Exemplars® K–12
We Set the Standards!

Standards-Based Assessment + Instruction

PROBLEM SOLVING FOR THE 21ST CENTURY

BUILT FOR THE COMMON CORE

Illustrative Math Alignments

Grade 7

1. Login to Exemplars Library: library.exemplars.com with your school e-mail and password
2. Select the Grade 7 Unit you are working on:
   - Unit 1: Scale Drawings
   - Unit 2: Introducing Proportional Relationships
   - Unit 3: Measuring Circles
   - Unit 4: Proportional Relationships and Percentages
   - Unit 5: Rational Number Arithmetic
   - Unit 6: Expressions, Equations, and Inequalities
   - Unit 7: Angles, Triangles, and Prisms
   - Unit 8: Probability and Sampling
   - Unit 9: 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.
4. Looking for ideas on how to find time to integrate Exemplars tasks into your IM Curriculum? We've got you covered!

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

Illustrative Math: Grade 7

Unit 1: Scale Drawings
Lessons 1-13

Scaled Copies (Lessons 1-6) 7.G.A.1	Scale Drawings (Lessons 7-12) 7.RP.A.1 7.G.A.1 7.G.A.6	Let's Put it to Work (Lessons 13) 7.G.A.1
Stained Glass	Lake Erie Dilemma	Olympic Trophy Design
Rectangular Prisms & Ratios (more accesible version)	Summative Assessment Task: The Great Pyramids	School Banner Design
The L.L Bean Bootmobile		
Summative Assessment Task: M&M's Show their Patriotism		

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Unit 2: Introducing Proportional Relationships
Lessons 1-15

Representing Proportional Relationships with Tables (Lessons 1-3) 7.RP.A.2	Representing Proportional Relationships with Equations (Lessons 4-6) 7.RP.A.1 7.RP.A.2	Comparing Proportional and Nonproportional Relationships (Lessons 7-9) 7.RP.A.2 7.G.A.6	Representing Proportional Relationships with Graphs (Lessons 10-13) 7.RP.A.2	Let's Put it to Work (Lesson 14-15) 7.RP.A.2
The Last Day of School	The Foosball Problem	7th Grade Service Project	Solar Cars	Golden Ratio Assignment
*Summative Assessment Task: Mile Markers	Samantha's Smoothies		Not So Fast	Dripping Faucet
	YouTube Star		*Summative Assessment Task: Mile Markers	
	*Summative Assessment Task: Mile Markers			

*While students will develop skills to be successful on the Summative Assessment Task: Mile Marker in the first section, giving the assessment during the second section, or even waiting until the fourth section will allow for students to demonstrate greater flexibility to the problem as they develop a variety of ways to represent thinking.

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Unit 3: Measuring Circles
Lessons 1-11

Circumference of a Circle (Lesson 1-5) 7.RP.A.2 7.RP.A.3 7.G.A.4	Area of a Circle (Lesson 6-9) 7.RP.A.2 7.G.A.4 7.G.A.6	Let's Put it to Work (Lesson 10-11) 7.EE.B.3 7.G.A.4
Can You Find a Relationship?	What's Left?	Play Area Fund
	Getting Some Exercise	
	The Pizza Shop	
	Fido's New Kennel	
	Summative Assessment Task: Billy's Goat	

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Unit 4: Proportional Relationships and Percentages
Lessons 1-16

Proportional Relationships with Fractions (Lesson 1-5) 7.RP.A.1 7.RP.A.2	Percent Increase and Decrease (Lesson 6-9) 7.RP.A.2 7.RP.A.3	Applying Percentages (Lesson 10-15) 7.RP.A.2 7.RP.A.3	Let's Put it to Work (Lesson 16) 7.RP.A.3
Raking It In	Dot Patterns	The Sweet Spot	Continue with tasks from previous sections in Unit 4
Dragon Races		Summative Assessment Task: 3.14159 We Think Math is Really Fine	
Average American			
Summative Assessment Task: Going Airborne			

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Unit 5: Rational Number Arithmetic
Lessons 1-12

Interpreting Negative Numbers (Lessons 1) 7.NS.A.1	Adding and Subtracting Rational Numbers (Lessons 2-7) 7.NS.A.1 7.NS.A.3	Multiplying and Dividing Rational Numbers (Lessons 8-12) 7.NS.A.3 7.EE.B.3	Four Operations with Rational Numbers (Lessons 13-14) 7.NS.A.3	Solving Equations When There Are Negative Numbers (Lessons 15-16) 7.NS.A.3 7.EE.B.4	Let's Put it to Work (Lesson 17) 7.NS.A.3 7.EE.B.3
Continue with tasks from Unit 4.	Benji's Accounting	Candy Dilemma	Survivor Is Back	Sunny Savings	Continue with tasks from previous sections in Unit 5
	Summative Assessment Task: Get Debt-Free	Greener Grass	Fargo Heat Wave		
			Gumdrops		
			Summative Assessment Task: Help With Our Next School Store Order		

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Unit 6: Expressions, Equations, and Inequalities
Lessons 1-23

Representing Situations of the Form px+q=r **and** p(x+q)=r **(Lessons 1-6)** 7.EE.B.3 7.EE.B.4	**Solving Equations of the Form** px+q=r **and** p(x+q)=r **and Problems that Lead to Those Equations (Lessons 6-11)** 7.EE.B.3	**Inequalities (Lessons 13-17)** 7.EE.B.4	**Writing Equivalent Expressions (Lessons 18-22)** 7.NS.A.1	**Let's Put it to Work (Lesson 23)**
Continue with tasks from previous units.	A Mid-Sized Paper Company in Northeastern Pennsylvania	Summative Assessment: Concert Ticket Purchase	Continue with tasks from previous sections in Unit 6	
	Farmers Market			
	Movie Ticket Dilemma			
	John's Field			
	The Clean Room			
	Building Block Dilemma			
	Summative Assessment: Steakhouse Tips			

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Unit 7: Angles, Triangles, and Prisms
Lessons 1-17

Angle Relationships (Lessons 1-5) 7.EE.B.4 7.G.A.5	Drawing Polygons with Given Conditions (Lessons 6-10) 7.NS.A.1	Solid Geometry (Lessons 11-16) 7.G.A.6	Let's Put it to Work (Lessons 17) 7.G.A.6
Mike's Mega Mart's Intersection	Continue to solve problems from Unit 7 or previous Units		
Summative Assessment Task: Mystery Angles			

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Unit 8: Probability and Sampling
Lessons 1-20

Probabilities of Single Step Events (Lessons 1-6) 7.SP.C.7 7.SP.C.8	Probabilities of Multi-step Events (Lessons 7-10) 7.SP.C.8	Sampling (Lessons 11-14) 7.SP.C.7	Using Samples (Lessons 15-19)	Let's Put it to Work (Lesson 20) 7.SP.C.7
Samantha's Spinners	Probability of Passing	Peak Amphibian Season	Game Practice	Continue with tasks from Unit 8
Game Club	Colorful Combinations	Election Polling	Beaded Math	
Bull's Eye	The Carnival			
Double Dilemma	Cupid Gets an Early Start			
Landing in the Carrot Patch	Summative Assessment Task: Fair Game Dilemma			
Summative Assessment Task: Chance Upon a Time	Duck, Duck, Booth			
Sums Dilemma	Chloe's Cupcakes			

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Unit 9: Putting It All Together
Lessons 1-13

Running a Restaurant (Lessons 1-4) 7.RP.A.2 7.RP.A.3 7.EE.B.4 7.G.A.4 7.G.A.6	Making Connections (Lessons 5-9) 7.RP.A.1 7.RP.A.2 7.RP.A.3 7.EE.B.4 7.G.A.6	Designing a Course (Lessons 10-13) 7.RP.A.3 7.G.A.4
Tiffany's Candles		

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 7, for instance, recommends 138–161 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 7, this could provide up to 12 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 7 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 7 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: Scale Drawings

Lesson	Considerations for Activities to be Substituted	Exemplars Task Options
3	Activity 2-Drawing Scaled Copies Activity 3-Which Operations? (Part 2)	Rectangular Prisms and Ratios (More Accessible Version)
4	Activity 4-Comparing Pictures of Birds	Stained Glass The L.L.Bean Bootmobile Summative Task: M&M's Show Their Patriotism Rectangular Prisms and Ratios (More Accessible Version)

Lesson	Considerations for Activities to be Substituted	Exemplars Task Options
5	Activity 3-Scaling a Puzzle Activity 4-Missing Figure, Factor, or Copy	Stained Glass The L.L.Bean Bootmobile Summative Task: M&M's Show Their Patriotism Rectangular Prisms and Ratios (More Accessible Version)
6	Activity 2: Scaling More Pattern Blocks Activity 3: Area of Scaled Parallelograms and Triangles	Stained Glass The L.L.Bean Bootmobile Summative Task: M&M's Show Their Patriotism Rectangular Prisms and Ratios (More Accessible Version)
8	Activity 2: Biking through Kansas Activity 3: Driving on I-90	Summative Task: The Great Pyramids
9	Activity 2: Bedroom Floor Plan	Summative Task: The Great Pyramids
10	Activity 3: A New Drawing of the Playground	Summative Task: The Great Pyramids
13	Activity 2: Creating a Floor Plan (Part 1) Activity 3: Creating a Floor Plan (Part 2) Activity 4: Creating a Floor Plan (Part 3)	Olympic Trophy Design

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.