

WILD Correlations: MATH GRADE 7

Content Standard 1: Mathematical Processes	
Learning Expectations	Project WILD (W) and Aquatic WILD (AW) Correlations
<p>GLE 0706.1.1 Use mathematical language, symbols, and definitions while developing mathematical reasoning.</p> <p>GLE 0706.1.2 Apply and adapt a variety of appropriate strategies to problem solving, including estimation, and reasonableness of the solution.</p> <p>GLE 0706.1.3 Develop independent reasoning to communicate mathematical ideas and derive algorithms and/or formulas.</p> <p>GLE 0706.1.4 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 0706.1.5 Use mathematical ideas and processes in different settings to formulate patterns, analyze graphs, set up and solve problems and interpret solutions.</p>	<p>Alice in Waterland, AW151 - Students gather data on their daily water use for 5 days. They implement water conservation and gather another set of data to compare results.</p> <p>Checks and Balances, W387 - Teams track herd size based on the series of imaginary events that occur over time.</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>Litter We Know, W434 - Students assign a relative value to each piece of litter in a collection and tally the total “score” for the collection.</p> <p>Lobster in Your Lunchbox, W245 - Students calculate the cost of a family’s meals for one day. They classify the food sources as plant or animal-derived, and as from wild or domesticated sources.</p>

	<p>Puddle Wonders!, AW114 - Students measure the depth, area and volume of puddles.</p> <p>Water's Going On?, AW149 - Students estimate and calculate water consumption.</p> <p>What's in the Air?, AW136 - Students graph data and compare results for different vinegar treatments.</p> <p>What's in the Water?, AW140 - Students graph the quantities of pollutants in a hypothetical water sample.</p> <p>Where Does Water Run?, AW21 - Students measure a site and calculate the volume of rainfall the site receives.</p> <p>Where Have All the Salmon Gone?, AW180 - Students graph and interpret actual fish population data in relation to historical events.</p>
<p>GLE 0706.1.6 Read and interpret the language of mathematics and use written/oral communication to express mathematical ideas precisely.</p> <p>GLE 0706.1.7 Recognize the historical development of mathematics, mathematics in context, and the connections between mathematics and the real world.</p> <p>GLE 0706.1.8 Use technologies/manipulatives appropriately to develop understanding of mathematical algorithms, to facilitate problem solving, and to create accurate and reliable models of mathematical concepts.</p>	

Content Standard 2: Number and Operations	
Learning Expectations	Project WILD (W) and Aquatic WILD (AW) Correlations
<p>GLE 0706.2.1 Extend understandings of addition, subtraction, multiplication and division to integers.</p> <p>GLE 0706.2.2 Understand and work with the properties of and operations on the system of rational numbers.</p>	

GLE 0706.2.3	Develop an understanding of and apply proportionality.	
GLE 0706.2.4	Use ratios, rates and perWILD to solve single- and multi-step problems in various contexts.	
GLE 0706.2.5	Understand and work with squares, cubes, square roots and cube roots.	
GLE 0706.2.6	Introduce the concept of negative exponents.	
GLE 0706.2.7	Understand and use scientific notation.	

Content Standard 3: Algebra		
Learning Expectations	Project WILD (W) and Aquatic WILD (AW) Correlations	
GLE 0706.3.1	Recognize and generate equivalent forms for simple algebraic expressions.	
GLE 0706.3.2	Understand and compare various representations of relations and functions.	
GLE 0706.3.3	Understand the concept of function as a rule that assigns to a given input one and only one number (the output).	
GLE 0706.3.4	Use function notation where $f(x)$ represents the output that the function f assigns to the input x .	
GLE 0706.3.5	Understand and graph proportional relationships.	
GLE 0706.3.6	Conceptualize the meanings of slope using various interpretations, representations, and contexts.	

GLE 0706.3.7	Use mathematical models involving linear equations to analyze real-world phenomena.	
GLE 0706.3.8	Use a variety of strategies to efficiently solve linear equations and inequalities.	

Content Standard 4: Geometry and Measurement

Learning Expectations	Project WILD (W) and Aquatic WILD (AW) Correlations	
GLE 0706.4.1	Understand the application of proportionality with similar triangles.	
GLE 0706.4.2	Apply proportionality to converting among different units of measurements to solve problems involving rates such as motion at a constant speed.	
GLE 0706.4.3	Understand and use scale factor to describe the relationships between length, area, and volume.	
GLE 0706.4.4	Understand and use ratios, derived quantities, and indirect measurements.	

Content Standard 5: Data Analysis, Statistics and Probability

Learning Expectations	Project WILD (W) and Aquatic WILD (AW) Correlations	
GLE 0706.5.1	Collect, organize, and analyze both single- and two-variable data.	

GLE 0706.5.2 Select, create, and use appropriate graphical representations of data.	Oh Deer!, W36 - Students graphs fluctuations in population size over time.
GLE 0706.5.3 Formulate questions and design studies to collect data about a characteristic shared by two populations, or different characteristics within one population.	
GLE 0706.5.4 Use descriptive statistics to summarize and compare data.	
GLE 0706.5.5 Understand and apply basic concepts of probability.	