

WILD Correlations: MATH GRADE 8

Content Standard 1: Mathematical Processes	
Learning Expectations	Project WILD (W) and Aquatic WILD (AW) Correlations
<p>GLE 0806.1.1 Use mathematical language, symbols, and definitions while developing mathematical reasoning.</p> <p>GLE 0806.1.2 Apply and adapt a variety of appropriate strategies to problem solving, including estimation, and reasonableness of the solution.</p> <p>GLE 0806.1.3 Develop independent reasoning to communicate mathematical ideas and derive algorithms and/or formulas.</p> <p>GLE 0806.1.4 Move flexibly between concrete and abstract representations of mathematical ideas in order to solve problems, model mathematical ideas, and communicate solution strategies.</p>	
<p>GLE 0806.1.5 Use mathematical ideas and processes in different settings to formulate patterns, analyze graphs, set up and solve problems and interpret solutions.</p>	<p>How Many Bears Can Live in This Forest?, W23 - Students collect “food tokens” and tally the amounts of foods of various types they collect, determining how bear survival is affected by food abundance and other factors.</p> <p>I’m Thirsty, W134 - Students use data provided to perform mathematical calculations and make inferences.</p> <p>Microtrek Treasure Hunt, W82 - Students classify and tally the types of wildlife they find.</p> <p>Urban Nature Search, W70 - Students organize and interpret data.</p> <p>What’s in the Air?, AW136 - Students graph data and compare results for different vinegar treatments.</p> <p>World Travelers, W330 - Students develop graphs or pie charts and maps depicting the proportions of exotic species of plants on their designated plots.</p>

GLE 0806.1.6	Read and interpret the language of mathematics and use written/oral communication to express mathematical ideas precisely.	
GLE 0806.1.7	Recognize the historical development of mathematics, mathematics in context, and the connections between mathematics and the real world.	
GLE 0806.1.8	Use technologies/manipulatives appropriately to develop understanding of mathematical algorithms, to facilitate problem solving, and to create accurate and reliable models of mathematical concepts.	

Content Standard 2: Number and Operations

Learning Expectations	Project WILD (W) and Aquatic WILD (AW) Correlations
GLE 0806.2.1 Extend understanding of the real number system to include irrational numbers.	
GLE 0806.2.2 Solve problems involving exponents and scientific notation using technology appropriately.	
GLE 0806.2.3 Solve real-world problems using rational and irrational numbers.	
GLE 0806.2.4 Understand and use the laws of exponents.	

Content Standard 3: Algebra

Learning Expectations	Project WILD (W) and Aquatic WILD (AW) Correlations
GLE 0806.3.1 Recognize and generate equivalent forms for algebraic expressions.	
GLE 0806.3.2 Represent, analyze, and solve problems involving linear equations and inequalities in one and two variables.	
GLE 0806.3.3 Solve systems of linear equations in two variables.	
GLE 0806.3.4 Translate among verbal, tabular, graphical and algebraic representations of linear functions.	
GLE 0806.3.5 Use slope to analyze situations and solve problems.	
GLE 0806.3.6 Compare and contrast linear and nonlinear functions.	

Content Standard 4: Geometry and Measurement

Learning Expectations	Project WILD (W) and Aquatic WILD (AW) Correlations
<p>GLE 0806.4.1 Derive the Pythagorean theorem and understand its applications.</p> <p>GLE 0806.4.2 Understand the relationships among the angles formed by parallel lines cut by transversals.</p> <p>GLE 0806.4.3 Understand the necessary levels of accuracy and precision in measurement.</p> <p>GLE 0806.4.4 Understand both metric and customary units of measurement.</p>	
<p>GLE 0806.4.5 Use visualization to describe or identify intersections, cross-sections, and various views of geometric figures.</p>	<p>Spider Web Geometry, W34 - Students apply principles of geometry to construct a replica of a spider's web.</p> <p>Whale of a Tail, AW10 - Students use computational, graphing, and measuring techniques to draw or sculpture life-size replicas of whales.</p>

Content Standard 5: Data Analysis, Statistics and Probability

Learning Expectations	Project WILD (W) and Aquatic WILD (AW) Correlations
<p>GLE 0806.5.1 Explore probabilities for compound, independent and/or dependent events.</p> <p>GLE 0806.5.2 Select, create, and use appropriate graphical representations of data (including scatterplots with lines of best fit) to make and test conjectures.</p> <p>GLE 0806.5.3 Evaluate the use of statistics in media reports.</p>	