

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

### GRADE 3– Unit 2/Stormy Skies

#### 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 2, students will learn about:

- Water cycle & phases of matter
- Local weather patterns & weather prediction
- Seasonal weather patterns
- Climate and global weather patterns
- Natural hazards and engineering

#### Standards Covered in Current Unit/Module

##### Related Standards and Learning Goals

SCI.3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

SCI.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.

SCI.3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

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SCI.3-ESS2-1 Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.

SCI.3-ESS2-2 Obtain and combine information to describe climates in different regions of the world.

SCI.3-ESS3-1 Make a claim about the merit of a design solution that reduces the impacts of climate change and/or a weather-related hazard.

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

Topic & # Days	NJ Standards	Critical Knowledge & Skills	Possible Resources & Activities
Water Cycle & Phases of Matter (1-2 weeks)	<ul style="list-style-type: none"> <li>SCI.3-ESS2-1 Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.</li> </ul>	<p><b>Obj. We are learning to:</b></p> <ul style="list-style-type: none"> <li>Consider the cause and effect relationship between heated liquid water and the evaporation of gas water that forms into clouds</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>
Local Weather Patterns & Weather Prediction (1-2 weeks)	<ul style="list-style-type: none"> <li>SCI.3-ESS2-1 Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.</li> </ul>	<p><b>Obj. We are learning to:</b></p> <ul style="list-style-type: none"> <li>Explore patterns of changing clouds as a way to predict weather</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>
Seasonal Weather Patterns (1-2 weeks)	<ul style="list-style-type: none"> <li>SCI.3-ESS2-1 Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.</li> </ul>	<p><b>Obj. We are learning to:</b></p> <ul style="list-style-type: none"> <li>Explore temperature patterns of the past to predict temperatures and weather conditions that will occur in the future for particular regions</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>
Climate and Global Weather Patterns (1-2 weeks)	<ul style="list-style-type: none"> <li>SCI.3-ESS2-1 Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.</li> <li>SCI.3-ESS2-2 Obtain and combine information to describe climates in different regions of the world.</li> </ul>	<p><b>Obj. We are learning to:</b></p> <ul style="list-style-type: none"> <li>Recognize climate across the world as an observable pattern</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>
Natural Hazards &	<ul style="list-style-type: none"> <li>SCI.3-ESS3-1 Make a claim about the merit of a design solution</li> </ul>	<p><b>Obj. We are learning to:</b></p> <ul style="list-style-type: none"> <li>Identify cause and effect relationships between</li> </ul>	<ul style="list-style-type: none"> <li>Materials <ul style="list-style-type: none"> <li>Mystery Science online</li> </ul> </li> </ul>

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<p>Engineering (1-2 weeks)</p>	<p>that reduces the impacts of climate change and/or a weather-related hazard.</p> <ul style="list-style-type: none"> <li>• SCI.3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.</li> <li>• SCI.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> <li>• SCI.3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.</li> </ul>	<p>strong winds and the problems they cause</p> <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>○ Mystery Science labs &amp; worksheets</li> <li>○ Mystery Science videos</li> <li>○ 3rd grade team Google Drive</li> </ul>
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[Link to Additional Components including Cross Curricular Connections, Accommodations, Assessments, Etc](#)

[ELA Enduring Understanding Statements](#)