8th Grade Unit 1 Unit Dependency:

Activity #	Activity Name	Time	Instructional Day
1.1	Which One Doesn't Belong: Diagrams		
1.2	Triangle Square Dance		
1.3	Frame to Frame		
2.1	A Pair of Quadrilaterals		
2.2	How Did You Make That Move?		
2.3	Card Sort: Move		
2.4	Is It a Reflection?		
3.1	Notice and Wonder: The Isometric Grid		
3.2	Transformation Information		
3.3	Some are Translations and Some Aren't		
4.1	Reflection Quick Image		
4.2	Make That Move		
4.3	A to B to C		
4.4	What Does It Take?		
5.1	Translating Coordinates		
5.2	Reflecting Points on the Coordinate Plane		
5.3	Transformations of a Segment		
5.4	Rotation or Reflection		
6.1	Finding a Center of Rotation		
6.2	Info Gap: Transformation Information		
6.3	Describing a Sequence of Transformations		
7.1	Measuring Segments		
7.2	Sides and Angles		
7.3	Which One?		
7.4	Translated Trapezoid		
8.1	Building a Quadrilateral		
8.2	Rotating a Segment		
8.3	A Pattern of Four Triangles		
8.4	Is it a rotation?		
9.1	Line Moves		
9.2	Parallel Lines		
9.3	Let's Do Some 180's		
9.4	Finding Missing Measurements		
10.1	Angles of an Isosceles Triangle		
10.2	Triangle Plus One		
10.3	Triangle Plus Two		
10.4	Triangle ONE Plus		
10.5	Identifying Side Lengths and Angle Measures		
	Mid-Unit Assessment		
11.1	Find the Right Hands		
11.2	Are They the Same?		
11.3	Area, Perimeter, and Congruence		
11.4	Mirror Images		
12.1	Translated Images		
12.2	Congruent Pairs (Part 1)		

12.3	Congruent Pairs (Part 2)		
12.4	Building Quadrilaterals		
12.5	Moving to Congruence		
13.1	Not Just the Vertices		
13.2	Congruent Ovals		
13.3	Corresponding Points in Congruent Figures		
13.4	Astonished Faces		
13.5	Explaining Congruence		
14.1	Angle Pairs		
14.2	Cutting Parallel Lines with a Transversal		
14.3	Alternate Interior Angles Are Congruent		
14.4	All The Rest		
15.1	Can You Draw It?		
15.2	Find All Three		
15.3	Tear It Up		
15.4	Missing Angle Measures		
16.1	True or False: Computational Relationships		
16.2	Angle Plus Two		
16.3	Every Triangle in the World		
16.4	Four Triangles Revisited		
16.5	Angle Sizes		
17.1	Deducing Angle Measures		
17.2	Tessellate This		
17.3	Rotate That		

	Assessment		

8th Grade Unit 2 Unit Dependency: 7.1, 8.1

Activity #	Activity Name	Time	Instructional Day
7.1.4.1	Three Quadrilaterals (Part 1)		
7.1.4.2	Three Quadrilaterals (Part 2)		
7.1.4.3	Scaled or Not Scaled?		
7.1.4.4	Comparing Pictures of Birds		
7.1.4.5	Corresponding Polygons		
7.1.5.1	Number Talk: Missing Factor		
7.1.5.2	Card Sort: Scaled Copies		
7.1.5.3	Scaling A Puzzle		
7.1.5.4	Missing Figure, Factor, or Copy		
7.1.5.5	Scaling a Rectangle		
1.1	Number Talk: Remembering Fraction Division		
1.2	Sorting Rectangles		
1.3	Scaled Rectangles		
1.4	What is a Dilation?		
2.1	Notice and Wonder: Concentric Circles		
2.2	A Droplet on the Surface		
2.3	Quadrilateral on a Circular Grid		
2.4	A Quadrilateral and Concentric Circles		
2.5	Dilating points on a circular grid		
3.1	Points on a Ray		
3.2	Dilation Obstacle Course		
3.3	Getting Perspective		
3.4	A Single Dilation of a Triangle		
4.1	Estimating a Scale Factor		
4.2	Dilations on a Grid		
4.3	Card Sort: Matching Dilations on a Coordinate Grid		
4.4	A Dilated Image		
5.1	Many Dilations of a Triangle		
5.2	Info Gap: Dilations		
5.3	Identifying a Dilation		
6.1	Equivalent Expressions		
6.2	Similarity Transformations (Part 1)		
6.3	Similarity Transformations (Part 2)		
6.4	Methods for Translations and Dilations		
6.5	Showing Similarity		
7.1	All, Some, None: Congruence and Similarity		
7.2	Are They Similar?		
7.3	Find Someone Similar		
7.4	How Do You Know?		
8.1	Equivalent Expressions		
8.2	Making Pasta Angles and Triangles		
8.3	Similar Figures in a Regular Pentagon		
8.4	Applying Angle-Angle Similarity		
9.1	Two-three-four and Four-five-six		
9.2	Quotients of Sides Within Similar Triangles		

9.3	Using Side Quotients to Find Side Lengths of Similar Triangles		
9.4	Similar Sides		
10.1	Equal Quotients		
10.2	Similar Triangles on the Same Line		
10.3	Multiple Lines with the Same Slope		
10.4	Different Slopes of Different Lines		
10.5	Finding Slope and Graphing Lines		
11.1	Coordinates and Lengths in the Coordinate Plane		
11.2	What We Mean by an Equation of a Line		
11.3	Writing Relationships from Slope Triangles		
11.4	Matching Relationships to Graphs		
12.1	Missing center		
12.2	Writing Relationships from Two Points		
12.3	Dilations and Slope Triangles		
12.4	Is the Point on the Line?		
13.1	Notice and Wonder: Long Shadows and Short Shadows		
13.2	Objects and Shadows		
13.3	Justifying the Relationship		
13.4	The Height of a Tall Object		
	Assessment		

8th Grade Unit 3 Unit Dependency: 7.5, 8.2

Activity #	Activity Name	Time	Instructional Day
1.1	Notice and Wonder: Two Graphs		
1.2	Moving Through Representations		
1.3	Moving Twice as Fast		
1.4	Turtle Race		
2.1	An Unknown Situation		
2.2	Card Sort: Proportional Relationships		
2.3	Different Scales		
2.4	Different Axes		
3.1	Number Talk: Multiplication		
3.2	Representations of Proportional Relationships		
3.3	Info Gap: Proportional Relationships		
3.4	Graph the Relationship		
4.1	What's the Relationship?		
4.2	Comparing Two Different Representations		
4.3	Different Salt Mixtures		
5.1	Number Talk: Fraction Division		
5.2	Stacking Cups		
5.3	Connecting Slope to Rate of Change		
5.4	Stacking More Cups		
6.1	Growing		
6.2	Slopes, Vertical Intercepts, and Graphs		
6.3	Summer Reading		
6.4	Savings		
7.1	Estimation: Which Holds More?		
7.2	Rising Water Levels		
7.3	Calculate the Slope		
7.4	Graphing a Line		
8.1	Lines that Are Translations		
8.2	Increased Savings		
8.3	Translating a Line		
8.4	Similarities and Differences in Two Lines		
9.1	Which One Doesn't Belong: Odd Line Out		
9.2	Stand Clear of the Closing Doors, Please		
9.3	Travel Habits in July		
9.4	Payback Plan		
9.5	The Slopes of Graphs		
10.1	Number Talk: Integer Operations		
10.2	Toward a More General Slope Formula		
10.3	Making Designs		
10.4	Different Slopes		
11.1	Which One Doesn't Belong: Pairs of Lines		
11.2	All the Same		
11.3	Same Perimeter		
11.4	Line Design		
12.1	Estimate Area		

12.2	Apples and Oranges		
12.3	Solutions and Everything Else		
12.4	Identify the Points		
13.1	Coordinate Pairs		
13.2	True or False: Solutions in the Coordinate Plane		
13.3	I'll Take an X, Please		
13.4	Intercepted		
14.1	Buying Fruit		
14.2	Five Savings Accounts		
14.3	Fabulous Fish		
	Assessment		

8th Grade Unit 4 Unit Dependency: 7.6, 8.3

Activity #	Activity Name	Time	Instructional Day
1.1	Notice and Wonder: A Number Line		
1.2	Telling Temperatures		
1.3	Making a Puzzle		
1.4	Seeing the Puzzle		
2.1	Notice and Wonder: Hanging Socks		
2.2	Hanging Blocks		
2.3	More Hanging Blocks		
2.4	Changing Blocks		
3.1	Matching Hangers		
3.2	Matching Equation Moves		
3.3	Keeping Equality		
3.4	More Matching Moves		
4.1	Different Equations?		
4.2	Step by Step by Step by Step		
4.3	Make Your Own Steps		
4.4	Mis-Steps		
5.1	Equation Talk		
5.2	Trading Moves		
5.3	A Puzzling Puzzle		
5.4	Check It		
6.1	Equal Perimeters		
6.2	Predicting Solutions		
6.3	Which Would You Rather Solve?		
6.4	Think Before You Step		
7.1	Which One Doesn't Belong: Equations		
7.2	Thinking About Solutions		
7.3	What's the Equation?		
7.4	Choose Your Own Solution		
8.1	Matching Solutions		
8.2	Thinking About Solutions Some More		
8.3	Make Use of Structure		
8.4	How Does She Know?		
9.1	Which Would You Choose?		
9.2	Water Tanks		
9.3	Elevators		
9.4	Printers and Ink		
10.1	Which One Doesn't Belong: Lines in the Plane		
10.2	Pocket Full of Change		
10.3	Making Signs		
10.4	Another Pocket Full of Change		
11.1	Notice and Wonder: Bugs Passing in the Night		
11.2	Bugs Passing in the Night, Continued		
11.3	A Close Race		
11.4	Saving Cash		
12.1	Milkshakes		
12.2	Passing on the Trail		

12.3	Stacks of Cups		
12.4	Milkshakes, Revisited		
13.1	True or False: Two Lines		
13.2	Matching Graphs to Systems		
13.3	Different Types of Systems		
13.4	Two Lines		
14.1	Algebra Talk: Solving Systems Mentally		
14.2	Challenge Yourself		
14.3	Five Does Not Equal Seven		
14.4	Solve It		
15.1	How Many Solutions? Matching		
15.2	Situations and Systems		
15.3	Info Gap: Racing and Play Tickets		
15.4	Solving Systems Practice		
15.5	Solve This		
16.1	Are We There Yet?		
16.2	Cycling, Fundraising, Working, and ___?		
	Assessment		

8th Grade Unit 5 Unit Dependency: 7.7, 8.3

Activity #	Activity Name	Time	Instructional Day
1.1	Dividing by 0		
1.2	Guess My Rule		
1.3	Making Tables		
1.4	What's the Rule?		
2.1	Square Me		
2.2	You Know This, Do You Know That?		
2.3	Using Function Language		
2.4	Same Function, Different Rule?		
2.5	Wait Time		
3.1	A Square's Area		
3.2	Diagrams, Equations, and Descriptions		
3.3	Dimes and Quarters		
3.4	The Value of Some Quarters		
4.1	Notice and Wonder: Doubling Back		
4.2	Equations and Graphs of Functions		
4.3	Running around a Track		
4.4	Subway Fare Card		
5.1	Which One Doesn't Belong: Graphs		
5.2	Time and Temperature		
5.3	Garbage		
5.4	Diego's 10K Race		
6.1	Dog Run		
6.2	Which Graph is It?		
6.3	Sketching a Story about a Boy and a Bike		
6.4	Walking Home From School		
7.1	Which are the Same? Which are Different?		
7.2	Comparing Temperatures		
7.3	Comparing Volumes		
7.4	It's Not a Race		
7.5	Comparing Different Areas		
8.1	Bigger and Smaller		
8.2	Proportional Relationships Define Linear Functions		
8.3	Is it Filling Up or Draining Out?		
8.4	Which is Growing Faster?		
8.5	Beginning to See Daylight		
9.1	Candlelight		
9.2	Shadows		
9.3	Recycling		
9.4	Board Game Sales		
10.1	Notice and Wonder: Lines on Dots		
10.2	Modeling Recycling		
10.3	Dog Bath		
10.4	Distance and Speed		
10.5	Lin's Phone Charge		
	Mid-Unit Assessment		
11.1	Which One Doesn't Belong: Solids		

11.2	Height and Volume		
11.3	What Is the Shape?		
11.4	Which Cylinder?		
12.1	Two Containers		
12.2	What's Your Estimate?		
12.3	Do You Know These Figures?		
12.4	Rectangle to Round		
13.1	A Circle's Dimensions		
13.2	Circular Volumes		
13.3	A Cylinder's Dimensions		
13.4	A Cylinder's Volume		
13.5	Liquid Volume		
14.1	A Cylinder of Unknown Height		
14.2	What's the Dimension?		
14.3	Cylinders with Unknown Dimensions		
14.4	Find the Height		
15.1	Which Has a Larger Volume?		
15.2	From Cylinders to Cones		
15.3	Calculate That Cone		
15.4	Calculate Volumes of Two Figures		
16.1	Number Talk: Thirds		
16.2	An Unknown Radius		
16.3	Cones with Unknown Dimensions		
16.4	Popcorn Deals		
16.5	A Square Radius		
17.1	Driving the Distance		
17.2	Double the Edge		
17.3	Halve the Height		
17.4	Figuring Out Cone Dimensions		
17.5	A Missing Radius		
18.1	Tripling Statements		
18.2	A Square Base		
18.3	Playing with Cones		
18.4	Halving Dimensions		
19.1	Notice and Wonder: Two Shapes		
19.2	Hemispheres in Boxes		
19.3	Estimating Hemispheres		
19.4	A Mirror Box		
20.1	Sketch a Sphere		
20.2	A Sphere in a Cylinder		
20.3	Spheres in Cylinders		
20.4	Volumes of Spheres		
21.1	Sphere Arguments		
21.2	Sphere's Radius		
21.3	Info Gap: Unknown Dimensions		
21.4	The Right Fit		
21.5	New Four Spheres		
22.1	Missing Information?		

22.2	Scaling Volume of a Sphere		
22.3	A Cylinder, a Cone, and a Sphere		
	Assessment		

8th Grade Unit 6 Unit Dependency: 7.8, 8.3

Activity #	Activity Name	Time	Instructional Day
1.1	Notice and Wonder: Messy Data		
1.2	Seeing the Data		
1.3	Tables and Their Scatter Plots		
1.4	Squashed Spheres		
2.1	Representing Data		
2.2	Gathering Data		
2.3	Scatter Plots		
2.4	Right Side Measurements		
3.1	The Giant Panda		
3.2	Weight and Fuel Efficiency		
3.3	Coat Sales		
3.4	Quarterbacks		
4.1	Predict This		
4.2	Shine Bright		
4.3	The Agony of the Feet		
4.4	A 1 Foot Foot		
5.1	Which One Doesn't Belong: Scatter Plots		
5.2	Fitting Lines		
5.3	Good Fit Bad Fit		
5.4	Practice Fitting Lines		
5.5	This is One Way to Do It		
6.1	Estimating Slope		
6.2	Describing Linear Associations		
6.3	Interpreting Slopes		
6.4	Positive or Negative?		
6.5	Trends in the Price of Used Cars		
7.1	Notice and Wonder: Nonlinear Scatter Plot		
7.2	Scatter Plot City		
7.3	Clustering		
7.4	Make Your Own Scatter Plot		
8.1	Speed vs. Step Length		
8.2	Animal Brains		
8.3	Equal Body Dimensions		
8.4	Drawing a Line		
9.1	Notice and Wonder: Bar Association		
9.2	Card Sort: Matching Representations		
9.3	Building Another Type of Two-Way Table		
9.4	Guitar and Golf		
10.1	Sports and Musical Instruments		
10.2	Sports and Music Association		
10.3	Colored Erasers		
10.4	Class Preferences		
11.1	Measuring 30 Seconds		

8th Grade Unit 7 Unit Dependency: 6.6

Activity #	Activity Name	Time	Instructional Day
1.1	Which One Doesn't Belong: Twos		
1.2	Return of the Genie		
1.3	Broken Coin		
1.4	Exponent Check		
2.1	100, 1, or $\frac{1}{100}$?		
2.2	Picture a Power of 10		
2.3	Multiplying Powers of Ten		
2.4	That's a Lot of Dough, Though!		
3.1	Big Cube		
3.2	Raising Powers of 10 to Another Power		
3.3	How Do the Rules Work?		
3.4	Making a Million		
4.1	A Surprising One		
4.2	Dividing Powers of Ten		
4.3	Zero Exponent		
4.4	Making Millions		
4.5	Why Subtract?		
5.1	Number Talk: What's That Exponent?		
5.2	Negative Exponent Table		
5.3	Follow the Exponent Rules		
5.4	Negative Exponent True or False		
6.1	True or False: Comparing Expressions with Exponents		
6.2	What Happens with Zero and Negative Exponents?		
6.3	Exponent Rules with Bases Other than 10		
6.4	Spot the Mistake		
7.1	Which One Doesn't Belong: Exponents		
7.2	Exponent Rule Practice		
7.3	Inconsistent Bases		
7.4	Working with Exponents		
8.1	Same Exponent, Different Base		
8.2	Power of Products		
8.3	How Many Ways Can You Make 3,600?		
8.4	Help an Absent Student		
9.1	Thousand Million Billion Trillion		
9.2	Base-ten Representations Matching		
9.3	Using Powers of 10 to Describe Large and Small Numbers		
9.4	Better with Powers of 10		
10.1	Labeling Tick Marks on a Number Line		
10.2	Comparing Large Numbers with a Number Line		
10.3	The Speeds of Light		
10.4	Describe the Point		
11.1	Small Numbers on a Number Line		
11.2	Comparing Small Numbers on a Number Line		
11.3	Atomic Scale		

11.4	Describing Very Small Numbers		
12.1	What Information Do You Need?		
12.2	Meter Sticks to the Moon		
12.3	That’s a Tall Stack of Cash		
12.4	Reflecting on Using Powers of 10		
13.1	Number Talk: Multiplying by Powers of 10		
13.2	The “Science” of Scientific Notation		
13.3	Scientific Notation Matching		
13.4	Scientific Notation Check		
14.1	True or False: Equations		
14.2	Biomass		
14.3	Info Gap: Distances in the Solar System		
14.4	Professions in the United States		
14.5	Estimating with Scientific Notation		
15.1	Number Talk: Non-zero Digits		
15.2	Measuring the Planets		
15.3	A Celestial Dance		
15.4	Old McDonald's Massive Farm		
15.5	Adding with Scientific Notation		
16.1	Old Hardware, New Hardware		
16.2	A Bit More on Bytes		

8th Grade Unit 8 Unit Dependency: 6.1

Activity #	Activity Name	Time	Instructional Day
1.1	Two Regions		
1.2	Decomposing to Find Area		
1.3	Estimating Side Lengths from Areas		
1.4	Making Squares		
1.5	It's a Square		
2.1	Notice and Wonder: Intersecting Circles		
2.2	One Square		
2.3	The Sides and Areas of Tilted Squares		
2.4	What Is the Side Length?		
3.1	Algebra Talk: Positive Solutions		
3.2	Three Squares		
3.3	Looking for a Solution		
3.4	Looking for $\sqrt2$		
3.5	Types of Solutions		
4.1	Notice and Wonder: Diagonals		
4.2	Squaring Lines		
4.3	Square Root of 3		
4.4	Approximating $\sqrt{18}$		
5.1	True or False: Squared		
5.2	Square Root Values		
5.3	Solutions on a Number Line		
5.4	Betweens		
6.1	Which One Doesn't Belong: Triangles		
6.2	A Table of Triangles		
6.3	Meet the Pythagorean Theorem		
6.4	Does a Squared Plus b Squared Equal c Squared?		
7.1	Notice and Wonder: A Square and Four Triangles		
7.2	Adding Up Areas		
7.3	Let's Take it for a Spin		
7.4	A Transformational Proof		
7.5	When is it True?		
8.1	Which One Doesn't Belong: Equations		
8.2	Which One Is the Hypotenuse?		
8.3	Find the Missing Side Lengths		
8.4	Could be the Hypotenuse, Could be a Leg		
9.1	The Hands of a Clock		
9.2	Proving the Converse		
9.3	Calculating Legs of Right Triangles		
9.4	Is It a Right Triangle?		
10.1	Closest Estimate: Square Roots		
10.2	Cutting Corners		
10.3	Internal Dimensions		
10.4	Jib Sail		
11.1	Closest Distance		
11.2	How Far Apart?		
11.3	Perimeters with Pythagoras		

11.4	Finding the Right Distance		
11.5	Lengths of Line Segments		
12.1	Ordering Squares and Cubes		
12.2	Name That Edge Length!		
12.3	Card Sort: Rooted in the Number Line		
12.4	Roots of 36		
13.1	True or False: Cubed		
13.2	Cube Root Values		
13.3	Solutions on a Number Line		
13.4	Different Types of Roots		
14.1	Notice and Wonder: Shaded Bars		
14.2	Halving the Length		
14.3	Recalculating Rational Numbers		
14.4	Zooming In On $\frac{2}{11}$		
14.5	An Unknown Rational Number		
15.1	Searching for Digits		
15.2	Some Numbers Are Rational		
15.3	Some Numbers Are Not Rational		
15.4	Repeating in Different Ways		
16.1	Three Figures		
16.2	A $4:3$ Rectangle		
16.3	The Screen Is the Same Size . . . Or Is It?		