

PLT Correlations: MATH GRADE 6

Content Standard 1: Mathematical Processes	
Learning Expectations	PLT Correlations
<p>GLE 0606.1.1 Use mathematical language, symbols, and definitions while developing mathematical reasoning.</p> <p>GLE 0606.1.2 Apply and adapt a variety of appropriate strategies to problem solving, including estimation, and reasonableness of the solution.</p> <p>GLE 0606.1.3 Develop independent reasoning to communicate mathematical ideas and derive algorithms and/or formulas.</p>	
<p>GLE 0606.1.4 Move flexibly between concrete and abstract representations of mathematical ideas in order to solve problems, model mathematical ideas, and communicate solution strategies.</p>	<p>29. Rain Reasons (p.123) - Students design experiments to see how climatic factors influence the growth of plants.</p> <p>41. How Plants Grow (p.179) - Students design and conduct tests to study plants' needs for light, water, and soil.</p> <p>77. Trees In Trouble (p.332) - Students measure and graph the effects of crowding, acid, and fertilizer on seedling height and radish diameter.</p>
<p>GLE 0606.1.5 Use mathematical ideas and processes in different settings to formulate patterns, analyze graphs, set up and solve problems and interpret solutions.</p>	<p>22. Trees as Habitats (p.102) - Students organize their data into tables and graphs to summarize their findings.</p> <p>25. Birds and Worms (p.111) - Students create bar graphs for their results.</p> <p>27. Every Tree For Itself (p.117) - Students record and compare results of the simulation for rounds conducted according to different scenarios.</p> <p>29. Rain Reasons (p.123) - Students design experiments to see how climatic factors influence the growth of plants.</p> <p>41. How Plants Grow (p.179) - Students design and conduct tests to study plants' needs for light, water, and soil.</p> <p>77. Trees In Trouble (p.332) - Students measure and graph the effects of crowding, acid, and fertilizer on seedling height and radish diameter.</p>
<p>GLE 0606.1.6 Read and interpret the language of mathematics and use written/oral communication to express mathematical ideas precisely.</p>	
<p>GLE 0606.1.7 Recognize the historical development of mathematics, mathematics in context, and the connections between mathematics and the real world.</p>	<p>22. Trees as Habitats (p.102) - Students organize their data into tables and graphs to summarize their findings.</p> <p>25. Birds and Worms (p.111) - Students create bar graphs for their results.</p> <p>27. Every Tree For Itself (p.117) - Students record and compare results of the simulation for rounds conducted according to different scenarios.</p>

	<p>29. Rain Reasons (p.123) - Students design experiments to see how climatic factors influence the growth of plants.</p> <p>41. How Plants Grow (p.179) - Students design and conduct tests to study plants' needs for light, water, and soil.</p> <p>77. Trees In Trouble (p.332) - Students measure and graph the effects of crowding, acid, and fertilizer on seedling height and radish diameter.</p>
GLE 0606.1.8 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	PLT Correlations
<p>GLE 0606.2.1 Understand and explain the procedures for multiplication and division of fractions, mixed numbers, and decimals.</p> <p>GLE 0606.2.2 Solve multi-step mathematical, contextual and verbal problems using fractions, mixed numbers, and decimals.</p>	
GLE 0606.2.3 Understand and use ratios, rates and percent.	
<p>GLE 0606.2.4 Understand and convert between fraction, decimal, and percent forms of rational numbers.</p> <p>GLE 0606.2.5 Develop meaning for integers; represent and compare quantities with integers.</p>	

Content Standard 3: Algebra

Learning Expectations	PLT Correlations
GLE 0606.3.1 Write and solve two-step equations and inequalities.	
GLE 0606.3.2 Interpret and represent algebraic relationships with variables in expressions, simple equations and inequalities.	
GLE 0606.3.3 Extend order of operations to include grouping symbols and exponents.	
GLE 0606.3.4 Use expressions, equations and formulas to solve problems.	
GLE 0606.3.5 Use multiple representations including symbolic algebra to model and/or solve contextual problems that involve linear relationships.	
GLE 0606.3.6 Understand and use the Cartesian coordinate system.	

Content Standard 4: Geometry and Measurement

Learning Expectations	PLT Correlations
GLE 0606.4.1 Understand and use basic properties of triangles, quadrilaterals, and other polygons.	
GLE 0606.4.2 Use the concepts of translation, rotation, reflection, and symmetry to understand congruence in the plane.	
GLE 0606.4.3 Develop and use formulas to determine the circumference and area of circles, and the area of trapezoids, and develop strategies to find the area of composite shapes.	
GLE 0606.4.4 Develop and use formulas for surface area and volume of 3-dimensional figures.	

Content Standard 5: Data Analysis, Statistics and Probability

Learning Expectations	PLT Correlations
GLE 0606.5.1 Understand the meaning of probability and how it is expressed.	
GLE 0606.5.2 Interpret representations of data from surveys and polls, and describe sample bias and how data representations can be misleading.	22. Trees as Habitats (p.102) - Students organize their data into tables and graphs to summarize their findings.