

**PROBLEM SOLVING**  
FOR THE **21<sup>ST</sup> CENTURY**

BUILT FOR THE  
**COMMON CORE**

**Illustrative Math Alignments**  
Grade 3

1. Login to Exemplars Library: [library.exemplars.com](http://library.exemplars.com) with your school e-mail and password
2. Select the Grade 3 Unit you are working on:
  - [Unit 1: Introducing Multiplication](#)
  - [Unit 2: Area and Multiplication](#)
  - [Unit 3: Wrapping Up Addition and Subtraction Within 1,000](#)
  - [Unit 4: Relating Multiplication to Division](#)
  - [Unit 5: Fractions as Numbers](#)
  - [Unit 6: Measuring Length, Time, Liquid Volume, and Weight](#)
  - [Unit 7: Two-dimensional Shapes and Perimeter](#)
  - [Unit 8: Putting It All Together](#)
3. Once you are in the correct Unit, click on the task name, which is directly linked to the Exemplars Library where you can download a printer-friendly PDF and lesson planning sheet for the corresponding task.

**\*\* Note: You must be logged into the Exemplars Library to access the tasks in this document.**

## Illustrative Math: Grade 3

### Unit 1: Introducing Multiplication

| Section A:<br>Interpret and Represent Data on<br>Scaled Graphs       | Section B:<br>From Graphs to Multiplication     | Section C:<br>Represent Multiplication with Arrays and the<br>Commutative Property |
|----------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------|
| <a href="#">The Math Team</a>                                        | <a href="#">Ms. Bray's Mathematical Problem</a> | <a href="#">Pictures in the Hallway</a>                                            |
| <a href="#">Buying Fruit</a>                                         | <a href="#">A Problem With Five</a>             | <a href="#">Collecting Stickers</a>                                                |
| <a href="#">Summative Assessment Task: A<br/>Read A Book Contest</a> | <a href="#">Abigail's Problem</a>               | <a href="#">Pom-poms</a>                                                           |
|                                                                      | <a href="#">Flower Petals</a>                   | <a href="#">Summative Assessment Task: Circles and Stars</a>                       |
|                                                                      | <a href="#">The School Store</a>                |                                                                                    |
|                                                                      | <a href="#">Three Fish Limit</a>                |                                                                                    |

## Illustrative Math: Grade 3

### Unit 2: Area and Multiplication

| Section A:<br>Concepts of Area Measurement | Section B:<br>Relate Area to Multiplication          | Section C:<br>Find Area of Figures Composed of Rectangles |
|--------------------------------------------|------------------------------------------------------|-----------------------------------------------------------|
| Use tasks from Unit 1.                     | <a href="#">A Patchwork Design</a>                   | Use tasks from Unit 2 section B.                          |
|                                            | <a href="#">Mathematics Flash Cards</a>              |                                                           |
|                                            | <a href="#">Letters for a Bulletin Board</a>         |                                                           |
|                                            | <a href="#">Summative Assessment Task: Bookmarks</a> |                                                           |

## Illustrative Math: Grade 3

Unit 3: Wrapping Up Addition and Subtraction Within 1,000

| Section A:<br>Add Within 1,000       | Section B:<br>Subtract Within 1,000  | Section C:<br>Round Within 1,000                             | Section D:<br>Solve Two-Step Problems       |
|--------------------------------------|--------------------------------------|--------------------------------------------------------------|---------------------------------------------|
| Use tasks from Unit 1 and/or Unit 2. | Use tasks from Unit 1 and/or Unit 2. | <a href="#">Tables for a Party</a>                           | <a href="#">Stacking Wood, Burning Wood</a> |
|                                      |                                      | <a href="#">Insects in Jars</a>                              | <a href="#">Benny the Brick Layer</a>       |
|                                      |                                      | <a href="#">Selling Bananas</a>                              | <a href="#">The Magic Pot</a>               |
|                                      |                                      | <a href="#">A Book to Read</a>                               | <a href="#">Henry's LEGO Structure</a>      |
|                                      |                                      | <a href="#">Summative Assessment Task: One Hundred Miles</a> |                                             |

## Illustrative Math: Grade 3

### Unit 4: Relating Multiplication to Division

| Section A:<br>What is Division?              | Section B:<br>Relate Multiplication and<br>Division                | Section C:<br>Multiplying Larger Numbers                    | Section D:<br>Dividing Larger Numbers                           |
|----------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|
| <a href="#">The Community Fair</a>           | <a href="#">Fancy Candle Company Boxes</a>                         | <a href="#">Bead Shopping</a>                               | <a href="#">Bracelets to Sell</a>                               |
| <a href="#">Pencil Boxes</a>                 | <a href="#">Rides at Fun Park</a>                                  | <a href="#">Tadpoles for Sale</a>                           | <a href="#">Walking Dogs</a>                                    |
| <a href="#">Seventy-Two Legs</a>             | <a href="#">Desks</a>                                              | <a href="#">Dimes and Pennies</a>                           | <a href="#">Planting Seeds</a>                                  |
| <a href="#">Each Orange Has Eight Slices</a> | <a href="#">Summative Assessment Task:<br/>Baskets of Tomatoes</a> | <a href="#">Wildflower Seeds</a>                            | <a href="#">Summative Assessment Task:<br/>Going to a Movie</a> |
|                                              | <a href="#">Jugglers Juggling</a>                                  | <a href="#">Doggy Treats</a>                                | <a href="#">A Pail of Pennies</a>                               |
|                                              | <a href="#">Picking Tomatoes</a>                                   | <a href="#">Summative Assessment Task:<br/>Ben's Poster</a> |                                                                 |
|                                              | <a href="#">Wild Turkeys</a>                                       | <a href="#">Soccer Balls on Sale</a>                        |                                                                 |
|                                              | <a href="#">A New Solar System</a>                                 |                                                             |                                                                 |
|                                              | <a href="#">Mary Sells Popcorn</a>                                 |                                                             |                                                                 |
|                                              | <a href="#">Summative Assessment Task:<br/>Fishing</a>             |                                                             |                                                                 |

## Illustrative Math: Grade 3

### Unit 5: Fractions as Numbers

| Section A:<br>Introduction to Fractions                              | Section B:<br>Fractions on the Number Line | Section C:<br>Equivalent Fractions                             | Section D:<br>Fraction Comparisons                             |
|----------------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|
| <a href="#">Slices of Bread</a>                                      | Use tasks from Unit 5 section A.           | <a href="#">Pizza Pieces</a>                                   | <a href="#">Who Eats the Most Pie?</a>                         |
| <a href="#">Energy Bars</a>                                          |                                            | <a href="#">Two Friends</a>                                    | <a href="#">Fraction Strips</a>                                |
| <a href="#">Lemon Pie</a>                                            |                                            | <a href="#">Cutting Boards</a>                                 | <a href="#">Pages in Books</a>                                 |
| <a href="#">A Cookie Cake for Sally</a>                              |                                            | <a href="#">Names for the Same</a>                             | <a href="#">Painting Two Walls</a>                             |
| <a href="#">Summative Assessment Task:<br/>Waffles</a>               |                                            | <a href="#">Summative Assessment Task:<br/>Ben's Apple Pie</a> | <a href="#">Summative Assessment Task:<br/>Pizza For Lunch</a> |
| <a href="#">Showing One-Fourth</a>                                   |                                            |                                                                |                                                                |
| <a href="#">Sharing Fudge</a>                                        |                                            |                                                                |                                                                |
| <a href="#">Pattern Blocks and Vertices</a>                          |                                            |                                                                |                                                                |
| <a href="#">Pins</a>                                                 |                                            |                                                                |                                                                |
| <a href="#">Summative Assessment Task:<br/>Pattern Block Cookies</a> |                                            |                                                                |                                                                |

## Illustrative Math: Grade 3

### Unit 6: Measuring Length, Time, Liquid Volume, and Weight

| Section A:<br>Measurement Data on Line<br>Plots | Section B:<br>Weight and Liquid Volume | Section C:<br>Problems Involving Time                     | Section D:<br>Measurement Problems in<br>Context |
|-------------------------------------------------|----------------------------------------|-----------------------------------------------------------|--------------------------------------------------|
| <a href="#">Pets at Home</a>                    | Use tasks from Units 4 or 5.           | <a href="#">Packing Boxes</a>                             | Use tasks from Units 4 or 5.                     |
| <a href="#">Carrots</a>                         |                                        | <a href="#">Breakfast for Kyle</a>                        |                                                  |
|                                                 |                                        | <a href="#">Music Classes</a>                             |                                                  |
|                                                 |                                        | <a href="#">An Under-the-Water<br/>Hippopotamus</a>       |                                                  |
|                                                 |                                        | <a href="#">Baseball Practice</a>                         |                                                  |
|                                                 |                                        | <a href="#">Mindy's Bedtime</a>                           |                                                  |
|                                                 |                                        | <a href="#">Summative Assessment Task:<br/>Chore Time</a> |                                                  |

## Illustrative Math: Grade 3

### Unit 7: Two-dimensional Shapes and Perimeter

| Section A:<br>Reason with Shapes                                  | Section B:<br>What is Perimeter?       | Section C:<br>Expanding on Perimeter                            | Section D:<br>Design with Perimeter and Area                     |
|-------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------|
| <a href="#">Quadrilaterals</a>                                    | <a href="#">A Shed for Mrs. Harvey</a> | <a href="#">A Guinea Pig for Gracie</a>                         | <a href="#">A Box Top</a>                                        |
| <a href="#">Pennies and Straws</a>                                |                                        | <a href="#">Gluing Pipe Cleaners</a>                            | <a href="#">A Vegetable Garden</a>                               |
| <a href="#">A Fun Project</a>                                     |                                        | <a href="#">A Flower Garden</a>                                 | <a href="#">A Place to Play</a>                                  |
| <a href="#">Lines and Dots</a>                                    |                                        | <a href="#">Building With Crayons</a>                           | <a href="#">Summative Assessment Task:<br/>Building a Garden</a> |
| <a href="#">Summative Assessment Task:<br/>A Walk to the Park</a> |                                        | <a href="#">Summative Assessment<br/>Task: A New Bunny</a>      |                                                                  |
|                                                                   |                                        | <a href="#">A Tomato Garden</a>                                 |                                                                  |
|                                                                   |                                        | <a href="#">Larry the Lizard</a>                                |                                                                  |
|                                                                   |                                        | <a href="#">Summative Assessment<br/>Task: A Fence for Star</a> |                                                                  |

## Illustrative Math: Grade 3

### Unit 8: Putting It All Together

| Section A:<br>Fraction Fun | Section B:<br>Measurement and Data                                         | Section C:<br>Multiplication and Division<br>Games           | Section D:<br>Create and Design           |
|----------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------|
| Use tasks from Unit 5.     | Use tasks from Unit 1-Section A; Unit 2; and/or Unit 7-Sections B, C, & D. | Use tasks from Unit 1-Sections A & B; Unit 2; and/or Unit 4. | Use tasks from any of the previous units. |

## Illustrative Math: Grade 3

### Unit 7: Two-dimensional Shapes and Perimeter

| Section A:<br>Reason with Shapes<br>(Lessons 1-5)                 | Section B:<br>What is Perimeter?<br>(Lessons 6-9) | Section C:<br>Expanding on Perimeter<br>(Lessons 10-12)         | Section D:<br>Design with Perimeter and<br>Area<br>(Lessons 13-15) |
|-------------------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------|
| <a href="#">Quadrilaterals</a>                                    | <a href="#">A Shed for Mrs. Harvey</a>            | <a href="#">A Guinea Pig for Gracie</a>                         | <a href="#">A Box Top</a>                                          |
| <a href="#">Pennies and Straws</a>                                |                                                   | <a href="#">Gluing Pipe Cleaners</a>                            | <a href="#">A Vegetable Garden</a>                                 |
| <a href="#">A Fun Project</a>                                     |                                                   | <a href="#">A Flower Garden</a>                                 | <a href="#">A Place to Play</a>                                    |
| <a href="#">Lines and Dots</a>                                    |                                                   | <a href="#">Building With Crayons</a>                           | <a href="#">Summative Assessment Task:<br/>Building a Garden</a>   |
| <a href="#">Summative Assessment Task:<br/>A Walk to the Park</a> |                                                   | <a href="#">Summative Assessment<br/>Task: A New Bunny</a>      |                                                                    |
|                                                                   |                                                   | <a href="#">A Tomato Garden</a>                                 |                                                                    |
|                                                                   |                                                   | <a href="#">Larry the Lizard</a>                                |                                                                    |
|                                                                   |                                                   | <a href="#">Summative Assessment<br/>Task: A Fence for Star</a> |                                                                    |

## Illustrative Math: Grade 3

### Unit 8: Putting It All Together

| Section A:<br>Fraction Fun<br>(Lessons 1-3) | Section B:<br>Measurement and Data<br>(Lessons 4-7)                        | Section C:<br>Multiplication and Division<br>Games<br>(Lessons 8-11) | Section D:<br>Create and Design<br>(Lessons 12-15) |
|---------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------------------------|
| Use tasks from Unit 5.                      | Use tasks from Unit 1-Section A; Unit 2; and/or Unit 7-Sections B, C, & D. | Use tasks from Unit 1-Sections A & B; Unit 2; and/or Unit 4.         | Use tasks from any of the previous units.          |

## Integrating Exemplars Tasks into Illustrative Mathematics

When using a high-quality instructional resource like *Illustrative Mathematics*, it can initially feel overwhelming to determine how and when to incorporate opportunities for students to extend their learning—especially through performance tasks from *Exemplars*. There is no single “right” way to integrate *Exemplars* tasks into the *Illustrative Mathematics* resource.

Many factors will influence your approach, including:

- The amount of time available for math instruction and assessment
- The goals of the unit, section, or lesson, and
- Your students’ backgrounds, knowledge, and prior experiences.

### General Considerations

If your math instructional block exceeds 60 minutes, you may have more flexibility to incorporate an Exemplars task that aligns with the current lesson, section, or unit goals—or that reinforces a previously taught concept.

If your instructional time is 60 minutes or less, consider the following strategies:

- **Build in additional lesson days** that focus solely on an Exemplars task. Since the IM pacing guide for Grade 3, for instance, recommends 152–159 instructional days (out of a typical 180-day school year), the remaining days can be distributed throughout units to make space for performance tasks.
- **Omit optional lessons** within IM to create room for deeper exploration using Exemplars tasks.
- **Substitute the final unit, “Putting It All Together,”** with Exemplars tasks. In Grade 3, this could provide up to 17 additional days that can be redistributed across the school year.

## Embedding Exemplars Tasks into Daily Instruction

You might also choose to substitute one or more activities within a lesson with an Exemplars problem-solving task—especially if it aligns closely with the lesson’s learning goal. *(Follow below for suggestions for a Grade 3 unit)*

Other flexible options for using Exemplars tasks include:

- Alongside Center Activities and Practice Problems
- As a homework opportunity
- In place of a Section Checkpoint for formative assessment
- Alongside or in place of a Unit Assessment for summative purposes

## Grade 3 Lesson Specific Ideas

The following are possible opportunities to substitute one or more Illustrative Mathematics activities with an Exemplars Task. It is important to consider the lesson goals and what experiences your students will most benefit from.

### Unit 1: Introducing Multiplication

| Lesson | Considerations for Activities to be Substituted                                                | Exemplars Task Options                                                                                                 |
|--------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| 6      | Activity 1-Represent Pattern Blocks<br>Activity 2-Represent More Data in a Scaled Bar Graph    | <a href="#">The Math Team</a><br><a href="#">Buying Fruit</a><br><a href="#">Summative Task: A Read A Book Contest</a> |
| 7      | Activity 1-Questions about Favorite Season<br>Activity 2-Questions about Insects in the Garden | <a href="#">The Math Team</a><br><a href="#">Buying Fruit</a><br><a href="#">Summative Task: A Read A Book Contest</a> |

| Lesson | Considerations for Activities to be Substituted                                    | Exemplars Task Options                                                                                                                                                                          |
|--------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8      | Activity 1-New School Year<br>Activity 2-Use Bar Graphs to Solve Problems          | <a href="#">The Math Team</a><br><a href="#">Buying Fruit</a><br><a href="#">Summative Task: A Read A Book Contest</a>                                                                          |
| 12     | Activity 1-Tyler's Boxes<br>Activity 2-Solve Equal Groups Problems                 | <a href="#">A Problem With Five</a><br><a href="#">Ms. Bray's Mathematical Problem</a>                                                                                                          |
| 15     | Activity 1-Represent Situations with Equations<br>Activity 2-Multiplication Mashup | <a href="#">A Problem With Five</a><br><a href="#">Ms. Bray's Mathematical Problem</a><br><a href="#">Flower Petals</a><br><a href="#">The School Store</a><br><a href="#">Three fish limit</a> |
| 19     | Activity 1 Array of Colors<br>Activity 2 Tyler's Trees                             | <a href="#">Pictures in the Hallway</a><br><a href="#">Collecting Stickers</a>                                                                                                                  |
| 20     | Activity 1 Learn More about Multiplication<br>Activity 2 Revisit Arrays            | <a href="#">Pom-poms</a><br><a href="#">Circles and Stars</a>                                                                                                                                   |
| 21     | Activity 1 Game Night<br>Activity 2 Game Night on a Graph                          | <a href="#">Pictures in the Hallway</a><br><a href="#">Collecting Stickers</a><br><a href="#">Pom-poms</a><br><a href="#">Circles and Stars</a>                                                 |

Exemplars performance tasks can extend students' learning seamlessly within the *Illustrative Mathematics* resource because in addition to their alignment to the Common Core standards, they share a focus for developing deep conceptual understanding along with a balance of procedural concepts and application to real-world problems. To learn more about how these resources work together, check out our Case Study [here](#).