


AgX Standards Alignment – Math

 Math – Middle School		Lesson 1 Ag in the Past	Lesson 2 Plants We Grow	Lesson 3 Resources We Use	Lesson 4 Resources We Recycle	Lesson 5 Energy We Consume	Lesson 6 Animals We Care For	Lesson 7 Food We Eat	Lesson 8 Ag in My Future
CCSS: Ratios and Proportional Relationships									
Grade 6	<ul style="list-style-type: none"> Understand ratio concepts and use ratio reasoning to solve problems. 			X					
Grade 7	<ul style="list-style-type: none"> Analyze proportional relationships and use them to solve real-world and mathematical problems. 			X					
CCSS: Conceptual Category – The Number System									
Grade 6	<ul style="list-style-type: none"> Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 								
	<ul style="list-style-type: none"> Compute fluently with multi-digit numbers and find common factors and multiples. 								
	<ul style="list-style-type: none"> Apply and extend previous understandings of numbers to the system of rational numbers. 						X		
Grade 7	<ul style="list-style-type: none"> Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. 								
Grade 8	<ul style="list-style-type: none"> Know that there are numbers that are not rational and approximate them by rational numbers. 								
CCSS: Conceptual Category – Expressions and Equations									
Grade 6	<ul style="list-style-type: none"> Apply and extend previous understandings of arithmetic to algebraic expressions. 								
	<ul style="list-style-type: none"> Reason about and solve one-variable equations and inequalities. 								
	<ul style="list-style-type: none"> Represent and analyze quantitative relationships between dependent and independent variables. 			X		X			
Grade 7	<ul style="list-style-type: none"> Use properties of operations to generate equivalent expressions. 			X					
	<ul style="list-style-type: none"> Solve real-life and mathematical problems using numerical and algebraic expressions and equations. 			X		X			
Grade 8	<ul style="list-style-type: none"> Work with radicals and integer exponents. 								
	<ul style="list-style-type: none"> Understand the connections between proportional relationships, lines, and linear equations. 			X		X		X	
	<ul style="list-style-type: none"> Analyze and solve linear equations and pairs of simultaneous linear equations. 								



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CCSS: Conceptual Category – Functions

Grade 8	• Define, evaluate, and compare functions.								
	• Use functions to model relationships between quantities.								

CCSS: Conceptual Category – Geometry

Grade 6	• Solve real-world and mathematical problems involving area, surface area, and volume.	X							
Grade 7	• Draw, construct and describe geometrical figures and describe the relationships between them.								
	• Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	X							
Grade 8	• Understand congruence and similarity using physical models, transparencies, or geometry software.								
	• Understand and apply the Pythagorean Theorem.								
	• Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.								

CCSS: Conceptual Category – Statistics and Probability

Grade 6	• Develop understanding of statistical variability.								
	• Summarize and describe distributions.								
Grade 7	• Use random sampling to draw inferences about a population.					X			
	• Draw informal comparative inferences about two populations.								
	• Investigate chance processes and develop, use, and evaluate probability models.								
Grade 8	• • Investigate patterns of association in bivariate data.					X			