

# Loving Life Scope & Sequence

## Grade 3 Unit 4

**Anchor Phenomenon** [\[link to Phenomena Wall\]](#): Plants and animals have unique life cycles and inherited traits that help them survive and thrive.

**Essential Question:** How can we help life survive and thrive at our school?

	<a href="#">Lesson 1</a> ~155 minutes	<a href="#">Lesson 2</a> ~170 minutes	<a href="#">Lesson 3</a> ~130 minutes	<a href="#">Lesson 4</a> ~120 minutes	<a href="#">Lesson 5</a> ~120 minutes	<a href="#">Lesson 6</a> ~130 minutes + Exhibition
<b>PBL Final Product Step</b>	Students gather data and choose a plant or animal to focus on in groups of four.	Students research, observe and draw the plant's or animal's life cycle.  <i>Prep for Life Cycle Performer</i>	Students research, observe and record how plants and animals form groups to survive and thrive. Perform life cycle dance.  <i>Field Biologist</i> choosing focus for data collection.	Students research, observe and draw traits that help their plant or animal survive and plan out costume for exhibition.  <i>Prep for The Voice</i>	Students brainstorm ways we can protect life cycles of the plants and animals at school and continue work/ begin layout of the field guide.  <i>Prep for Field Biologist</i>	<i>Tour Guide</i> leads student buddies to each group where <i>The Voice</i> plays the role of the plant/ animal, the <i>Life Cycle Performer</i> teaches the life cycle and the <i>Field Biologist</i> shares their field guide.
<b>NGSS Performance Expectation</b>		<a href="#">3-LS1-1</a>	<a href="#">3-LS2-1</a>	<a href="#">3-LS3-1</a> <a href="#">3-LS4-2</a>	<a href="#">3-LS3-2</a>	
<b>SEP</b>	SEP3 SEP4	SEP2	SEP4 SEP7	SEP8	SEP6	SEP2 SEP6
<b>DCI</b>		LS1.B	LS2.D	LS3.B SD4.B	LS3.A	LS3.B
<b>CCC</b>	CCC1	CCC1	CCC1	CCC1, CCC2	CCC2	CCC2
<b>NGSS 3 Dimensional Learning Concept</b>	Students <i>make observations and collect data</i> to use <i>patterns</i> to determine how <i>different kinds of plants and animals survive and thrive</i> in the school ecosystem.	Students <i>develop and use models</i> to <i>describe unique and diverse life cycles</i> and <i>identify patterns to understand</i> that all life cycles have in common birth, growth, reproduction, and death.	Students <i>make observations and collect data</i> to <i>identify patterns as evidence to construct an argument</i> that plants and animals form groups to survive and thrive.	Students <i>use evidence</i> and their understanding of <i>patterns and cause and effect relationships</i> to <i>support the explanation</i> that variations of characteristics provide advantages for surviving and thriving.	Students <i>use evidence</i> and their understanding of <i>cause and effect relationships</i> to <i>support the explanation</i> that <i>traits can be influenced by the environment</i> .	Students <i>develop and use models</i> to <i>construct an explanation</i> of how people <i>can impact the school environment</i> in order to support <i>plant and animal life cycles</i> at school.
<b>Learning Event</b>	1	3	2	2	3	4

<b>Investigative Phenomenon</b>	Many plants and animals may be observed at our school. Different numbers of organisms and types of organisms survive and thrive in different locations on the schoolyard.	The life cycle of a butterfly is unique but shares the pattern of birth, growth, reproduction and death with all other diverse life cycles.	Plants and animals at our school and in the wild form groups to survive and thrive.	The natural selection of the peppered moth and selection/ varieties of fruits and vegetables.	How to make a monarch butterfly rest stop.	Human activities can cause changes to the environment and impact the local habitat.
<b>Question to Investigate</b>	What plants and animals survive and thrive at our school?	What patterns can we observe between life cycles of plants and animals?	How does working with a group help plants and animals survive and thrive?	How do traits passed down from parents help plants and animals survive and thrive?	How can understanding life cycles help us take care of plants and animals?	How can we help plants and animals at our school survive and thrive?
<b>Success Criteria</b>	I can make observations and collect and organize data.  I can identify patterns.  I can ask investigative questions.	I can find evidence in texts and videos.  I can make observations and identify patterns.  I can develop a model.	I can find evidence in texts and videos.  I can make observations and construct an argument with evidence.  I can identify patterns.	I can make observations and comparisons.  I can explain similarities and differences.  I can support my claims with evidence.	I can create a dance or cheer to represent a plant's or animal's life cycle.  I can design a plan to help support life surviving and thriving at our school.	I can share what I know about a plant or animal.  I can make a claim and support it with evidence.  I can make a positive impact on our school ecosystem.  I can share action steps that help plants and animals.
<b>Social Justice Standard</b>	<b>ACTION 20 - AC.3-5.20</b> - I will work with my friends and family to make our school and community fair for everyone, and we will work hard and cooperate in order to achieve our goals.					
<b>Math</b>	Represent and Interpret Data <a href="#">3.MD.B.3</a>			Represent and Interpret Data <a href="#">3.MD.B.3</a>	Geometric measurement: understand concepts of area and relate area to multiplication and addition. <a href="#">3.MD.C.5</a>	
<b>ELA</b>	<b>CCSS.ELA-LITERACY.SL.3.1</b> - Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 3 topics and texts</i> , building on others' ideas and expressing their own clearly. <b>CCSS.ELA-LITERACY.RI.3.3</b> - Describe the relationship between a series of scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. <b>CCSS.ELA-LITERACY.SL.3.4</b> - Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.					
<b>ELD</b>	Contribute to class, group, and partner discussions, including sustained dialogue. (Follow turn-taking rules, ask relevant questions, affirm others, add relevant information)					
<b>VAPA</b>		<b>Visual Arts 3.VA:Cn10</b> - Develop a work of art based on observations of surroundings. <b>Dance 3.DA:Cr2</b> - . Develop a dance phrase that communicates an idea or feeling.	<b>Dance 3.DA:Cr3</b> - Revise movement choices in response to feedback to improve a short dance study.	<b>Visual Arts 3.VA:Cn10</b> - Develop a work of art based on observations of surroundings.	<b>Visual Arts 3.VA:Pr4</b> - Investigate and discuss possibilities and limitations of spaces, including electronic, for exhibiting artwork.	<b>Visual Arts 3.VA:Pr5</b> - Identify exhibit space and prepare works of art, including artists' statements, for presentation.
<b>HOM (Habits of Mind)</b>	<a href="#">10</a>	<a href="#">8. 12</a>	<a href="#">15</a>	<a href="#">10</a>	<a href="#">11</a>	<a href="#">9</a>

# KEY

## NGSS: Next Generation Science Standards Performance Expectations

### SEP: Science Engineering Practice - DO

<b>SEP1:</b> Asking Questions and Defining Problems	<b>SEP2:</b> Developing and Using Models	<b>SEP3:</b> Planning and Carrying Out Investigations	<b>SEP4:</b> Analyzing and Interpreting Data	<b>SEP5:</b> Using Mathematics and Computational Thinking	<b>SEP6:</b> Constructing Explanations and Designing Solutions	<b>SEP7:</b> Engaging in Argument from Evidence	<b>SEP8:</b> Obtaining, Evaluating, and Communicating Information
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### DCI: Disciplinary Core Idea - KNOW

<b>LS1.B: Growth and Development of Organisms</b> Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles. (3-LS1-1)	<b>LS2.D: Social Interactions and Group Behavior</b> Being part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may serve different functions and vary dramatically in size. (3-LS2-1)	<b>LS3.B: Variation of Traits</b> Different organisms vary in how they look and function because they have different inherited information. (3-LS3-1) The environment also affects the traits that an organism develops. (3-LS3-2)	<b>LS3.A: Inheritance of Traits</b> Many characteristics of organisms are inherited from their parents. (3-LS3-1) Other characteristics result from individuals' interactions with the environment, which can range from diet to learning. Many characteristics involve both inheritance and environment. (3-LS3-2)	<b>LS4.B: Natural Selection</b> Sometimes the differences in characteristics between individuals of the same species provide advantages in surviving, finding mates, and reproducing. (3-LS4-2)
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### CCC: Crosscutting Concept - THINK & LINK

<b>CCC1:</b> Patterns	<b>CCC2:</b> Cause & Effect	<b>CCC3:</b> Scale, Proportion, & Quantity	<b>CCC4:</b> Systems & System Models	<b>CCC5:</b> Energy & Matter	<b>CCC6:</b> Structure & Function	<b>CCC7:</b> Stability & Change
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# Learning Events

- 1: Students explore design problems, make observations, and collect data through investigations.
- 2: Students make sense of patterns and relationships in observations and data through representation, analysis, and interpretation.
- 3: Students construct models and causal explanations of phenomenon using evidence and reasoning.
- 4: Students revise ideas, models, and explanations through critique and argumentation.

## HOM: Habits of Mind

- #1: Persisting:** Strives to reach goals when tasks are difficult. Stays focused and keeps trying. Bounces back when things go wrong and tries to figure out what happened. (I can stick to it!)
- #2: Managing Impulsivity:** Thinking before acting; remaining calm. Considers consequences and alternatives for actions. (I can take my time!)
- #3: Listening with Understanding and Empathy:** Spends time listening to others' ideas. Is able to remember what others say. (I can understand others!)
- #4: Thinking Flexibly:** Is inspired by learning new concepts. Looks at ideas from others point of view. Can gather information for multiple sources and apply to real life situations. (I can look at it another way!)
- #5: Thinking About Your Thinking (Metacognition):** Student has the ability to understand when they are an expert and when they are a novice. (I understand when I know and when I need help.)
- #6: Striving for Accuracy:** Puts in effort and takes time to complete work. Enjoys producing exceptional work. (I can do my best!)
- #7: Questioning and Problem Posing:** How do you know? Having a questioning attitude; knowing what data are needed and developing questioning strategies to produce those data. Finding problems to solve. (I can ask thoughtful questions and find problems!)
- #8: Applying Past Knowledge to New Situations:** Uses what has been learned before in new situations. Is able to retain information as connections are made. (I can use what I learned!)
- #9: Thinking and Communicating with Clarity and Precision (Communication):** Supports thoughts with explanations and evidence. Knows social rules for interacting with others. (I can be clear!)
- #10: Gather Data through All Senses:** Enjoys hands-on learning experiences. Is aware of the world around them. (I can learn about the world around me!)
- #11: Creating, Imagining and Innovating:** Starts with a vision and works backwards. Uses creative ideas to solve problems. Considers multiple perspectives and is open to feedback. Able to compare and contrast emotional and factual information. (I can try a different way!)
- #12: Responding with Wonderment and Awe:** Student is curious about the world around them and finds interest. They are compelled, enthusiastic and passionate about learning and their place in the universe. (I am curious and have fun learning.)
- #13: Taking Responsible Risks:** Likes adventure, tries new things confidently and in a responsible manner. (I can try new things!)
- #14: Finding Humor:** Situations are perceived from interesting and original perspectives, humor is initiated and appreciated in others. Student is able to distinguish between situations needing compassion and those that are truly funny. (I can laugh!)
- #15: Thinking Interdependently (Teamwork):** Sensitive to the needs of others. Understanding that when people work together they are more powerful. Negotiates conflict constructively. (I can work with a team and learn from others!)
- #16: Remaining Open to Continuous Learning:** Viewing problems as powerful ways to learn. Always looking for new and better ways, interested in alternatives. (I can learn from experiences!)