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 6

1. Login to Exemplars Library: library.exemplars.com with your school e-mail and password
2. Select the Grade 6 Unit you are working on:
   - Unit 1: Area and Surface
   - Unit 2: Introducing Ratios
   - Unit 3: Unit Rates and Percentages
   - Unit 4: Dividing Fractions
   - Unit 5: Arithmetic in Base Ten
   - Unit 6: Expressions and Equations
   - Unit 7: Rational Numbers
   - Unit 8: Data Sets and Distributions
   - 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 6

Unit 1: Area and Surface Area
Lessons 1-11

Reasoning to Find Area (Lessons 1-3) 6.G.A.1	Parallelograms (Lessons 4-6) 6.G.A.1	Triangles (Lessons 7-10) 6.G.A.1	Polygons (Lessons 11) 6.G.A.1
Students begin this unit with many hands on experiences that allow them to make sense of volume as a measurement of three-dimensional figures by building objects with unit cubes and counting the cubes. This will provide them with a foundation in which to problem solve about volume in the upcoming sections.		Fix That Foyer!	Mrs. McNair's Construction Project
		Summative Assessment Task: An Architect Needed!	

Illustrative Math: Grade 6

Unit 1: Area and Surface Area
Lessons 12-19

Surface Area (Lessons 12-16) 6.G.A.2 6.G.A.4	Squares and Cubes (Lessons 17-18) 6.G.A.4	Let's Put it to Work (Lesson 19) 6.G.A.1 6.G.A.4
Shoe Contest	Continue with tasks from previous sections in Unit 1.	Townhouse Tribulation
Rocking the Room		
Wrapping Mom's Lamp		
Two Great Tastes that Taste Great Together		
Box Problem		
Candy Bar Madness		
Summative Assessment Task: Gift Wrap		
Hershey's vs. Kit Kats		
Lucy Limestone		
Cordwood Dilemma		
Summative Assessment Task: Box Dilemma		

Illustrative Math: Grade 6

Unit 2: Introducing Ratios
Lessons 1-16

What are Ratios? (Lessons 1-2)	Equivalent Ratios (Lessons 3-5)	Representing Equivalent Ratios (Lessons 6-10) 6.RP.A.2 6.RP.A.3 6.RP.A.3.b	Solving Ratio and Rate Problems (Lessons 11-14) 6.RP.A.3. 6.RP.A.3.a	Part-part-whole Ratios (Lessons 15-16) 6.RP.A.3	Let's Put it to Work (Lesson 17) 6.RP.A. 6.RP.A.3
Continue with tasks from Unit 1		Down the Babbling River	Summative Assessment Task: Buying Seashells	Continue with tasks from Unit 1 and 2.	

Illustrative Math: Grade 6

Unit 3: Unit Rates and Percentages
Lessons 1-17

Units of Measurement (Lesson 1) 6.RP.A.2	Unit Conversion (Lesson 2-4) 6.RP.A.3.d	Rates (Lesson 5-9) 6.RP.A.2 6.RP.A.3 6.RP.A.3.b 6.RP.A.3.b	Percentages (Lesson 10-16) 6.RP.A.3 6.RP.A.3.c	Let's Put it to Work (Lesson 17) 6.RP.A.3 6.RP.A.3.c
Continue with tasks from Unit 1 and 2.	Mrs. McNair's Construction Project	The Sweetest Time of the Year	Eraser Boxes	M&M's
	Preparing a Volunteer Dessert	Gobble, Gobble,Gobble	Water to Mars	
	Summative Assessment Task: A Stinky Situation	Sink or Swim	Summative Assessment Task: Sneaker Sales	
		Cookie Caper		
		Height Dilemma		
		How Many Nickels?		
		Summative Assessment Task: Bake Sale		
		Summative Assessment Task: Celebrity Frog Races		

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Unit 4: Dividing Fractions
Lessons 1-17

Making Sense of Division (Lesson 1-3) 6.NS.A.1	Meanings of Fraction Division (Lesson 4-9) 6.NS.A.1	Algorithm for Fraction Division (Lesson 10-11) 6.NS.A.1	Fractions in Lengths, Areas and Volumes (Lesson 12-15) 6.NS.A.1 6.G.A.1 6 G.A.2	Let's Put it to Work (Lesson 16-17) 6.NS.A.1 6 G.A.2
Continue with tasks from Unit 3.		Game Saving	The Longest Yard	Continue with tasks from previous sections in Unit 4
		Summative Assessment Task: Brain Freeze	Dwarf Hamster Habitat	

Illustrative Math: Grade 6

Unit 5: Arithmetic in Base Ten
Lessons 1-15

Warming Up to Decimals (Lessons 1)	Adding and Subtracting Decimals (Lessons 2-4) 6.NS.B.3	Multiplying Decimals (Lessons 5-8) 6.NS.3 6.NS.B.3	Dividing Decimals (Lessons 9-13) 6.NS.B.3	Let's Put it to Work (Lessons 14-15) 6.NS.B.3
Continue with tasks from Unit 4.		Just Enough	Saving Gas	Continue with tasks from previous sections in Unit 5
		Flossing Financials	Summative Assessment Task: Moving to the Big Apple	
		Water to Mars		

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Unit 6: Expressions and Equations
Lessons 1-19

Equations in One Variable (Lessons 1-5) 6.EE.B 6.EE.B.7	Equal and Equivalent (Lessons 6-11) 6.EE.A.3 6.EE.B.7	Expressions with Exponents (Lessons 12-15)	Relationships Between Quantities (Lessons 16-18) 6.EE.C.9	Let's Put it to Work (Lesson 19) 6.EE.B.7 6.EE.C.9
Continue with tasks from Unit 5.	T-Shirt Time	Saving for the New Year	Going Batty	Continue with tasks from previous sections in Unit 5
	Snack Bar	Frank and Stein	Tooth Fairy	
	Putting the Sun to Work		Pattern Block Perimeters	
	Fried Food Fest		Reducing Waste	

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Unit 7: Rational Numbers
Lessons 1-19

Negative Numbers and Absolute Value (Lessons 1-7) 6.NS.C.5	Inequalities (Lessons 8-10) 6.EE.B.8	The Coordinate Plane (Lessons 11-15) 6.NS.C.8 6.G.A.3	Common Factors and Common Multiples (Lessons 16-18) 6.NS.B.4	Let's Put it to Work (Lessons 19) 6.NS.C.8 6.G.A.3
Summative Assessment Task: How High and How Low Can That Drone Go?	Feeding Fuzzbucket	Garden Contest	Tire Problem	Continue with tasks from previous sections in Unit 5
		Herding Cats	Summer Camp	
		Finish the Mural	Floral Arrangements	
		How Big Is the Property?	Summative Assessment Task: Gears	
		Cafe in the XY City		
		Math World Maze		
		Counting Steps		
		Summative Assessment Task: Philadelphia: The City of Brotherly Love of Math!		

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Unit 8: Data Sets and Distributions
Lessons 1-18

Data, Variablility, and Statistical Questions (Lessons 1-2) 6.SP.B 6.SP.B.5.b	Dot Plots and Histograms (Lessons 3-8) 6.SP.B.5.a 6.SP.B.5.b	Measures of Center and Variability (Lessons 9-12) 6.SP.B 6.SP.B.5.c 6.SP.B.5.d	Median and IQR (Lessons 13-17) 6.SP.B.5 6.SP.B.5.b 6.SP.B.5.c 6.SP.B.5.d	Let's Put it to Work (Lesson 18) 6.SP.B.5.c 6.SP.B.5.d
Continue with tasks from Unit 7.		Too Sweet	How Cold Would It Be?	Environmentally Friendly Shopper
		More Screen Time	What is the Typical Price of a Vermont Ski Pass?	
			What Does Mother Nature Have Planned for My Special Day in Vermont?	
			Is Silver the Most Popular Car Color?	
			Homework Survey	
			Summative Assessment Task: Who Is The Best?	

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Unit 9: Putting It All Together
Lessons 1-6

Making Connections (Lessons 1-3) 6.G.A 6.NS.A 6.NS.B 6.RP.A	Voting (Lessons 4-6) 6.RP.A.2 6.RP.A.3 6.RP.A.3.c 6.NS.B.3
Bouncing Balls	Use tasks from Unit 1 as well as Unit 4 Section C

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 6, for instance, recommends 147–173 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 6, this could provide up to 11 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 6 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 6 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: Area and Surface Area

Lesson	Considerations for Activities to be Substituted	Exemplars Task Options
8	Activity 3-Decomposing a Parallelogram	Fix That Foyer! Summative Task: An Architect Needed
10	Activity 2-Hunting for Heights	Fix That Foyer! Summative Task: An Architect Needed
11	Activity 3-Pinwheel	Fix That Foyer! Summative Task: An Architect Needed Mrs. McNair's Construction Project

Lesson	Considerations for Activities to be Substituted	Exemplars Task Options
13	Activity 3-Assembling Polyhedra	Shoe Contest Rocking the Room Hershey's vs. Kit Kats Cordwood Dilemma
15	Activity 3-Comparing Boxes	Summative Task: Gift Wrap-net Shoe Contest Rocking the Room Hershey's vs. Kit Kats Cordwood Dilemma
16	Activity 2-Building with 8 Cubes Activity 3-Comparing Prisms	Summative Task: Gift Wrap-net Shoe Contest Rocking the Room Hershey's vs. Kit Kats Cordwood Dilemma Wrapping Mom's Lamp Two Great Tastes That Taste Great Together Candy Bar Madness-boxes within box Lucy Limestone Box Problem-create most volume Summative Task: Box Dilemma

Lesson	Considerations for Activities to be Substituted	Exemplars Task Options
17	Activity 2-Building with 32 Cubes	Summative Task: Gift Wrap-net Shoe Contest Rocking the Room Hershey's vs. Kit Kats Cordwood Dilemma Wrapping Mom's Lamp Two Great Tastes That Taste Great Together Candy Bar Madness-boxes within box Lucy Limestone Box Problem-create most volume Summative Task: Box Dilemma
19	Activity 2-Two Tents Activity 3-Tent Design (Part 1) Activity 4-Tent Design (Part 2)	Townhouse Tribulation

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.