PROBLEM SOLVING
FOR THE | 21ST CENTURY
THE

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.

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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!	

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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		

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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.	

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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	

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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)	Voting (Lessons 4-6)
6.G.A 6.NS.A 6.NS.B 6.RP.A	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