Grades 3-5 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.1.5.3.A Engage effectively in a range of collaborative discussions on grade level topics and texts, building on others' ideas and expressing their own clearly.

CC.1.5.4.A Engage effectively in a range of collaborative discussions on grade level topics and texts, building on others' ideas and expressing their own clearly.

CC.1.5.5.A Engage effectively in a range of collaborative discussions on grade level topics and texts, building on others' ideas and expressing their own clearly.

Mathematics

CC.2.1.3.C.1 Explore and develop an understanding of fractions as numbers. M03.A-F.1.1.1, M03.A-F.1.1.2, M03.A-F.1.1.3, M03.A-F.1.1.4, M03.A-F.1.1.5

CC.2.1.4.C.1 Extend the understanding of fractions to show equivalence and ordering. M04.A-F.1.1.1, M04.A-F.1.1.2

CC.2.1.5.C.1 Use the understanding of equivalency to add and subtract fractions. M05.A-F.1.1.1

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: Understand fractions and fraction problems.

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
Fractions	Develop an understanding of fractions as numbers. Demonstrate an understanding of fraction equivalence. Explain operations as they pertain to fractions.	Denominator Equivalent fractions Estimate Fraction Numerator Pattern Consequently In part As a whole In conclusion With a focus on First, Second, Next, Last	Identify proportional representation of objects from oral directions and visuals following explicit, repeated examples, as modeled and monitored by the teacher.	Match everyday examples of fractions with oral descriptions using graphic or visual support	Follow multi- step directions to change proportional representations of fractions in graphs or visuals.	Analyze everyday situations involving fractions from oral scenarios with graphic support.	Apply ways of using fractions in grade-level situations from oral discourse.

Reading Model Performance Indicator (MPI)

Classroom Context: Understand fractions and fraction problems.

Cognitive Function: Students at all levels of English proficiency will UNDERSTAND fractions and fraction problems. Concepts Competencies Vocabulary Proficiency Proficiency Proficiency Proficiency Proficiency Level 1 Level 2 Level 3 Level 4 Level 5 and Topic Related Entering Emerging Developing Expanding Bridging Language Fractions Develop an Denominator Sort fractional Compare or Follow listed Follow written Interpret rank fractional understanding of instructions instructions to various representations fractions as Equivalent determine of everyday representations that involve representations numbers. fractions objects with a hands-on math when and how of numbers in of everyday partner objects with a using fractions. to apply math real-life Estimate following partner. in real-life problems Demonstrate an situations explicit, explaining understanding of Fraction repeated involving operations fraction examples, as fractions. pertaining to equivalence. modeled and Numerator fractions monitored by Explain the teacher. operations as Pattern they pertain to Consequently fractions. In part As a whole In conclusion With a focus on First, Second, Next, Last . . .

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)						
			Identify	Organize	Explain	Interpret	Prove		
			Label	Describe	Retell	Analyze	Synthesize		
			Classify	Define	Summarize	Infer	Create		
			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 deg from English language proficiency level 1 to level 5. "I do, We do, You do"						
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			Manipulative materials	Manipulative materials	Manipulative materials	Guided model Visual support	Guided model Partner		
			Visual support	Visual support	Visual support	Realia	Graphic		
			Realia	Realia	Realia	Sentence	organizers		
			Sentence frames	Sentence frames	Sentence frames	frames	Word bank		
			Graphic	Graphic	Graphic	Graphic organizers	Marking text		
			organizers	organizers	organizers		Rubrics		

		Partner Flexible grouping First language support Modeling Re-teaching and/or pre- teaching	Word bank Rubrics Checklists Partner Flexible grouping First language support Modeling Re-teaching and/or pre- teaching Activate/build prior knowledge	Word bank Marking text Rubrics Checklists Partner Flexible grouping First language support Modeling Re-teaching and/or pre- teaching Activate/build prior knowledge	Marking text Word bank Rubrics Checklists Partner/group work Modeling Frontload vocabulary Activate/build prior knowledge	Checklists Partner/roup work Modeling Frontload vocabulary Activate/build prior knowledge
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