

**GRADE 3– Unit 3 Circle of Life & Fates of Traits**

**Mission Statement**

The primary goal of the Swedesboro-Woolwich School District is to prepare each student with the real life skills needed to compete in a highly competitive global economy. This will be achieved by providing a comprehensive curriculum, the integration of technology, and the professional services of a competent and dedicated faculty, administration, and support staff.

Guiding this mission will be Federal mandates, including No Child Left Behind, the New Jersey Core Curriculum Content Standards, and local initiatives addressing the individual needs of our students as determined by the Board of Education. The diverse resources of the school district, which includes a caring PTO and active adult community, contribute to a quality school system. They serve an integral role in supporting positive learning experiences that motivate, challenge and inspire children to learn.

**Unit/Module Overview**

In unit 3, students will learn about:

- Animal life cycles
- Environmental change & engineering
- Pollination & plant reproduction
- Fruit, seeds, & plant reproduction
- Plant life cycles
- Trait variation, inheritance, & artificial selection
- Trait variation, natural selection, & survival
- Animal groups & survival
- Traits & environmental variation

**Standards Covered in Current Unit/Module**

Related Standards and Learning Goals

## Swedesboro-Woolwich School District's Science Curriculum Guidance Document

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

3-LS1-1 Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.

3-LS2-1 Construct an argument that some animals form groups that help members survive.

3-LS3-1 Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.

3-LS3-2 Use evidence to support the explanation that traits can be influenced by the environment.

3-LS4-2 Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.

3-LS4-3 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

3-LS4-4 Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

### Unit/Module Weekly Learning Activities and Pacing Guide

Topic & # Days	NJ Standards	Critical Knowledge & Skills	Possible Resources & Activities
Animal Life Cycles (1 week)	<ul style="list-style-type: none"> <li>3-LS1-1 Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.</li> </ul>	<p><b>Obj. We are learning to:</b></p> <ul style="list-style-type: none"> <li>search for patterns of what all animals share (birth, growth, reproduction, death) across their unique and diverse life cycles</li> </ul> <p><b>Suggested Formative Assessment(s):</b></p> <ul style="list-style-type: none"> <li>Lesson 1 exit ticket</li> </ul>	<ul style="list-style-type: none"> <li>Materials               <ul style="list-style-type: none"> <li>Mystery Science online</li> <li>Mystery Science labs &amp; worksheets</li> <li>Mystery Science videos</li> <li>3rd grade team Google Drive</li> </ul> </li> </ul>
Environmental Change & Engineering (1 week)	<ul style="list-style-type: none"> <li>3-LS4-4 Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.</li> <li>3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.</li> </ul>	<p><b>Obj. We are learning to:</b></p> <ul style="list-style-type: none"> <li>recognize the cause and effect relationship between a change in the environment and the survival of organisms that live there. They recognize environments as a system, made up of interdependent parts that function as a whole.</li> </ul> <p><b>Suggested Formative Assessment(s):</b></p> <ul style="list-style-type: none"> <li>Lesson 2 exit ticket</li> </ul>	<ul style="list-style-type: none"> <li>Materials               <ul style="list-style-type: none"> <li>Mystery Science online</li> <li>Mystery Science labs &amp; worksheets</li> <li>Mystery Science videos</li> <li>3rd grade team Google Drive</li> </ul> </li> </ul>

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Pollination & Plant Reproduction (1 week)	<ul style="list-style-type: none"> <li>3-LS1-1 Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.</li> </ul>	<p><b>Obj. We are learning to:</b></p> <ul style="list-style-type: none"> <li>explore the pattern of similarities in life cycles among organisms</li> <li>observe that a plant's stigma (structure) is sticky to "catch" pollen (function).</li> </ul> <p><b>Suggested Formative Assessment(s):</b></p> <ul style="list-style-type: none"> <li>Lesson 3 exit ticket</li> </ul>	<ul style="list-style-type: none"> <li>Materials <ul style="list-style-type: none"> <li>Mystery Science online</li> <li>Mystery Science labs &amp; worksheets</li> <li>Mystery Science videos</li> <li>3rd grade team Google Drive</li> </ul> </li> </ul>
Fruit, Seeds, & Plant Reproduction (1 week)	<ul style="list-style-type: none"> <li>3-LS1-1 Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.</li> </ul>	<p><b>Obj. We are learning to:</b></p> <ul style="list-style-type: none"> <li>use patterns to sort food as a science fruit or science vegetable</li> <li>that fruit (structure) contains seeds and helps them spread (function).</li> </ul> <p><b>Suggested Formative Assessment(s):</b></p> <ul style="list-style-type: none"> <li>Lesson 4 exit ticket</li> </ul>	<ul style="list-style-type: none"> <li>Materials <ul style="list-style-type: none"> <li>Mystery Science online</li> <li>Mystery Science labs &amp; worksheets</li> <li>Mystery Science videos</li> <li>3rd grade team Google Drive</li> </ul> </li> </ul>
Plant Life Cycles (1 week)	<ul style="list-style-type: none"> <li>3-LS1-1 Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.</li> </ul>	<p><b>Obj. We are learning to:</b></p> <ul style="list-style-type: none"> <li>discover the pattern that without bees in their model garden game, plants cannot reproduce, and therefore the garden will not have flowers or fruits in future growing seasons</li> </ul> <p><b>Suggested Formative Assessment(s):</b></p> <ul style="list-style-type: none"> <li>Lesson 5 exit ticket</li> </ul>	<ul style="list-style-type: none"> <li>Materials <ul style="list-style-type: none"> <li>Mystery Science online</li> <li>Mystery Science labs &amp; worksheets</li> <li>Mystery Science videos</li> <li>3rd grade team Google Drive</li> </ul> </li> </ul>
Trait Variation, Inheritance, & Artificial Selection (1 week)	<ul style="list-style-type: none"> <li>3-LS3-1 Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.</li> </ul>	<p><b>Obj. We are learning to:</b></p> <ul style="list-style-type: none"> <li>recognize similarities and differences among the traits of different plants as a pattern</li> </ul> <p><b>Suggested Formative Assessment(s):</b></p> <ul style="list-style-type: none"> <li>Lesson 1 exit ticket</li> </ul>	<ul style="list-style-type: none"> <li>Materials <ul style="list-style-type: none"> <li>Mystery Science online</li> <li>Mystery Science labs &amp; worksheets</li> <li>Mystery Science videos</li> <li>3rd grade team Google Drive</li> </ul> </li> </ul>
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Trait Variation, Natural Selection, & Survival (1 week)	<ul style="list-style-type: none"> <li>3-LS3-1 Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.</li> </ul>	<p><b>Obj. We are learning:</b></p> <ul style="list-style-type: none"> <li>how nature, not human beings, can slowly change the appearance of an animal using the process of selection</li> </ul> <p><b>Suggested Formative Assessment(s):</b></p> <ul style="list-style-type: none"> <li>Lesson 3 exit ticket</li> </ul>	<ul style="list-style-type: none"> <li>Materials <ul style="list-style-type: none"> <li>Mystery Science online</li> <li>Mystery Science labs &amp; worksheets</li> <li>Mystery Science videos</li> <li>3rd grade team Google Drive</li> </ul> </li> </ul>

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	<ul style="list-style-type: none"> <li>• 3-LS4-2 Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.</li> <li>• 3-LS4-3 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.</li> </ul>		
Animal Groups & Survival (1 week)	<ul style="list-style-type: none"> <li>• 3-LS2-1 Construct an argument that some animals form groups that help members survive.</li> </ul>	<b>Obj. We are learning to:</b> <ul style="list-style-type: none"> <li>• explain how living in groups helps animals survive</li> </ul> <b>Suggested Formative Assessment(s):</b> <ul style="list-style-type: none"> <li>• Lesson 4 exit ticket</li> </ul>	<ul style="list-style-type: none"> <li>• Materials <ul style="list-style-type: none"> <li>○ Mystery Science online</li> <li>○ Mystery Science labs &amp; worksheets</li> <li>○ Mystery Science videos</li> <li>○ 3rd grade team Google Drive</li> </ul> </li> </ul>
Traits & Environmental Variation (1 week)	<ul style="list-style-type: none"> <li>• 3-LS3-2 Use evidence to support the explanation that traits can be influenced by the environment.</li> </ul>	<b>Obj. We are learning to:</b> <ul style="list-style-type: none"> <li>• explain how physical traits can be influenced by the environment</li> </ul> <b>Suggested Formative Assessment(s):</b> <ul style="list-style-type: none"> <li>• Lesson 5 exit ticket</li> </ul>	<ul style="list-style-type: none"> <li>• Materials <ul style="list-style-type: none"> <li>○ Mystery Science online</li> <li>○ Mystery Science labs &amp; worksheets</li> <li>○ Mystery Science videos</li> <li>○ 3rd grade team Google Drive</li> </ul> </li> </ul>

[Link to Additional Components including Cross Curricular Connections, Accommodations, Assessments, Etc](#)

[ELA Enduring Understanding Statements](#)