

8th Grade McGraw Hill - Math Course 3 Pacing Guide

SEMESTER 1		
Dates		Number of Days
August 17 - 28	Beginning of the Year ALEKS Window	August 17 - 28
August 12 - August 22 8 days	Unit 1 – Math Is...	
	Big Idea: Problem Solving	
	Essential Question: What does it mean to do math?	
	1-1 Math Is In My World	1 day
	1-2 Math Is Exploring and Thinking	1 day
	1-3 Math Is Explaining and Sharing	1 day
	1-4 Math Is Finding Patterns	1 day
	1-5 Math Is Ours	1 day
	1-6 Math Is Mine	1 day
	Additional/Extra Instructional Days	2 days
August 24- September 25 24 days	Unit 2 – Congruence and Similarity	
	Big Idea: Transformational Geometry	
	Essential Question: How can observing changes to the shape and space of a figure help me understand how it transformed?	
	2-1 Explore Translations	2 days
	2-2 Explore Reflections	2 days
	2-3 Explore Rotations	2 days
	2-4 Understand Congruence	2 days
	2-5 Explore Dilations	2 days
	2-6 Understand Similarity	2 days
	2-7 Use Angle-Angle Similarity	2 days
	2-8 Solve Problems Using Similar Triangles	2 days
	Additional/Extra Instructional Days	8 days
September 28 - October 9	Benchmark Assessment # 1: Unit 2 Assessment - Form A	September 28 - October 9
September 28 - October 23 20 days	Unit 3 – Proportional Relationships	
	Big Ideas: Linear Equations, Multiple Representations of Functions	
	Essential Question: What information does a representation tell us?	
	3-1 Describe the Slope of a Line	2 days
	3-2 Compare Proportional Relationships	2 days
	3-3 Use Similar Triangles to Determine Slope	2 days
	3-4 Describe Proportional Linear Relationships	2 days
	3-5 Describe Nonproportional Linear Relationships	2 days

		3-6 Solve Linear Equations	2 days
		3-7 Describe Solutions to Linear Equations	2 days
	Additional Days for Instruction and Testing of Benchmark Assessment #1 (Unit 2)		6 days
October 26 - November 13 14 days	Unit 4 – Understand and Analyze Functions		
	Big Ideas: Interpret Scatterplots, Linear Equations		
	Essential Question: How can representations help me see how quantities change?		
	4-1	Describe Qualitative Relationships	2 days
	4-2	Explore Functions	2 days
	4-3	Represent Functions	2 days
	4-4	Explore Types of Functions	2 days
	4-5	Describe Linear Relationship with Functions	2 days
	4-6	Compare Functions	2 days
	Additional/Extra Instructional Days		2 days
November 16 - December 18 20 days	Unit 5 – Patterns of Association		
	Big Ideas: Data Explorations; Data, Graphs, and Tables; Interpret Scatterplots; Slopes and Intercepts		
	Essential Question: Why is it important for you to be able to determine relationships in data?		
	5-1	Construct Scatter Plots	2 days
	5-2	Interpret Scatter Plots	2 days
	5-3	Analyze Linear Associations in Bivariate Data	2 days
	5-4	Use Linear Functions to Solve Problems	2 days
	5-5	Describe Patterns in Two-Way Tables	2 days
	5-6	Interpret Two-Way Relative Frequency Tables	2 days
	Additional Days for Instruction and Testing of Benchmark Assessment #2 (Unit 5)		8 days
December 7 - December 18	Benchmark Assessment # 2: Unit 5 Assessment - Form A		December 7 - December 18

SEMESTER 2		
Dates		Number of Days
January 12 - February 11 22 days	Unit 6 – Angles, Triangles, and the Pythagorean Theorem	
	Big Idea: Pythagorean Explorations, Transformational Geometry	
	Essential Question: Why are relationships with angles and triangles important?	
	6-1	Understand Angle Relationships and Parallel Lines
	6-2	Understand Angle Relationships and Triangles
	6-3	Understand and Use Square Roots

	6-4	Understand the Pythagorean Theorem	2 days
	6-5	Understand the Converse of the Pythagorean Theorem	2 days
	6-6	Determine Distance on the Coordinate Plane	2 days
	6-7	Apply the Pythagorean Theorem	2 day s
	Additional Days for Instruction and Middle of the Year Aleks		8 days
January 19 - January 29	Middle of the Year ALEKS Window		
February 16 - March 5 14 days	Unit 7 – Volume		
	Big Idea: Cylindrical Investigations; Shape, Number, and Expressions		
	Essential Question: Do we always need formulas to find the volume of cylinders, cones, and spheres?		
	7-1	Understand and Use Cube Roots	2 days
	7-2	Solve Problems Involving Cylinders	2 days
	7-3	Solve Problems Involving Cones	2 days
	7-4	Solve Problems Involving Spheres	2 days
	7-5	Solve Problems Involving Volume	2 days
	Additional Days for Instruction and Testing of Benchmark Assessment #3 (Unit 7)		4 days
March 1 - March 12	Benchmark Assessment # 3: Unit 7 Assessment - Form A		March 1 - March 12
March 8 - March 24 13 days	Unit 8 – Systems of Linear Equations		
	Big Idea: Linear Equations		
	Essential Question: What strategies can you use to relate two linear relationships to solve everyday problems?		
	8-1	Use Graphing to Solve Systems of Equations	2 days
	8-2	Estimate Solutions to Systems of Equations by Graphing	2 days
	8-3	Determine the Number of Solutions	2 days
	8-4	Use Substitution to Solve Systems of Equations	2 days
	8-5	Use Elimination to Solve Systems of Equations	2 days
	Additional/Extra Instructional Days		3 days
Spring Break March 24 - April 2			
	Unit 9 – Irrational Numbers, Exponents, and Scientific Notation		
	Big Idea: Big and Small Numbers		
	Essential Question: Why is it important to represent big and small numbers in different ways?		
	9-1	Represent Rational Numbers in Decimal Form	2 days
	9-2	Understand Irrational Numbers	2 days

April 5- April 30 20 days	9-3	Compare and Order Rational and Irrational Numbers	2 days
	9-4	Explore Patterns of Exponents	2 days
	9-5	Use Product and Quotient of Power Properties	2 days
	9-6	Use Power of a Power and Product Properties	2 days
	9-7	Use Powers of 10 to Estimate Quantities	2 days
	9-8	Perform Operations with Numbers in Scientific Notation	2 days
	Additional Days for Instruction and End of the Year Test		4 days
April 19-30	End of the Year ALEKS Window		
May 3 - May 28	CAASPP Testing		

Extra Instructional Days

Closing the Unit	Unit Review, Math Modeling, Unit Assessment, Performance Task, FIABs
Intervention	Fluency Practice, Differentiation (small group lessons, ALEKS, personalized practice)