Pre-Kindergarten-Kindergarten
Mathematics
Framework for FORMATIVE/CLASSROOM Instruction and Assessment
Receptive Domains of **Listening and Reading**

Pennsylvania English Language Proficiency Standard 3
English language learners communicate information, ideas, and concepts necessary for academic success in the content area of Mathematics.

Pennsylvania Core Standards

Speaking and Listening
CC.1.5.PK.C Respond to what a speaker says in order to follow directions, seek help, or gather information.
CC.1.5.PK.A Participate in collaborative conversations with peers and adults in small and larger groups.
CC.1.5.K.A Participate in collaborative conversations with peers and adults in small and larger groups.

Mathematics
CC.2.4.PreK.A.1 Describe and compare measurable attributes of length and weight of everyday objects.
CC.2.4.K.A.1 Describe and compare attributes of length, area, weight, and capacity of everyday objects.

The PA ELL Overlays for English Language Arts and Mathematics assist educators in developing instructional units, lessons, or activities that are meaningful and comprehensible for English language learners. They illustrate the dynamic process of adapting instruction and assessment based on the English language proficiency of students. The PA ELL Overlays for English Language Arts and Mathematics are models that exemplify adaptations for a select instructional context and provide resources to extend this process to other instructional units.

Listening Model Performance Indicator (MPI)

Classroom Context: Analyze attributes of objects.

Cognitive Function: Students at all levels of English proficiency will ANALYZE attributes of objects.

Concepts	Competencies	Vocabulary and Topic Related Language	Proficiency Level 1 Entering	Proficiency Level 2 Emerging	Proficiency Level 3 Developing	Proficiency Level 4 Expanding	Proficiency Level 5 Bridging
Measureable attributes	Describe measurable attributes of objects, such as length and weight. Sort and order by one attribute. Compare two objects with a measureable attribute in common and describe the difference. Describe several measurable attributes of a single object. Use ordinal number words to describe the position of objects (first, second, last). Practice using measurement vocabulary.	Bigger (than) Heavier Length Longer Measure Shorter Side Smaller Taller Both . . . Just like . . . One has . . ., but the other doesn't. Not as . . . as . . . These . . . those . . . First, second, last . . .	Associate the size of real-life objects with non-standard measurement tools following explicit, repeated examples, as modeled and monitored by the teacher.	Sort real-life objects by size using non-standard measurement tools based on oral directions and visual or graphic support with a partner.	Determine size of real-life objects using non-standard measurement tools with a partner as modeled orally.	Estimate size of objects from pictures using non-standard measurement tools with a partner as directed orally.	Rank size of objects described according to nonstandard measurements tools with a partner as directed orally.

Reading Model Performance Indicator (MPI)

Classroom Context: Analyze attributes of objects.

Cognitive Function: Students at all levels of English proficiency will ANALYZE attributes of objects.

Concepts	Competencies	Vocabulary and Topic Related Language	Proficiency Level 1 Entering	Proficiency Level 2 Emerging	Proficiency Level 3 Developing	Proficiency Level 4 Expanding	Proficiency Level 5 Bridging
Measureable attributes	Describe measurable attributes of objects, such as length and weight. Sort and order by one attribute. Compare two objects with a measureable attribute in common and describe the difference. Describe several measurable attributes of a single object. Use ordinal number words to describe the position of objects (first, second, last). Practice using measurement vocabulary.	Bigger (than) Heavier Length Longer Measure Shorter Side Smaller Taller Both . . . Just like . . . One has . . ., but the other doesn't. Not as . . . as . . . These . . . those . . . First, second, last . . .	Match icons of objects to single measurable attributes described orally following explicit, repeated examples, as modeled and monitored by the teacher.	Sort real objects by a single attribute according to descriptive words or phrases with a partner.	Sort pictures of objects according to two measurable attributes in a small group.	Find pairs of illustrated words about objects and their measurable attributes in a small group.	Identify words related to measurable attributes in phrases or short sentences.

Building Receptive Model Performance Indicators (MPI) to differentiate and scaffold instruction per English language proficiency level by adjusting the *language function* and *support*.							
Classroom Context:							
Cognitive Function: Students at ALL levels of English proficiency will							
Concepts	**Competencies**	**Vocabulary and Topic Related Language**	**Proficiency Level 1 Entering**	**Proficiency Level 2 Emerging**	**Proficiency Level 3 Developing**	**Proficiency Level 4 Expanding**	**Proficiency Level 5 Bridging**
			Language Function (differentiated measurable expectations of student language use increasing in complexity and amount from English language proficiency level 1 to level 5)				
			Match Identify Find labeled real-life objects	Distinguish between Match examples Match labeled pictures	Use pictures to identify Sort labeled pictures Classify visuals	Compare Distinguish Categorize	Draw conclusions Summarize Make observations
			Content Stem (selected focus of grade-level curriculum for all students remains constant across all English language proficiency levels)				
			Instructional Support (scaffolds to accompany explicit instruction with multiple opportunities for student response and feedback decreasing in degree from English language proficiency level 1 to level 5. "I do, We do, You do")				
			Manipulative materials Visual support Realia Sentence frames	Manipulative materials Visual support Realia Sentence frame	Manipulative materials Visual support Realia Sentence frame	Manipulative materials Visual support Realia Sentence frame	Manipulative materials Sentence Frames Graphic organizers Word bank

			Graphic organizers Partner Flexible grouping First language support Re-teaching and/or pre-teaching Modeling	Graphic organizers Word bank Rubrics Checklists Partner Flexible grouping First language support Re-teaching and/or pre-teaching Modeling	Graphic organizers Word bank Rubrics Checklists Partner Flexible grouping First language support Re-teaching and/or pre-teaching Modeling	Graphic organizers Word bank Rubrics Checklists Partner Flexible grouping First language support Re-teaching and/or pre-teaching Modeling Guided model	Rubrics Checklists Partner Guided model