

Algebra 1 – Unit 5 – ELL Scaffold

SLO	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 1 CCSS: F.LE.1 F.LE.2 WIDA ELDS: 3 Reading Writing Speaking	Write linear and exponential functions (e.g. growth/decay and arithmetic and geometric sequences) from graphs, tables, or a description of the relationship, recursively and with an explicit formula, and describe how quantities increase linearly and exponentially over equal intervals.		<u>Describe and explain</u> how to write linear and exponential functions from a graph, table, or a description recursively and with an explicit formula, and how quantities increase linearly and exponentially over equal intervals <i>using note cards, Think-alouds, and a Learnzillion.com.</i> <i>Link to site: http://learnzillion.com/lessons/291-model-exponential-growth-situations-with-2-variables</i>		VU: Linear, exponential, functions, growth, decay, recursive LFC: Imperative tense, present tense, complex sentences, question words, transitional phrases LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Describe and explain how to write linear and exponential functions from a graph, table, or a description and how quantities increase in L1 and/or use gestures, examples, and selected, technical words.	Describe and explain how to write linear and exponential functions from a graph, table, or a description and how quantities increase in L1 and/or use selected, technical vocabulary in phrases and short sentences.	Describe and explain how to write linear and exponential functions from a graph, table, or a description and how quantities increase using key, technical vocabulary in simple sentences.	Describe and explain how to write linear and exponential functions from a graph, table, or a description and how quantities increase using key, technical vocabulary in expanded sentences.	Describe and explain how to write linear and exponential functions from a graph, table, or a description and how quantities increase using technical vocabulary in complex sentences.
Learning Supports	Note Cards Think -aloud Checklist of Steps Highlighted Words/Boldface Words Charts/Posters Teacher Support Word Bank Gestures	Note Cards Think -aloud Checklist of Steps Highlighted Words/Boldface Words Charts/Posters Teacher Support Word/Phrase Bank	Note Cards Think -aloud Checklist of Steps Word Bank	Note Cards Think -aloud	Note Cards

Algebra 1 – Unit 5 – ELL Scaffold

	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 2 CCSS: S.ID.1 S.ID.2 S.ID.3 WIDA ELDS: 3 Reading Writing Speaking	Represent data on the real number line (i.e. dot plots, histograms, and box plots) and use statistics to compare and interpret differences in shape, center, and spread in the context of the data (account for effects of outliers)		Sequence the steps needed to represent data on the real number line and use statistics to <u>compare and interpret</u> differences in shape, center, and spread in the context of the data <i>using a cloze activity, Think-alouds, and partner work.</i>		VU: Dot plots, histograms, box plots, statistics, spread, context, outliers
					LFC: Transitional phrases, ordinal numbers, imperatives, complex sentences, comparative language
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Sequence the steps needed to represent data on the real number line and use statistics to compare and interpret differences in L1 and/or use gestures, examples, and selected, technical words.	Sequence the steps needed to represent data on the real number line and use statistics to compare and interpret differences in L1 and/or use selected, technical vocabulary in phrases and short sentences.	Sequence the steps needed to represent data on the real number line and use statistics to compare and interpret differences using key, technical vocabulary in simple sentences.	Sequence the steps needed to represent data on the real number line and use statistics to compare and interpret differences using key, technical vocabulary in expanded sentences.	Sequence the steps needed to represent data on the real number line and use statistics to compare and interpret differences using technical vocabulary in complex sentences.
Learning Supports	Think -aloud Partner work Cloze Activity Checklist of Steps Highlighted Words/Boldface Words Word Bank	Think -aloud Partner work Checklist of Steps Highlighted Words/Boldface Words Sentence Frame Word/Phrase Bank	Think -aloud Partner work Sentence Starter	Think -aloud Partner work	Think -aloud

Algebra 1 – Unit 5 – ELL Scaffold

	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 3 CCSS: S.ID.4 WIDA ELDS: 3 Reading Writing Speaking	Use the mean and standard deviation of a data set to fit it to a normal distribution, estimate population percentages, and recognize that there are data sets for which such a procedure is not appropriate (use calculators, spreadsheets, and tables to estimate areas under the normal curve)		<u>Explain</u> orally and in writing how and when to use the mean and standard deviations of a data to fit it to a normal distribution and estimate population percentages <i>using note cards, teacher modeling, and think-alouds</i> . <i>Note: Multiple meaning of “mean and property”</i>		VU: Mean, standard deviation, normal distribution, property, probability
					LFC: Complex questions, transitional phrases, cause and effect
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Explain orally and in writing how and when to use the mean and standard deviations of a data set for specific purposes in L1 and/or use gestures, examples, and selected, technical words.	Explain orally and in writing how and when to use the mean and standard deviations of a data set for specific purposes in L1 and/or use selected, technical vocabulary in phrases and short sentences.	Explain orally and in writing how and when to use the mean and standard deviations of a data set for specific purposes using key, technical vocabulary in simple sentences.	Explain orally and in writing how and when to use the mean and standard deviations of a data set for specific purposes using key, technical vocabulary in expanded sentences.	Explain orally and in writing how and when to use the mean and standard deviations of a data set for specific purposes using technical vocabulary in complex sentences.
Learning Supports	Think -aloud in L1 Teacher Modeling Note Cards Highlighted Words/Boldface Words Word Bank Gestures Cloze Activity Think -aloud Native language support	Think -aloud in L1 Teacher Modeling Note Cards Highlighted Words/Boldface Words Word/Phrase Bank Sentence Frame Think -aloud Native language support	Think -aloud Teacher Modeling Note Cards Sentence Starter	Think -aloud Teacher Modeling	Think -aloud

Algebra 1 – Unit 5 – ELL Scaffold

	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 4 CCSS: S.ID.5 WIDA ELDS: 3 Speaking Reading Writing	Summarize and interpret categorical data for two categories in two-way frequency tables; recognize associations and trends in the data.		<u>Summarize and justify</u> associations and trends in categorical data for two categories in two-way frequency tables <i>using linguistic supports, word bank and a small group.</i>		VU: Categorical data, two-way frequency tables, associations, trends
					LFC: Complex sentences, questions, imperative tense, transitional phrases
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Summarize and justify associations and trends in categorical data in L1 and/or use gestures, examples, and selected, technical words.	Summarize and justify associations and trends in categorical data in L1 and/or use selected, technical vocabulary in phrases and short sentences.	Summarize and justify associations and trends in categorical data using key, technical vocabulary in simple sentences.	Summarize and justify associations and trends in categorical data using key, technical vocabulary in expanded sentences.	Summarize and justify associations and trends in categorical data using technical vocabulary in complex sentences.
Learning Supports	Cloze Activity Word Bank Small group/triads Charts/Posters L1 text and/or support Pictures/Illustrations/diagrams/drawings Multilingual Math Glossary (link to)	Sentence Frame Word/Phrase Bank Small group/triads Charts/Posters L1 text and/or support Multilingual Math Glossary (link to)	Small group/ triads Sentence Starter Multilingual Math Glossary (link to)	Small group/ triads Sentence Starter	Small group/ triads

Algebra 1 – Unit 5 – ELL Scaffold

	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 5 CCSS: S.ID.6 WIDA ELDS: 3 Speaking Reading Writing	Represent and describe data for two variables on a scatter plot, fit a function to the data, analyze residuals (in order to informally assess fit), and use the function to solve problems. a) Uses a given function or choose a function suggested by the context. Emphasize linear and exponential models.		<u>Demonstrate comprehension</u> of linear and exponential models by representing and <u>describing</u> data for two variables on a scatter plot, fit the function to the data, assess the fit and use the function to solve problem. <u>Explain</u> in writing how to use a function to solve problems <i>using note cards, Think-alouds, and a checklist of steps.</i>		VU: Scatter plot, function, residuals, linear model, exponential model
					LFC: Comparative language, transitional phrases, complex sentences and questions
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Describe and explain how to use a function to solve problems in L1 and/or use gestures, examples, and selected, technical words.	Describe and explain how to use a function to solve problems in L1 and/or use selected, technical vocabulary in phrases and short sentences.	Describe and explain how to use a function to solve problems using key, technical vocabulary in simple sentences.	Describe and explain how to use a function to solve problems using key, technical vocabulary in expanded sentences.	Describe and explain how to use a function to solve problems using technical vocabulary in complex sentences.
Learning Supports	Note Cards Think -aloud Checklist of Steps Highlighted Words/Boldface Words Charts/Posters Teacher Support Word Bank Gestures	Note Cards Think -aloud Checklist of Steps Highlighted Words/Boldface Words Charts/Posters Teacher Support Word/Phrase Bank	Note Cards Think -aloud Checklist of Steps	Note Cards Think -aloud	Note Cards

Algebra 1 – Unit 5 – ELL Scaffold

	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 6 CCSS: S.ID.7 S.ID.8 WIDA ELDS: 3 Speaking Listening Reading Writing	Interpret the slope, intercept and correlation coefficient (compute using technology) of a linear model.		<u>Interpret and explain</u> , orally and in writing, the slope, intercept, and correlation coefficient of a linear model <i>using a checklist of steps, a peer coach, and linguistic supports.</i> <i>Note: meaning of phrase “best fit”</i>		VU: Interpret, slope, intercept, correlation coefficient, linear model, line of best fit
					LFC: Transitional phrases, questions, complex sentences, imperative tense
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Interpret and explain, orally and in writing, the slope, intercept, and correlation coefficient of a linear model in L1 and/or use gestures, examples, and selected, technical words.	Interpret and explain, orally and in writing, the slope, intercept, and correlation coefficient of a linear model in L1 and/or use selected, technical vocabulary in phrases and short sentences.	Interpret and explain, orally and in writing, the slope, intercept, and correlation coefficient of a linear model using key, technical vocabulary in simple sentences.	Interpret and explain, orally and in writing, the slope, intercept, and correlation coefficient of a linear model using key, technical vocabulary in expanded sentences.	Interpret and explain, orally and in writing, the slope, intercept, and correlation coefficient of a linear model using technical vocabulary in complex sentences.
Learning Supports	Peer Coach Checklist of Steps Cloze Activity Word Bank Charts/Posters L1 text and/or support Pictures/Illustrations/diagrams /drawings	Peer Coach Checklist of Steps Sentence Frame Word/Phrase Bank Chart/poster L1 text and/or support	Peer Coach Checklist of Steps Sentence Starter	Peer Coach Checklist of Steps	Peer Coach

Algebra 1 – Unit 5 – ELL Scaffold

	Student Learning Objective (SLO)		Language Objective		Language Needed
SLO: 7 CCSS: S.ID.9 WIDA ELDS: 3 Listening Speaking	Distinguish between correlation and causation in a data context.		<u>Recognize and explain</u> the distinction between correlation and causation in a data context <i>using white boards, linguistic supports and group work.</i>		VU: Technical vocabulary specific to word problem
					LFC: Imperative tense, complex sentences
					LC: Varies by ELP level
	ELP 1	ELP 2	ELP 3	ELP 4	ELP 5
Language Objectives	Recognize and explain the distinction between correlation and causation in a data context in L1 and/ or word problems with gestures, examples, and selected, technical words.	Recognize and explain the distinction between correlation and causation in a data context using L1 and/ or selected technical vocabulary in phrases and short sentences.	Recognize and explain the distinction between correlation and causation in a data context using key, technical vocabulary in simple sentences.	Recognize and explain the distinction between correlation and causation in a data context key, technical vocabulary in expanded sentences.	Recognize and explain the distinction between correlation and causation in a data context using technical vocabulary in complex sentences.
Learning Supports	White Board Small group/ triads Word Bank Native language support Teacher Support Cloze Sentences	White Board Small group/ triads Word Bank Native language support Teacher Support Sentence Frame	White Board Small group/ triads Word Bank Sentence Starter	White Board Small group/ triads	White Board