Grade 2

Unit 3: Earth's Surface

New Jersey Student Learning Standards

Established 2016-2017
Revised 2018-2019
Revised 2019-2020
Revised 2020-2021
Revised 2022-2023
Revised 2023-2024
Revised 2024-2025

Marking Period	Unit Title	Recommended Instructional Days
Trimester 2	Earth's Surface	20 - 30 days

NJSLS - Science: *TItle*	NJSLS - Science: *Performance Expectations*	Recommended Activities, Investigations, Interdisciplinary Connections, and/or Student Experiences to Explore NJSLS-S within Unit
Earth's Systems	• **ESS2-2** Develop a model to represent the shapes and kinds of land and bodies of water in an area • **ESS2-3** Obtain information to identify where water is found on Earth and that it can be solid or liquid	
FOUNDATION Disciplinary: *Core Idea*	**FOUNDATION Disciplinary: *Statement***	
• ESS2.C The Roles of Water in Earth's Surface Processes • ESS2.B Plate Tectonics and Large-Scale System Interactions	• Water is found in the ocean, rivers, lakes, and ponds. Water exists as solid ice and in liquid form. • Maps show where things are located. One can map the shapes and kinds of land and water in any area.	**Essential Question/s:** • How can I describe Earth's Surface? • How does a map represent land and water on Earth? **Activity Description:** • Explore Earth's Surface - including landforms and bodies of water • Understand the purpose of maps - to represent land and water on Earth **Interdisciplinary Connections:** **Connections to Math:** • **2.NBT.A.3** Read and write numbers to 1000 using base ten numerals, number names, and expanded form. • **2.NBT.A.4** Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. • **2.MD.B.5** Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as
FOUNDATION Science and Engineering Practices: *Core Idea*	**FOUNDATION Science and Engineering Practices: *Statement***	
• Developing and Using Models • Obtaining, Evaluating, and Communicating Information	• Develop a model to represent patterns in the natural world. • Obtain information using various texts, text features, and other media that will be useful in answering a scientific question.	

FOUNDATION **Crosscutting Concepts:** ***Core Idea***	**FOUNDATION** **Crosscutting Concepts:** ***Statement***
• Patterns • Cause and Effect	• Patterns in the natural world can be observed. • Events have causes that generate observable patterns
Social and Emotional Learning: ***Competencies***	**Social and Emotional Learning:** ***Sub-Competencies***
• Responsible Decision-Making • Relationship Skills • Self-Management • Social Awareness • Self Awareness	• Develop, implement, and model effective problem-solving and critical thinking skills • Utilize positive communication and social skills to interact effectively with others • Recognize the skills needed to establish and and achieve personal and educational goals • Demonstrate an understanding of the need for mutual respect when viewpoints differ. • Demonstrate an awareness of the expectations for social interactions in a variety of ways. • Recognize the importance of self-confidence in handling daily tasks and challenges.

drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
- **2.MD.D.10** Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.
- **2.G.A.1** Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
- **2.G.A.2** Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
- **MP2** Reason abstractly and quantitatively.
- **MP4** Model with mathematics.

Connections to ELA:
- **RI.2.1** Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- **W.2.2** Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.
- **W.2.7** Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).
- **W.2.8** Recall information from experiences or gather information from provided sources to answer a question.
- **SL.2.2** Recount or describe key ideas or details from a text read aloud or information presented orally or through other media

Assessments (Formative) ***To show evidence of meeting the standard/s, students will successfully engage within:***	**Assessments (Summative)** ***To show evidence of meeting the standard/s, students will successfully complete:***
<u>Formative Assessments:</u> ● Lesson Check	**<u>Benchmarks/Summative Assessments:</u>** ● Unit Test ● Performance Based Assessment

Differentiated Student Access to Content: **Teaching and Learning *Resources/Materials***			
Core Resources	**Alternate Core Resources** ***IEP/504/At-Risk/ESL***	**ELL Core Resources**	**Gifted & Talented Core Resources**
● Workbook ● Leveled Readers ● Hands-on Activities ● Interactive Worktext	● Utilize a multi-sensory (VAKT) approach during instruction, provide alternate presentations of skills by varying the method (repetition, simple explanations, additional examples, modeling, etc.), modify test content and/or format, allow students to retake ● Deliver instruction utilizing varied learning styles including audio, visual, and tactile/kinesthetic, provide individual instruction as needed, modify assessments and/or rubrics, repeat instructions as needed.	● Extend time requirements, preferred seating, positive reinforcement, check often for understanding/review, oral/visual directions/prompts when necessary, supplemental materials including use of an online bilingual dictionary, and modified assessment and/or rubric.	● Create an enhanced set of introductory activities, integrate active teaching/learning opportunities, incorporate authentic components, propose interest-based extension activities, and connect students to related talent development opportunities.

Supplemental Resources

Technology:

- *Mapping Water - collect and use information about various types of freshwater and saltwater bodies to recognize patterns in bodies of water found on Earth.*
- *Explore Ocean Landforms - research landforms that can be found on the ocean floor and then make models to show what they found.*
- *Map an Island - develop a model to show where land and water are located and to represent patterns in the natural world*

Other:

- ***Math -*** *Use Symbols; Use Shapes; Display Data; Read Numbers*
- ***ELA -*** *Recall Information; Write Informative Text; Recount Ideas; Participate in a Research and Writing Project; Write for Different Purposes; Ask and Answer Questions; Gather Information*
- ***Social Studies***
  - ***People in Science & Engineering:*** *Rafael L. Bras, Kenneth Ridgway*
  - ***Careers in Science & Engineering:*** *Mapmakers*

Differentiated Student Access to Content:
Recommended *Strategies & Techniques*

Core Resources	**Alternate Core Resources** ***IEP/504/At-Risk/ESL***	**ELL Core Resources**	**Gifted & Talented Core**
• Large group instruction • Small group instruction • Think Pair Share • Cooperative group work • Multimedia presentations • K-W-L • Manipulatives • Leveled Readers	• Utilize a multi-sensory (VAKT) approach during instruction, provide alternate presentations of skills by varying the method (repetition, simple explanations, additional examples, modeling, etc.), modify test content and/or format, allow students to retake • Deliver instruction utilizing varied learning styles including audio, visual, and tactile/kinesthetic, provide individual instruction as needed, modify assessments and/or rubrics, repeat instructions as needed.	• Extend time requirements, preferred seating, positive reinforcement, check often for understanding/review, oral/visual directions/prompts when necessary, supplemental materials including use of an online bilingual dictionary, and modified assessment and/or rubric.	• Create an enhanced set of introductory activities, integrate active teaching/learning opportunities, incorporate authentic components, propose interest-based extension activities, and connect students to related talent development opportunities.

<table>
<tr><td rowspan="4">NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS</td><td colspan="2">Disciplinary Concept: Creativity & Innovation/Critical Thinking & Problem Solving / Technology Literacy</td></tr>
<tr><td>Core Ideas:</td><td>● Brainstorming can create new, innovative ideas.
● Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem.
● Collaboration can simplify the work an individual has to do and sometimes produce a better product.</td></tr>
<tr><td>Performance Expectation/s:</td><td>● 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
● 9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
● 9.4.2.CT.1: Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2).
● 9.4.2.CT.2: Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3).
● 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
● 9.4.2.TL.7: Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts (e.g., W.2.6., 8.2.2.ED.2).</td></tr>
<tr><td colspan="2">Career Readiness, Life Literacies & Key Skill Practices</td></tr>
<tr><td colspan="2">● Demonstrate creativity and innovation.
● Utilize critical thinking to make sense of problems and persevere in solving them.
● Use technology to enhance productivity, increase collaboration and communicate effectively.
● Work productively in teams while using cultural/global competence.</td></tr>
</table>

New Jersey Legislative Statutes and Administrative Code (place an "X" before each law/statute if/when present within the curriculum map)									
	Amistad Law: *N.J.S.A. 18A 52:16A-88*		Holocaust Law: *N.J.S.A. 18A:35-28*		LGBT and Disabilities Law: *N.J.S.A. 18A:35-4.35*	x	Diversity & Inclusion: *N.J.S.A. 18A:35-4.36a*	x	Standards in Action: *Climate Change*