

Pre-Kindergarten-Kindergarten Mathematics

Framework for FORMATIVE/CLASSROOM Instruction and Assessment Productive Domains of **Speaking and Writing**

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.

Speaking Model Performance Indicator (MPI)

Classroom Context: Analyze measurable attributes of objects.

Cognitive Function: Students at all levels of English proficiency will ANALYZE measurable 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	<p>Describe measurable attributes of objects, such as length and weight. Sort and order by one attribute.</p> <p>Compare two objects with a measureable attribute in common and describe the difference.</p> <p>Describe several measurable attributes of a single object.</p> <p>Use ordinal number words to describe the position of objects (first, second, last).</p> <p>Practice using measurement vocabulary.</p>	<p>Bigger (than)</p> <p>Heavier</p> <p>Length</p> <p>Longer</p> <p>Measure</p> <p>Shorter</p> <p>Side</p> <p>Smaller</p> <p>Taller</p> <p>Both . . .</p> <p>Just like . . .</p> <p>One has . . . , but the other doesn't.</p> <p>Not as . . . as . . .</p> <p>These . . . those . . .</p> <p>First, second, last . . .</p>	<p>Indicate attributes of objects using gestures and words following explicit, repeated examples, as modeled and monitored by the teacher with ample student practice.</p>	<p>Describe attributes of objects using gestures and words with a partner.</p>	<p>Describe in detail attributes of objects with a partner.</p>	<p>Compare attributes of objects using visuals in small groups.</p>	<p>Specify similarities and differences of attributes of objects in small groups.</p>

Writing Model Performance Indicator (MPI)

Classroom Context: Analyze measurable attributes of objects.

Cognitive Function: Students at all levels of English proficiency will ANALYZE measurable 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	<p>Describe measurable attributes of objects, such as length and weight. Sort and order by one attribute.</p> <p>Compare two objects with a measurable attribute in common and describe the difference.</p> <p>Describe several measurable attributes of a single object.</p> <p>Use ordinal number words to describe the position of objects (first, second, last).</p> <p>Practice using measurement vocabulary.</p>	<p>Bigger (than)</p> <p>Heavier</p> <p>Length</p> <p>Longer</p> <p>Measure</p> <p>Shorter</p> <p>Side</p> <p>Smaller</p> <p><u>Taller</u></p> <p>Both . . .</p> <p>Just like . . .</p> <p>One has . . . , but the other doesn't.</p> <p>Not as . . . as . . .</p> <p>These . . . those . . .</p> <p>First, second, last . . .</p>	<p>Circle or underline single measurable attributes of objects following explicit repeated examples, as modeled by the teacher.</p>	<p>Identify objects according to measurable attributes by placing pictures on a graphic organizer as modeled by the teacher.</p>	<p>Describe real objects according to measurable attributes by copying words using graphic organizers with a partner.</p>	<p>Compare visually supported measurable attributes of objects using invented spelling and a graphic organizer.</p>	<p>Illustrate measurable attributes of objects using details and descriptive words from a word bank.</p>

Building Productive 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)				
			Identify Answer yes/no questions Repeat Name	Answer either/or questions Restate Describe	Sequence steps Compare Draw Retell	Develop Predict Summarize	Revise Draw conclusions Create
			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

