

Grade 5 Mathematics – Unit 8: Data and Graphs

Phoenixville Area School District

Stage 1 Desired Results		
<p>PA Core Standards: <u>CC.2.4.5.A.2</u> - Represent and interpret data using appropriate scale. <u>CC.2.4.5.A.4</u> - Solve problems involving computation of fractions using information provided in a line plot.</p> <p>PSSA Assessment Anchors: <u>M05.D-M.2.1</u> - Organize, display, and answer questions based on data.</p>	Transfer	
	<p>TRANSFER GOALS <i>Students will be able to independently use their learning to...</i></p> <ul style="list-style-type: none"> • <u>Problem-Solving</u>: Persistently apply various problem-solving strategies and organized approaches to accurately understand and solve problems. • <u>Mathematical Vocabulary</u>: Interpret mathematical vocabulary and apply proper terminology to engage in meaningful oral and written expression that communicates mathematical thinking, problem-solving methods, and rationale. 	
	Meaning	
	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;"> <p>UNDERSTANDINGS <i>Students will understand that...</i></p> <ul style="list-style-type: none"> • Various mathematical representations are useful for problem solving and communicating a solution. • Mathematical ideas must be communicated clearly in written, visual, or oral form • Organizing/interpreting data helps us make inferences and draw conclusions. </td> <td style="width: 50%;"> <p>ESSENTIAL QUESTIONS <i>Students will keep considering...</i></p> <ul style="list-style-type: none"> • What are the strengths and weaknesses of the tools at hand, and might there be better ones for the task? • What tools should I use here to be most efficient and effective? • How can models and graphs be used to share and understand information? • How do we use data to make decisions? </td> </tr> </table>	<p>UNDERSTANDINGS <i>Students will understand that...</i></p> <ul style="list-style-type: none"> • Various mathematical representations are useful for problem solving and communicating a solution. • Mathematical ideas must be communicated clearly in written, visual, or oral form • Organizing/interpreting data helps us make inferences and draw conclusions.
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Knowledge and Skills Acquisition		
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	<ul style="list-style-type: none"> • Graphs and tables have titles, scales, and labels that help us to interpret the information they present. <p>VOCABULARY</p> <ul style="list-style-type: none"> • Bar Graph • Line Graph • Pictograph • Line Plot • Interpret • Data • Scale • X-axis • Y-axis 	
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Stage 2 – Evidence

Code A/M/T	Evaluative Criteria	Assessment Evidence	
A/M/T Acquisition Meaning Making Transfer	<i>What criteria will be used in each assessment to evaluate attainment of the desired results?</i>	PERFORMANCE TASK(S) <i>Students will demonstrate understanding (meaning-making and transfer) through complex performance by...</i> Science Fair Performance Task <ul style="list-style-type: none"> • Students create a graph to determine plant growth over a period of time. <u>MIF Performance Task</u> <ul style="list-style-type: none"> • Student Edition workbook page 115 (only #1 pertains to line plots) 	Differentiation Considerations: [Work on this section after completing Stages 1-2 of all units]
A/M/T Acquisition Meaning Making Transfer	<i>What criteria will be used in each assessment to evaluate attainment of the desired results?</i>	OTHER EVIDENCE <u>Data/Graphs Assessment</u> – See <i>MIF Chapter 7 Test (only contains Line Plots)</i> <ul style="list-style-type: none"> • Multiple Choice • Constructed Response Prompts: to be determined <u>Canvas Teacher-Created Quiz</u> – Shared to commons <ul style="list-style-type: none"> • Search “Math in Focus - Ch. 7: Lesson 1, Line Plots and Line Graphs Quick Quiz” 	Differentiation Considerations: [Work on this section after completing Stages 1-2 of all units]

