

ELL Scaffold Grade 8 - Unit 4

	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 1 CCSS: 8.EE.5 WIDA ELDS: 3 Speaking Reading Writing	Graph and analyze the different representations of proportional relationships and interpret the unit rate as the slope of the graph which indicates the rate of change.		Demonstrate comprehension of the different representations of proportional relationships by interpreting and explaining the unit rate as the slope of the graph using Charts/Posters, a personal math dictionary and models. <i>Note: ELLs may not be familiar with US measurement, ounces, pounds, tons, acres</i>		VU: Slope, proportion, measurement units
					LFC: Negative (which is NOT), follow directions
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Demonstrate comprehension of the different representations of proportional relationships by interpreting and explaining in L1 and/or use gestures, examples and selected technical words.	Demonstrate comprehension of the different representations of proportional relationships by interpreting and explaining in L1 and/or use selected technical vocabulary in phrases and short sentences.	Demonstrate comprehension of the different representations of proportional relationships by interpreting and explaining using key, technical vocabulary in simple sentences.	Demonstrate comprehension of the different representations of proportional relationships by interpreting and explaining using key technical vocabulary in expanded sentences.	Demonstrate comprehension of the different representations of proportional relationships by interpreting and explaining the unit rate as the slope of the graph using technical vocabulary in complex sentences.
Learning Supports	Teacher Modeling Personal math dictionary Small group/triads Word/Picture Wall L1 text and/or support Charts/Posters	Teacher Modeling Personal math dictionary Small group/triads Word/symbols wall L1 text and/or support Sentence Frame Charts/Posters	Teacher Modeling Personal math dictionary Small group/triads Sentence Starter Word Wall Charts/Posters	Teacher Modeling Small group/triads	Teacher Modeling

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	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 2 CCSS: 8.EE.6 WIDA ELDS: 3 Reading Writing	Derive the equation of a line ($y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b) and use similar triangles to explain why the slope (m) is the same between any two points on a non-vertical line in the coordinate plane.		<u>Demonstrate comprehension</u> of how to derive the equation of a line and use similar triangle to explain why the slope is the same between any two points on a non-vertical line in the coordinate plane <i>using a Word Wall, Think Alouds, Charts/Posters and Partner work.</i>		VU: Slope, measurement units, coordinate plane <hr/> LFC: Comparative phrases, relative clauses <hr/> LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
	Language Objectives	Demonstrate comprehension of the equation of a line and why the slope is the same between any two points on a non-vertical line in the coordinate plane in L1 and/or use gestures, examples and selected technical words.	Demonstrate comprehension of the equation of a line and why the slope is the same between any two points on a non-vertical line in the coordinate plane in L1 and/or use selected technical vocabulary in phrases and short sentences.	Demonstrate comprehension of the equation of a line and why the slope is the same between any two points on a non-vertical line in the coordinate plane using key, technical vocabulary in simple sentences.	Demonstrate comprehension of the equation of a line and why the slope is the same between any two points on a non-vertical line in the coordinate plane using key, technical vocabulary in expanded sentences.
Learning Supports	Think Alouds Charts/Posters Partner work Demonstration Word/Picture Wall L1 text and/or support Completed examples	Think Alouds Charts/Posters Partner work Word/Picture Wall L1 text and/or support Sentence Frame Examples	Think Alouds Charts/Posters Partner work Sentence Starter Word Wall	Think Alouds Charts/Posters Partner work	Think Alouds Charts/Posters

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	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 3 CCSS: 8.EE.7 WIDA ELDS: 3 Reading Writing	Solve linear equations in one variable with rational number coefficients that might require expanding expressions using the distributive property and/or combining like terms, including examples with one solution, infinite solutions, or no solution.		<u>Demonstrate comprehension</u> of written problems on how to solve linear equations in one variable with rational number coefficients that might require expanding expressions using the distributive property and/or combining like terms, including examples with one solution, infinite solutions, or no solution <i>using a Charts/Posters, a Word Wall and Math Journal.</i>		VU: Linear/non-linear, coefficients, solution, infinite
					LFC: Question words
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Demonstrate comprehension of written problems in L1 and/or which use gestures, examples and selected technical words on how to solve linear equations in one variable with rational number coefficients.	Demonstrate comprehension of written problems in L1 and/or which use selected technical vocabulary in phrases and short sentences on how to solve linear equations in one variable with rational number coefficients.	Demonstrate comprehension of written problems which use key, technical vocabulary in simple sentences on how to solve linear equations in one variable with rational number coefficients.	Demonstrate comprehension of written problems which use key, technical vocabulary in expanded sentences on how to solve linear equations in one variable with rational number coefficients.	Demonstrate comprehension of written problems which use technical vocabulary in complex sentences on how to solve linear equations in one variable with rational number coefficients.
Learning Supports	Teacher Modeling Charts/Posters Math Journal Word/Picture Wall L1 text and/or support Illustrations/Illustrations/diagrams/drawings/drawings Competed examples	Teacher Modeling Charts/Posters Math Journal Word/Picture Wall L1 text and/or support Sentence Frame	Teacher Modeling Charts/Posters Math Journal Sentence Starter Word Wall	Teacher Modeling Charts/Posters Math Journal	Charts/Posters Math Journal

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	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 4 CCSS: 8.EE.8 WIDA ELDS:3 Speaking Writing	Solve systems of linear equations in two variables by inspection, algebraically, and/or graphically (estimate solutions) to demonstrate solutions correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.		<u>Explain</u> orally and in writing how to solve systems of linear equations in two variables by inspection, algebraically, and/or graphically (estimate solutions) to demonstrate solutions correspond to points of intersection of their graphs <i>using</i> Manipulatives, Charts/Posters, a Word Wall <i>and</i> a Math Journal.		VU: Solution, coordinate plane
					LFC: Cause/effect embedded clauses
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Explain orally and in writing how solutions correspond to points of intersection of their graphs in L1 and/or using gestures, examples and selected technical words in phrases.	Explain orally and in writing how solutions correspond to points of intersection of their graphs in L1 and/or using selected technical vocabulary in phrases and short sentences.	Explain orally and in writing how solutions correspond to points of intersection of their graphs using key, technical vocabulary in simple sentences.	Explain orally and in writing how solutions correspond to points of intersection of their graphs using key, technical vocabulary in expanded sentences.	Explain orally and in writing how solutions correspond to points of intersection of their graphs using technical vocabulary in complex sentences.
Learning Supports	Manipulatives Math Journal Charts/Posters Word/Picture Wall L1 text and/or support Illustrations/Illustrations/diagrams/drawings/drawings	Manipulatives Math Journal Charts/Posters Word/Picture Wall L1 text and/or support Sentence Frame	Manipulatives Math Journal Charts/Posters Sentence Starter Word Wall	Manipulatives Math Journal Charts/Posters	Manipulatives

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	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 5 CCSS: 8.F.4 WIDA ELDS: 3 Listening Reading Writing	Construct a function to model the linear relationship between two variables and determine the rate of change and initial value of the real world data it represents from either graphs or tabulated values.		<u>Demonstrate comprehension</u> of the rate of change and initial value of real world data by <u>identifying and constructing</u> functions that model linear relationships between two variables <i>using a Word Wall, Charts/Posters and personal math dictionary.</i>		VU: Function, faucet, health club membership, constant rate, fee
					LFC: Embedded clauses
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Demonstrate comprehension of the rate of change and initial value of real world data by identifying the function which models the linear relationship between two variables in L1 and/or using gestures, examples and selected technical words.	Demonstrate comprehension of the rate of change and initial value of real world data by identifying the function which models the linear relationship between two variables in L1 and/or using selected technical vocabulary in phrases and short sentences.	Demonstrate comprehension of the rate of change and initial value of real world data by identifying the function which models the linear relationship between two variables using key, technical vocabulary in simple sentences.	Demonstrate comprehension of the rate of change and initial value of real world data by identifying the function which models the linear relationship between two variables using key technical vocabulary in expanded sentences.	Demonstrate comprehension of the rate of change and initial value of real world data by identifying the function which models the linear relationship between two variables using technical vocabulary in complex sentences.
Learning Supports	Teacher Modeling Personal math dictionary Peer Coach Word/Picture Wall L1 text and/or support Examples Cloze Sentences	Teacher Modeling Personal math dictionary Peer Coach Word/Picture Wall L1 text and/or support Sentence Frame	Teacher Modeling Charts/Posters Peer Coach Word Wall Sentence Starter	Teacher Modeling Charts/Posters	Charts/Posters

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	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 6 CCSS: 8.F.5 WIDA ELDS:3 Reading Writing	Sketch a graph of a function from a qualitative description and give a qualitative description of a graph of a function. ☐		<u>Demonstrate comprehension</u> of graphs of functions by sketching a graph of a function from a qualitative description and giving a qualitative description of graph of a function <i>using a personal math dictionary, Word Wall, examples, and a Think Alouds.</i>		VU: Function, ounces, constant rate of speed
					LFC: Embedded clauses; comparatives
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Demonstrate comprehension of functions by sketching a graph of a function from a qualitative description in L1 and/or using gestures and selected technical words.	Demonstrate comprehension of functions by sketching a graph of a function from a qualitative description in L1 and/or using selected technical vocabulary in phrases or short sentences.	Demonstrate comprehension of functions by sketching a graph of a function from a qualitative description using key, technical vocabulary in simple sentences.	Demonstrate comprehension of functions by sketching a graph of a function from a qualitative description using key, technical vocabulary in expanded sentences.	Demonstrate comprehension of functions by sketching a graph of a function from a qualitative description using technical vocabulary in complex sentences.
Learning Supports	Think Alouds Personal math dictionary Word/Picture Wall L1 text and/or support Cloze Sentences	Think Alouds Personal math dictionary Word/Picture Wall L1 text and/or support Sentence Frame	Think Alouds Sentence Starter Word Wall Illustrations/diagrams/drawings	Think Alouds	Think Alouds