the numbers with base ten blocks. Then, have students combine their models to find the sum of those numbers. Give students time to work, then ask a student volunteer for the answer. Repeat several times.

Lesson Resources

Surface Level	Deep Level
Resources by Chapter • Extra Practice • Reteach Differentiating the Lesson Skills Review Handbook Skills Trainer	Resources by Chapter • Enrichment and Extension Graphic Organizers Dynamic Assessment System • Lesson Practice

Connect and Extend Learning

The Teaching Edition provides opportunities to connect and extend learning for students with Practice Notes, Prior Skills, Cross-Curricular Connections, and Extend Student Learning, which helps meet student learning styles such as linguistic, interpersonal, bodily-kinesthetic, and others.

The Lesson Resources highlight options for supporting all students in their transition from surface- to deep-level understanding.

Manipulative Kits and Virtual Manipulatives

Support hands-on learning and facilitate the transition from the concrete to the abstract.

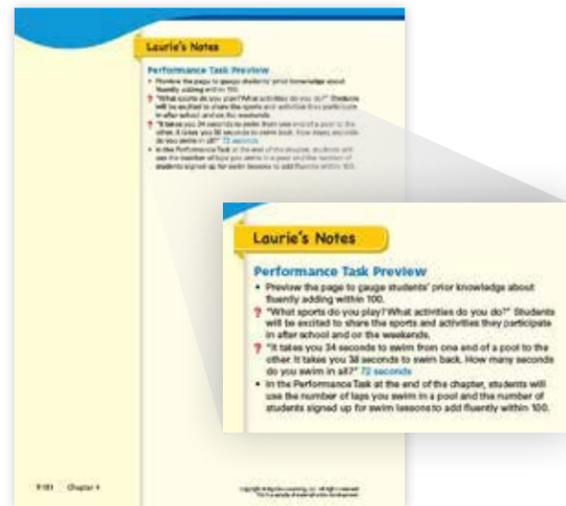
Literature Kits

Literature Kits are available to enhance instruction with stories and support cross-curricular connections.

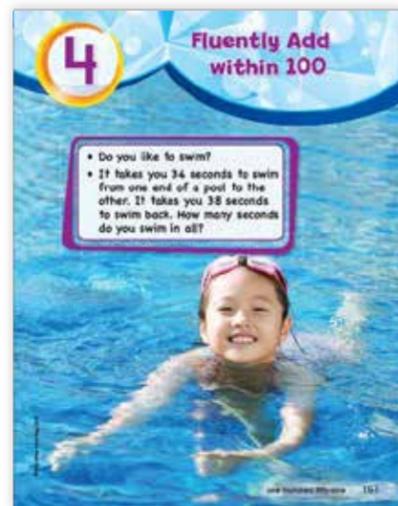
Assessment

The K–5 program offers a variety of opportunities for both formative and summative assessment. Student ownership and accountability for learning is a vital component of fluency with the content, as well as the mathematical processes and proficiencies.

Each chapter opens with a **Performance Task Preview**. It previews what children will be learning throughout the chapter.

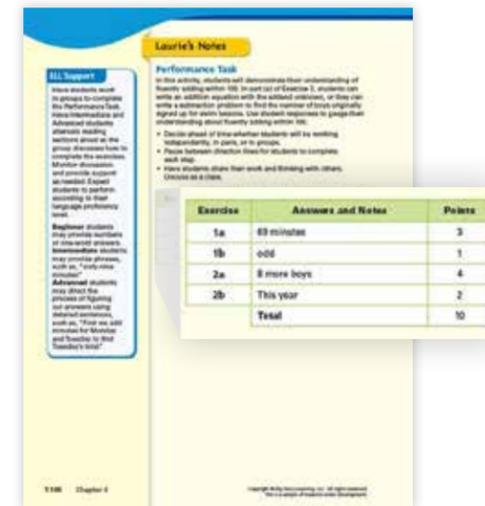


The Performance Task Preview is an engaging way to hook them into the content of the chapter with some guiding questions about engaging and relevant topics.



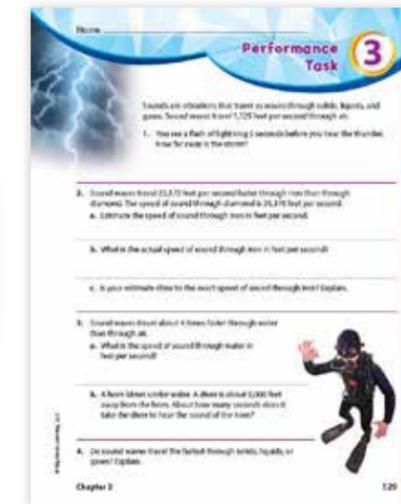
Students are given visibility into what will be expected of them at the end of the chapter to ensure accountability for learning.

Laurie's Notes and the **ELL support** provide instructional support for modifying the Performance Task activity for different levels of learners as well as options for individuals, partners, and small groups.



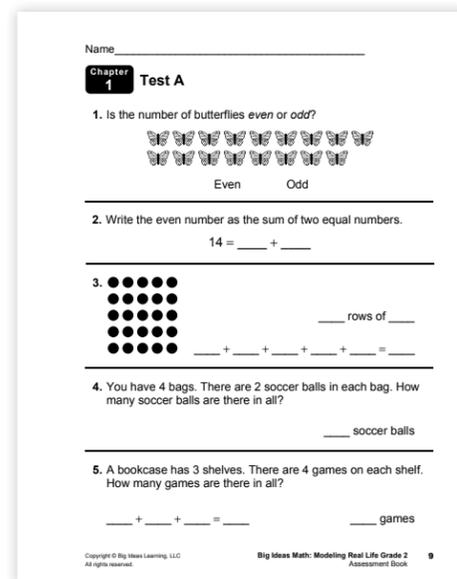
The evaluation table lays out a point structure for ease of grading and evaluation.

The **Performance Task** provides students with the opportunity to demonstrate their understanding of the chapter learning targets. It aligns with what was previewed in the Performance Task Preview.

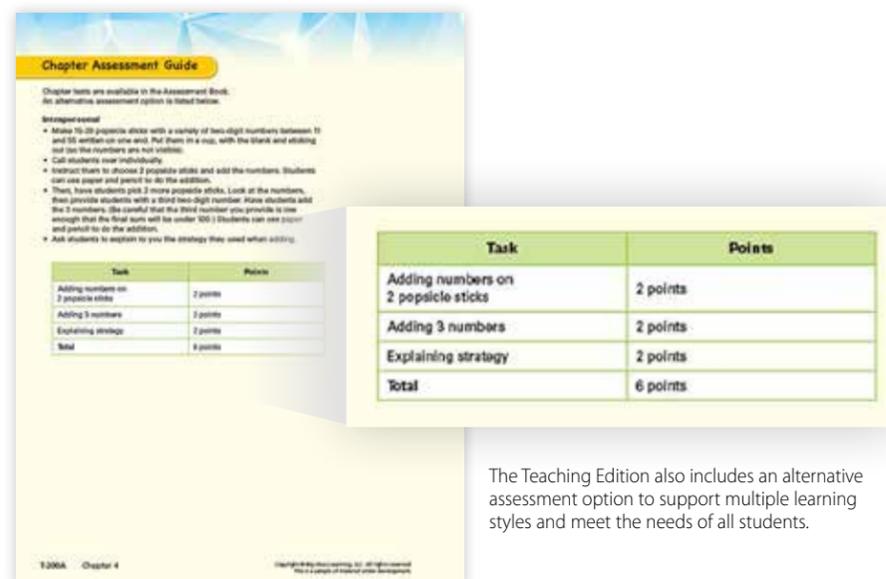


Grade 4 Performance Task

Chapter Tests are available in the Assessment Book. Additional assessment opportunities include **Course Benchmark Tests** (Pre-Course, Post-Course, and Cumulative), as well as **Prerequisite Skills Practice**.



Grade 2 Chapter Test



The Teaching Edition also includes an alternative assessment option to support multiple learning styles and meet the needs of all students.

Online Assessment

With the Dynamic Assessment System, teachers can build customizable assessments with *Big Ideas Math* question banks or items they create!

Items include a variety of question types such as multiple choice, technology enhanced, multiple select, essay style, and more.



Technology

Big Ideas Math: Modeling Real Life comes with an innovative and dependable technology package that supports and enhances instruction for teachers and students.

Dynamic Student Edition

The Dynamic Student Edition is a complete, interactive version of the Student Edition. Students have access to interactive explorations, digital examples, virtual manipulatives, Lesson Tutorial Videos (Grades 3-5), and digital exercises from the textbook.



Dynamic Assessment System

With the Dynamic Assessment System, teachers can create customizable homework and assessments with *Big Ideas Math* question banks or items they create!

Items include a variety of question types, all of which are automatically scored except for the newly released essay questions, which allow students to explain their thinking and reasoning.

The reports in this system provide the feedback teachers need to drive instruction.



Students complete the assignments online and can receive immediate feedback on their progress.

STEAM Videos

STEAM Videos, which are available for Grades 3-5, allow students to see mathematics in real life.



STEAM Performance Tasks make further connections to the mathematical content. Students learn about animals, electricity, sea levels, constellations, and more!

Math Musicals

Math Musicals are a fun way of bringing music and literature into your math classroom. *Big Ideas Math's* own Newton, the dog, and Descartes, the cat, team up to provide educational stories, songs, and animations to enhance student learning.



Math Musicals bring fun into the classroom with engaging songs that support concepts with patterns, rhythm, and rhymes.

Dynamic Classroom

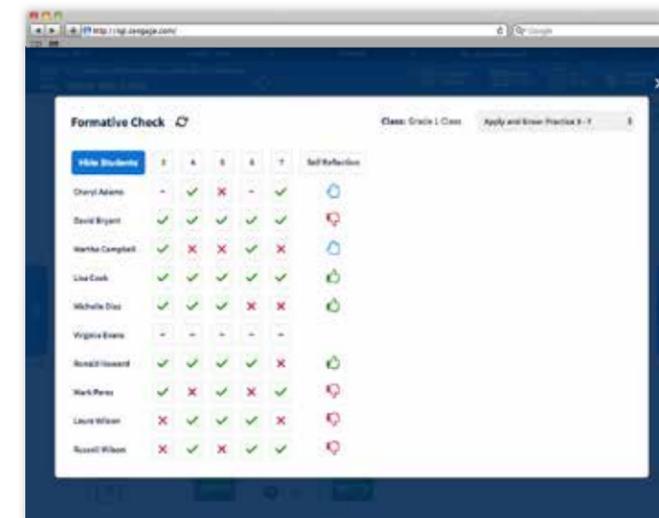
The Dynamic Classroom mimics the students' Dynamic Student Edition, with additional resources and support for teachers.



Point-of-use Laurie's Notes guide instruction with Dig Ins, motivation suggestions, teaching tips, questions to ask the students, closure strategies, and more!



Interactive explorations and digital examples from the textbook create a 21st-century classroom atmosphere that engages students.



The Formative Check provides teachers with immediate feedback on student progress, making it easy to differentiate and provide support where it is needed the most.

Skills Trainer

The Skills Trainer is an online interactive tool for skill practice that comes with detailed reports for teachers to gain insight into each student's proficiency. Students have access to every skill found within the *Modeling Real Life* series.



The Skills Trainer can be used to engage students in remediation or as the daily warm-up for the lessons!

Components

PRINT RESOURCES

Student Edition (Volumes 1 and 2)

Teaching Edition (Volumes 1 and 2)

Resources by Chapter

- Family Letter
- Warm-Ups
- Extra Practice
- Reteach
- Enrichment and Extension
- Chapter Self-Assessment*

Assessment Book

- Prerequisite Skills Practice
- Course Benchmark Tests
- Chapter Tests

Instructional Resources

- Vocabulary Cards
- Blackline Masters
- Activities

Skills Review Handbook*

Differentiated Rich Math Tasks

ADDITIONAL RESOURCES

Manipulative Kits

Literature Kits

Math Musicals

Newton and Descartes Puppet Set

TECHNOLOGY RESOURCES

Dynamic Student Edition

- Virtual Manipulatives
- Interactive Explorations
- Digital Examples
- Lesson Tutorial Videos*

Dynamic Classroom

- Laurie's Notes
- Virtual Manipulatives
- Interactive Explorations
- Digital Examples
- Formative Check
- Flip-To

Dynamic Teaching Tools

- Answer Presentation Tool*
- Skills Trainer
- Digital Flashcards
- STEAM Videos*
- Game Library
- Multi-Language Glossary
- Additional Online Resources
 - Lesson Plans
 - Differentiating the Lesson
 - Graphic Organizers
 - Pacing Guides
 - Worked-Out Solutions Key*
 - Math Tool Paper
 - Kindergarten Exploration Literature

Dynamic Assessment System

- Customized Practice and Assessments
- Detailed Reports

Video Support for Teachers

- Professional Development Videos
- Concepts and Tools Videos

*Available for Grades 3–5

Big Ideas Math: Modeling Real Life offers a program that:

INSPIRES

Elevate student learning with a balanced approach

ENGAGES

Captivate student learning with innovative technology

EMPOWERS

Make learning visible through student accountability

GROWS

Positively impact student performance in mathematics

Learn more at [NGL.Cengage.com/BigIdeas](https://www.ngl.cengage.com/BigIdeas)

K–12 Programs

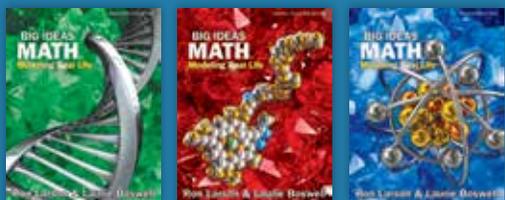
Big Ideas Math programs offer a seamless articulation from elementary through high school. With a consistent author voice from level to level, students make connections through cohesive progressions and rich instruction.

Big Ideas Math uses a balanced approach to engage students' inquiring minds and empower them to become mathematical thinkers in their daily lives.



Common Core
edition available
for Grade K
through Algebra 2.

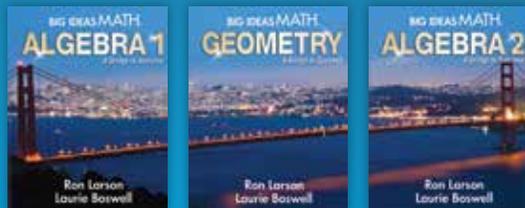
Big Ideas Math: Modeling Real Life for Grades K–5



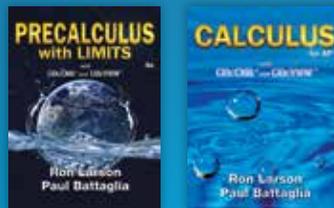
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Integrated
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Grades 9–12



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ISBN-13: 978-13379-6841-6

ISBN-10: 13379-6841-2

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