

WIDA ELD Standards Framework Implementation

Sample Grade 3 Science Unit Plan

Unit Overview

All living things go through life cycles that include physical changes so that they become adults and reproduce. The survival of the species requires the replacement of individual organisms.

Topic: How can life cycles be explained and modeled?

Unit Goal: Students will develop and use models to explain the life cycle of different organisms.

Essential Question(s)

- Why do living things go through changes and complete a whole life cycle?
- How are the life cycles of plants and animals similar or different?

Description of Summative Assessment

- Students working with a partner will create models of the life cycle of a plant and animal by drawing or using manipulatives e.g. playdough, create a mobile, etc.
- They will be required to show key stages of change within a chosen living thing's life cycle by labeling and adding arrows to their model.
- The students will explain their life cycle model in a presentation.

Step 1: Locate relevant WIDA ELD Standards by examining the unit's content standards.	
Collaboration Questions	<ol style="list-style-type: none"> 1. What content concepts and topics do we expect our students to learn? 2. What disciplinary practices do we want our students to engage in? 3. How can we tap into our students' prior knowledge, experiences, and interests as we launch this unit?
Start with Unit Content Standards	<p>Content Standards</p> <p>3-LS1-1: Develop models to describe that organisms have unique and diverse life cycles but all experience birth, growth, reproduction, and death.</p> <p>LS1.B Growth and Development of Organisms: Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles.</p> <p>Science and Engineering Practice</p> <p>3-LS11 Developing and Using Models: Develop models to describe phenomena.</p> <p>Crosscutting Concepts</p> <p>3-LS1-1 Patterns: Patterns of change can be used to make predictions.</p>

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Find the Relevant ELD Standards	<p>ELD-SI: English language learners will communicate for social and instructional purposes within the school setting.</p> <p>ELD-SC: English language learners communicate information, ideas, and concepts necessary for academic success in the content area of science.</p>
Tap into Student Assets in the Unit	<p>Questions for Student Assets:</p> <ul style="list-style-type: none"> • What are your personal or community experiences related to the topic? • What are the ways that your family and friends talk about this topic? • What questions do you have about this topic? • Who do you know who is affected by this topic? • Where have you heard about this topic? • How does/did this topic influence your community? • How is science important in your culture/ethnicity?
<p>Step 2: Identify most prominent Key Language Uses by analyzing the unit’s content standards, summative assessments, essential questions, and main learning events.</p>	
Collaboration Questions	<ol style="list-style-type: none"> 1. How are our students being asked to use language in the unit? 2. What Key Language Uses best reflect how students will interact with language? 3. What is our summative assessment? 4. What meaning-making activities do we have planned and how will they use language?
Identify Language Opportunities in the Content Standards and Practices	<p>Students will need to....</p> <ul style="list-style-type: none"> • Observe and record the life cycles of different plants and animals include the stages of birth, growth, reproduction, and death. • Compare and contrast differing plant and animal life cycles that are shorter or longer than others. • Construct an explanation that plant and animal life cycles can include dramatic changes (metamorphosis). • Develop and use a model to explain that Some plant and animal life cycles include dramatic changes (metamorphosis).
Identify Language Opportunities in the Summative Assessment	<p>Students will need to....</p> <ul style="list-style-type: none"> • Label their life cycle model. • Explain their life cycle model in a presentation.
Choose a Key Language Use to Prioritize During this Unit	<p>Explain</p>

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Step 3: Use **Language Expectations** to create unit language goals.

Collaboration Questions	<ol style="list-style-type: none"> 1. Which Language Expectations best reflect the language focus of the unit? 2. Which *embedded Language Function is essential for meeting content and language goals and success criteria for the end-of-unit assessment? 3. What is our language goal for the unit?
Identify Language Expectations	<p>ELD-SI.K-3.Explain: Multilingual learners will</p> <ul style="list-style-type: none"> • Share initial thinking with others • Follow and describe cycles in diagrams, steps in procedures, or causes and effects • Compare and contrast objects or concepts • Offer ideas and suggestions • Act on feedback to revise understandings of how or why something works <p>ELD-SC.2-3.Explain.Interpretive: Multilingual learners will interpret scientific explanations by</p> <ul style="list-style-type: none"> • Defining investigable questions or simple design problems based on observations, data, and prior knowledge about a phenomenon • Obtaining and combining information from observations, and using evidence to help explain how or why a phenomenon occurs • Identifying information from observations as well as evidence that supports particular points in explanations <p>ELD-SC.2-3.Explain.Expressive: Multilingual learners will construct scientific explanations that</p> <ul style="list-style-type: none"> • Describe observations and/or data about a phenomenon • Develop a logical sequence between data or evidence and claim • Compare multiple solutions to a problem considering how well they meet the criteria and constraints of the design solution
Set Unit Language Goal	Describe observations and develop a logical sequence to explain different life cycles.

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Step 4: Unpack the **Language Expectations, Functions, and Features** in the context of your unit.

Collaboration Questions	<ol style="list-style-type: none"> 1. Which of the *Language Features associated with the Language Function we selected would contribute to students’ effective communication during the end-of-unit assessment? 2. How might our students’ language stretch when they use this **Language Feature, and how will this “stretching” contribute to their effectiveness in the content? 3. What support will our students need in order to detect and use the specific language function and feature we have selected as a specific language focus during this unit?
Analyze examples for language functions and features related to unit language goal.	<p>ELD-SC.2-3.Explain.Expressive: Multilingual learners will construct scientific explanations that</p> <ul style="list-style-type: none"> • Describe observations and/or data about a phenomenon • Develop a logical sequence between data or evidence and claim
Prioritize an Associated Language Feature	<p>Describe observations and/or data about a phenomenon through...</p> <ul style="list-style-type: none"> • Declarative statements to present facts Examples: <i><u>Animals and plants both go through life cycles.</u></i> <i><u>Some animals go through the process of complete metamorphosis.</u></i> <p>Develop a logical sequence between data or evidence and claim through...</p> <ul style="list-style-type: none"> • Connectors to sequence and order events across paragraphs (first, second, begins, ends) Examples: <i>First an adult ladybug lays her eggs on a leaf. Then the egg hatches and a larva comes out and begins to eat. Next the larva sheds its skin becoming a pupa and attaches itself to a leaf. Finally, a ladybug emerges from the pupa and the cycle starts again.</i> • Comparatives to show similarities and differences Examples: <i>The larva of a ladybug is smaller than the caterpillar of the butterfly.</i> • <i>The pupa stage of the ladybug is about 15 days which is longer than the butterfly chrysalis which last 12 days</i>
Plan ways for students to notice how language works.	<ul style="list-style-type: none"> • Reading article and books showing the life cycles of various plants and animals • Notice and lift information from text and images • Sorting images of various stages of life cycles while using sequence connectors • Sorting images of life cycles of various plants and animals while using comparatives to show similarities and differences.

Language Expectations: Multilingual learners will...

ELD-SC.2-3.Explain.Interpretive

Interpret scientific explanations by

- Defining investigable questions or simple design problems based on observations, data, and prior knowledge about a phenomenon
- Obtaining and combining information from observations, and using evidence to help explain how or why a phenomenon occurs
- Identifying information from observations as well as evidence that supports particular points in explanations

ELD-SC.2-3.Explain.Expressive

Construct scientific explanations that

- Describe observations and/or data about a phenomenon
- Develop a logical sequence between data or evidence and claim
- Compare multiple solutions to a problem considering how well they meet the criteria and constraints of the design solution

Language Functions and Sample Language Features

Describe observations and/or data about a phenomenon through...

- Abstract nouns and to introduce concepts (*habitat*)
- Declarative statements to present facts
- Cohesion to reference ideas, people across text (pronouns, renaming subject, demonstratives: *this, that*)
- Relating verbs to state relationships or attributes (*have, be, belong to*)

Develop a logical sequence between data or evidence and claim through...

- Timeless verbs to state on-going facts about phenomenon (*Rain forests create oxygen.*)
- Connectors to sequence and order events across paragraphs (*first, second, begins, ends*)
- Causal connectors to link events (*because, so that, when*)
- Prepositional phrases to provide details (*where, when, how*)
- Clauses to express sequences in time (*after digestion, when the air cools*)
- Comparatives to show similarities and differences

Compare multiple solutions to a problem considering how well they meet the criteria and constraints of the design solution through...

- Technical terminology (*food chain, biome*) to add precision
- Comparatives to show similarities and differences
- Connectors to sequence and order events across paragraphs (*first, second, begins, ends*)
- Causal connectors to link events (*because, so that, when*)
- Prepositional phrases to provide details about where, when, how
- Clauses to express sequences in time (*after digestion, when the air cools*)

Proficiency Level Descriptors

Remember...

Proficiency Level Descriptors (PLDs) illustrate a continuum of language development for multilingual learners across six levels of English language proficiency for each grade-level cluster. The descriptors span three dimensions of language: discourse, sentence, and word/phrase.

- Each proficiency level (PL) includes and builds on previous levels (e.g., PL4 = PL1 + PL2 + PL3 + PL4). PL6 is open-ended. It indicates that for all of us, language development continues throughout life.
- Language development is not a straightforward linear process across proficiency levels; it is contingent on a variety of factors. Multilingual learners may take various paths to develop language.
- The PLDs are designed to be used in coordination with Language Expectations, Language Functions, and Language Features.
 - Whereas Language Expectations offer goals for how *all students* might use language to meet academic content standards, PLDs offer a succinct description of how multilingual learners might develop language *across levels of language proficiency* in moving toward meeting Language Expectations.
- In the PLDs, *text* is multimodal, including oral, visual, and written forms.
- Scaffolding learning increases accessibility for multilingual learners, supports and bolsters their opportunities to meaningfully engage in grade-level content learning, and builds toward independence. The PLDs are predicated on the idea that appropriate scaffolding supports students in moving through the language proficiency levels.

Grades 2-3 WIDA Proficiency Level Descriptors for the Interpretive Communication Mode (Listening, Reading, and Viewing)

Toward the end of each proficiency level, when scaffolded appropriately, multilingual learners will...

Criteria	End of Level 1	End of Level 2	End of Level 3	End of Level 4	End of Level 5	Level 6
DISCOURSE Organization of language	around general topics (continents, shapes, animals) with short sentences	around specific topics (habitats, diet, behavior) with multiple related simple sentences	to meet a purpose (to inform, narrate, argue or explain) in a series of extended sentences	to meet a purpose in a short text	to meet a purpose through generic (not genre-specific) organizational patterns in texts (introduction, body, conclusion)	to meet a purpose through genre-specific organizational patterns (paragraph openers and topic sentences signaling relationships between paragraphs)
	Understand how coherent texts (spoken, written, multimodal) are created...					
DISCOURSE Cohesion of language	repetitive chunks of meaning across text (red crayon, yellow crayon, blue crayon)	frequently used cohesive devices (demonstratives: <i>this, that, these, those</i>)	a few different types of cohesive devices (pronoun referencing, etc.)	multiple cohesive devices (synonyms, antonyms)	a variety of cohesive devices that connect larger meaningful chunks of text (class/subclass: shapes like circles, triangles, and rectangles)	a wide variety of cohesive devices that connect ideas throughout text (whole/part, class/subclass, substitution: The rectangle is a big one.) and ellipsis (<i>There isn't any. [milk]</i>)
	Understand how ideas are connected across a whole text through...					
DISCOURSE Density of language	frequently used multi-word noun groups (<i>green frogs</i>)	multi-word noun groups with connectors (<i>green and slimy frogs</i>)	expanded noun groups with classifiers (<i>tree frogs and poison frogs</i>)	expanded noun groups with prepositional phrases (<i>three little green tree frogs on the log</i>)	expanded noun groups with embedded clauses (<i>three little green tree frogs that jumped into the water</i>)	expanded noun groups with a variety of embedded clauses (<i>three little green tree frogs with long legs that swam away and didn't come back</i>)
	Understand how ideas are elaborated or condensed through...					
SENTENCE Grammatical complexity	chunks of language (<i>stick to rocks and coral</i>)	simple sentences (<i>They stick to rocks and coral.</i>)	related simple sentences (<i>They look like plants. They stick to rocks and coral.</i>)	multiple related simple sentences (<i>They are called anemones. They look like plants. They stick to rocks and coral.</i>)	simple and compound sentences with familiar ways of combining clauses (using coordinating conjunctions: <i>They are called anemones and they look like plants.</i>)	compound sentences with frequently used ways of combining clauses (coordinating conjunctions: <i>Anemones look like plants but they are sea animals.</i>)
	Understand how meanings are extended or enhanced through...					
WORD, PHRASE Precision of language	frequently used words and phrases in familiar contexts and topics (<i>time to clean up</i>)	situation-specific words and phrases (<i>How do we spell that word?</i>)	an increasing number of words and phrases (my favorite characters in this story)	a growing number of words and phrases in a variety of contexts (nonfiction books)	an expanding number of words and phrases, including idioms and collocations (plus and minus)	a variety of words and phrases such as adverbials of time, manner, and place; verb types; and abstract nouns (in the book about dolphins...)
	Understand how precise meanings are created through everyday, cross-disciplinary, and technical language through...					

Grades 2-3 WIDA Proficiency Level Descriptors for the Expressive Communication Mode (Speaking, Writing, and Representing)

Toward the end of each proficiency level, when scaffolded appropriately, multilingual learners will...

Criteria	End of Level 1	End of Level 2	End of Level 3	End of Level 4	End of Level 5	Level 6
DISCOURSE Organization of language	single words and phrases to represent ideas with an intended purpose (to inform, narrate, share opinion)	short sentences linked by topic to convey intended purpose	sentences convey intended purpose with emerging organization (topic sentence, supporting details)	short text that conveys intended purpose using predictable organizational patterns (signaled with some paragraph openers: <i>Last week, When I was five, I think, etc.</i>)	expanding text that conveys intended purpose using generic (not genre-specific) organizational patterns across paragraphs (introduction, body, conclusion)	text that conveys intended purpose using genre-specific organizational patterns (opinion and reasons; information and details)
	Create coherent texts (spoken, written, multimodal) using...					
DISCOURSE Cohesion of language	few frequently used cohesive devices (repetition)	some frequently used cohesive devices (demonstratives)	some formulaic cohesive devices (pronoun referencing)	a growing number of cohesive devices (emerging use of articles to refer to the same word)	an expanding number of cohesive devices (given/new, whole/part, class/subclass)	a flexible number of cohesive devices (ellipsis, substitution/omission)
	Connect ideas across a whole text through...					
DISCOURSE Density of language	Simple elaboration (single nouns)	a few types of elaboration (adding a familiar adjective to describe a noun)	some types of elaboration (adding a newly learned adjective to a noun)	a growing number of types of elaboration (adding articles or demonstratives to a noun: <i>the or these clouds</i>)	a variety of types of elaboration (adding in a variety of adjectives)	a wide variety of types of elaboration (adding in embedded clauses after the noun (<i>those storm clouds that we saw yesterday</i>))
	Elaborate or condense ideas through...					
SENTENCE Grammatical complexity	sentence fragments (<i>triangles and rectangles</i>)	sentence fragments and emerging use of simple sentences (<i>triangle has three sides</i>)	simple sentences (<i>A square has 4 right angles</i>)	sentences with emerging use of clauses (<i>We put triangles, then rectangles</i>)	simple or compound sentences with familiar ways of combining clauses (with some coordinating conjunctions: <i>We put blue triangles, then we put red triangles.</i>)	compound and complex sentences with frequently used ways of combining clauses (with a broad range of coordinating conjunctions: <i>We put blue triangles, then red triangles, but there was no pattern.</i>)
	Extend or enhance meanings through...					
WORD, PHRASE Precision of language	few frequently used words and phrases with emerging precision (<i>Time to eat?</i>)	some frequently used words and phrases with some precision (<i>three groups of four equals...</i>)	a small repertoire of words and phrases with developing precision (<i>best friend, the red ball</i>)	a growing repertoire of words and phrases with growing precision (<i>preschool friends, math time, after lunch</i>)	an expanding repertoire of words and phrases including idioms and collocations with expanding precision (<i>hard as a rock</i>)	flexible repertoire of words and phrases such as adverbials of time, manner, and place; verb types; and abstract nouns with consistent precision (<i>rounding off and finding the mean</i>)
	Create precise meanings through everyday, cross-disciplinary, and technical language with...					