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

The Pennsylvania English Learner (EL) Overlays assist educators in developing instructional units, lessons, or activities that are meaningful and comprehensible for English learners, and are aligned with Pennsylvania's *EL Differentiation Protocol*.

The EL Overlays illustrate the dynamic process of adapting instruction and assessment based on the English language proficiency of students. These are models that exemplify adaptations for a select instructional contexts and provide resources to extend this process to other instructional units. Key features of the Overlays are Model Performance Indicators (MPIs) which differentiate and scaffold instruction per ELP level by adjusting the language function and instructional support.

The EL Overlays are organized by: 1) content area, 2) grade cluster, and 3) language domain (receptive/productive).

Each **Receptive** Overlay contains:

Page 1: Introduction

Page 2: Example Listening Differentiation with Model Performance Indicators (MPIs)

Page 3: Example Reading Differentiation with Model Performance Indicators (MPIs)

Page 4: Receptive Performance Indicator (PI) Builder

Page 5: Differentiation Template

Listening Differentiation with Model Performance Indicators (MPIs)

ELD Standard 4: English learners communicate information, ideas, and concepts necessary for academic success in Science.

Content Standard(s): 3.3.K.A1 Distinguish between three types of earth materials – rock, soil, and sand

Concepts: Different materials are suited to different purposes.

Competencies:
- Analyze data from testing objects made from different materials to determine if a proposed object functions as intended.
- K-ESS3-1 Use a model to explain the relationship between the needs of different plants or animals and the places they live.

Key Use of Academic Language (KUALA): Students at all levels of English proficiency will produce **RECOUNTS**.

Academic Language Components		
Discourse	**Sentence**	**Word**
Science Journaling (observations; list characteristics) Create a rock, sand, and soil museum	This is an example of . . . How is this like . . . Compare/Contrast How are these alike? How are these different? Can you identify the . . . Can you draw . . .	Earth materials Rock Soil Sand Size Composition Texture Sediment

ELP Level 1 Entering MPI	ELP Level 2 Emerging MPI	ELP Level 3 Developing MPI	ELP Level 4 Expanding MPI	ELP Level 5 Bridging MPI
Identify the three types of earth materials (rock, soil, and sand) by pointing to pictures, graphics or samples with teacher prompts.	Collect types of earth materials as directed by one-step teacher prompts.	Respond to WH-questions about the three types of earth materials in a small group.	Identify the three types of earth materials following two-step oral directions in a small group.	Respond to questions about the three types of earth materials with a partner.

Reading Differentiation with Model Performance Indicators (MPIs)

ELD Standard 4: English learners communicate information, ideas, and concepts necessary for academic success in Science.

Content Standard(s): 4.1.K.E Identify how the changes of seasons affect their local environment.

Concepts:
- ESS2.D Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time.
- PS3.B Sunlight warms the Earth's surface.
- ESS3.B) Some kinds of severe weather are more likely than others in a given region. Weather scientists forecast severe weather so that the communities can prepare for and respond to these events.

Competencies:
- K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time.
- K-PS3-1 Make observations to determine the effect of sunlight on the Earth's surface.

Key Use of Academic Language (KUALA): Students at all levels of English proficiency will produce **EXPLANATIONS**.

Academic Language Components

Discourse	Sentence	Word
Research the weather using different resources Develop a drawing of a tree for each season Select clothes for each season Use a thermometer to tell temperature Measure rainfall/snowfall amounts	Give me an example of something you would wear during the _____ season? Explain Describe the weather. How is the weather same and different in different environments? What is the weather like today in . . . How could we find that information?	Winter Spring Summer Fall Weather Rain, sleet, snow, wind, sun Thermometer Hot, cold, warm, cool

ELP Level 1 Entering MPI	ELP Level 2 Emerging MPI	ELP Level 3 Developing MPI	ELP Level 4 Expanding MPI	ELP Level 5 Bridging MPI
Match pictures illustrating seasonal changes in a group with teacher support following the read-aloud of a big book.	Sort labeled pictures illustrating change-of- season effects on local environment (e.g., fall leaves, spring flowers, snow) following the read-aloud of a big book.	Identify the changes in seasons with a partner following the read-aloud of a big book.	Identify clothing and activities associated with the changes of seasons using simple sentences in a pocket chart following the read-aloud of a big book.	Identify change-of-season effects on local environment with a partner (e.g., In the fall, leaves fall from trees) following the read-aloud of a big book.

Building Receptive Performance Indicators (PIs) to differentiate and scaffold instruction per ELP level by adjusting the language function and instructional support.

1) **Language Function** how students will process language during a receptive activity to demonstrate attainment of the ELD and content standard.

The language of **RECOUNTS**		The language of **EXPLANATIONS**		The language of **ARGUMENTS**		The language of **DISCUSSIONS**	
Arrange	Name	Apply	Identify	Compare	Express	Answer	Initiate
Brainstorm	Order	Chart	Illustrate	Compose	Extract	Ask	Participate in
Categorize	Paraphrase	Classify	Interpret	Confirm	Interpret	Associate	Present
Compose	Reenact	Compare	Narrate	Connect	Justify	Compare	Recommend
Construct	Repeat	Compose	Note	Construct	Negotiate	Confirm	Reflect on
Copy	Replicate	Contrast	Organize	Critique	Respond to	Converse	Request
Cross check	Restate	Define	Present	Defend	Restate	Discuss	Respond to
Draw	Retell	Describe	Role play	Define	Suggest	Edit	Revise
Find	Rewrite	Develop	Show	Elaborate		Give	Use
Follow directions	Select	Express	Summarize			Indicate	
Label	Sequence	Follow directions	Tell				
List	Share	Generalize	Trace				
Locate	State						
Make	Take notes						

2) **Content Stem** - Selected focus of grade-level curricular lesson/activity for all students which remains consistent across all ELP levels:

3) **Instructional Support** - Scaffolds to accompany explicit instruction with multiple opportunities for student response and feedback decreasing in degree from ELP level 1 to level 5.

ELA Sensory Supports	ELA Graphic Supports	ELA Interactive Supports
Acting/Reader's Theater	Cloze Paragraphs/Sentences	Bilingual/Picture Dictionaries
Audio Books	Gallery Walk	Internet/Software Programs
Felt/Magnetic Figures	Graphic Organizer	Jigsaw Activities
Illustrations/Photographs	Illustrated Word/Phrase Banks or Walls	Pairs/Triads/Small Groups
Manipulatives	Information Chunking	Teacher Modeling/Monitoring
Pantomime	Rubrics	Use of L1
Read Alouds	Study Guides/Guided Notes	
Realia	Written Objectives	
Role Play		
Songs/Chants		
Total Physical Response (TPR)		
Videos		

Differentiation Template

ELD Standard:

Content Standard(s):

Concepts:

Competencies:

Key Use of Academic Language (KUALA): Students at all levels of English proficiency will produce_____.

Academic Language Components

Discourse	Sentence		Word	

ELP Level-specific PIs	ELP Level 1 Entering	ELP Level 2 Emerging	ELP Level 3 Developing	ELP Level 4 Expanding	ELP Level 5 Bridging
Include: 1) **Language Function** 2) **Content Stem** (consist across all levels) 3) **Instructional Support(s)** *Language functions and instructional supports can be selected from Page 4, or supplied by the educator.*					