Grades 6-8
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 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 EL 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): 3.1.7.A1**.** Describe the similarities and differences of physical characteristics in diverse organisms

Concepts: All living things have adaptations that help them survive and reproduce in their environment

Competencies: Use argument based evidence to support the notion that living things are able to survive and reproduce based on structural or behavioral adaptations.

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

Academic Language Components		
Discourse	**Sentence**	**Word**
Comparing/Contrasting essay (thesis; evidence; conclusion)	One similarity/difference between [subject 1] and [subject 2] is …. [Subject 1] and [subject 2] are similar because they both…. [Subject 1] and [subject 2] are rather different because while [subject 1] has _____, [subject 2] has _____.	Adaptions Structural Behavior

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**
Critique a peer's oral presentation of the description of an organism's reproductive adaptations with use of L1 support and in small groups	Critique a peer's oral presentation of the description of an organism's reproductive adaptations with visually-supported rubric and in small groups	Critique a peer's oral presentation of the description of an organism's reproductive adaptations with a small group	Critique a peer's oral presentation of the description of an organism's reproductive adaptations with a partner	Evaluate a peer's oral presentation of the description of an organism's reproductive adaptations using a rubric.

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): Standard 3.1.7.C1. Describe how natural selection is a underlying factor in a population's ability to adapt to changes

Concepts: The collection of fossils and their placement in chronological order (e.g., through the location of the sedimentary layers in which they are found or through radioactive dating) is known as the fossil record. It documents the existence, diversity, change, and extinction, of many life forms throughout the history of life on Earth.

Competencies: Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past.

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

Academic Language Components		
Discourse	**Sentence**	**Word**
Natural selection model (scenarios; graphical representation; data)	___ was a result of____ This leads to___ The change results in___ As a result_____	existence mutation fitness extinction fossil limiting factors

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 picture to vocabulary of stages of evolution	Sequence illustrated text of the stages of evolution	Identify evidence from the text that documents the change of a life form throughout the history of life on Earth using a graphic organizer with a partner	Cite evidence from the text that documents the change of a life form throughout the history of life on Earth with graphic organizer	Cite evidence from the text that documents the change of a life form throughout the history of life on Earth

Building Receptive Performance Indicators (PIs) to differentiate and scaffold instruction per EL 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	TEL				
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 EL levels:

3) **Instructional Support** - Scaffolds to accompany explicit instruction with multiple opportunities for student response and feedback decreasing in degree from EL 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 4: English learners communicate information, ideas, and concepts necessary for academic success in Science.

Content Standard(s):

Concepts:

Competencies:

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

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.*					