

Fifth Grade Science

Course Compendium

UNITS OF STUDY*

Unit 1- *Ecosystems: Interactions, Energy and Dynamics*

Unit 2- *Water on Earth*

Unit 3- *Earth Systems*

Unit 4- *Properties of Matter*

INTERDISCIPLINARY CONNECTIONS

ELA Standards:

- RI.5.1. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- RI.5.7. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
- RI.5.9. Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
- W.5.1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
- SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
- W.5.8 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.
- W.5.9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

Math Standards

- MP.2 Reason abstractly and quantitatively.
- MP.4. Model with mathematics.
- MP 5. Use appropriate tools strategically.
- 5.NBT.B.5,6
- 5.G.A.2. Repres. Fluently multiply multi-digit whole numbers using the standard algorithm. 6. Find whole-number quotients of whole numbers with up to four-digit dividends and two digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. ent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.
- 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

**See individual units for Pacing Guide, NJSL Standards, Transfer Skills, Enduring Understandings, Essential Questions, Learning Objectives, Key Vocabulary, Skills, Resources, & Assessments*

21st Century Life and Careers

- **CRP2.** Apply appropriate academic and technical skills.
- **CRP4.** Communicate clearly and effectively and with reason.
- **CRP6.** Demonstrate creativity and innovation.
- **CRP11.** Use technology to enhance productivity.
- **9.2.4.A.3** Investigate both traditional and nontraditional careers and relate information to personal likes and dislikes.
- **9.2.4.A.4** Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Technology

- **8.2.2.B.4** Identify how the ways people live and work has changed because of technology.
- **8.2.2.C.1** Brainstorm ideas on how to solve a problem or build a product.

GENERAL CONSIDERATIONS FOR DIVERSE LEARNERS		
English Language Learners	Students Receiving Special Education Services	Advanced Learners
<ul style="list-style-type: none"> • WIDA Can Do Descriptors for Kindergarten* • WIDA Essential Actions Handbook • FABRIC Paradigm • Wall Township ESL Grading Protocol <p>*Use WIDA Can Do Descriptors in coordination with Student Language Portraits (SLPs).</p> <p>Potential Accommodations for ELLs</p> <ul style="list-style-type: none"> • Personal glossary • Text-to-speech • Extended time • Simplified / verbal instructions • Frequent breaks • Small group/One to one • Additional time • Review of directions 	<ul style="list-style-type: none"> • New Jersey Tiered System of Supports • National Center on Universal Design for Learning - About UDL • UDL Checklist • UDL Key Terms <p>Students within this class receiving Special Education/Section 504 programming have specific goals and objectives, as well as accommodations and modifications outlined within their Individualized Education Plans (IEP)/504 Plans due to an identified disability and/or diagnosis. In addition to exposure to the general education curriculum, instruction is differentiated based upon the student's needs. The IEP/504 Plan acts as a supplemental curriculum guide inclusive of instructional strategies that support each specific learner.</p> <p>Potential Accommodations for Special Education</p> <p>Presentation accommodations:</p> <ul style="list-style-type: none"> • Listen to audio recordings instead of reading text 	<ul style="list-style-type: none"> • Knowledge and Skill Standards in Gifted Education for All Teachers • Pre-K-Grade 12 Gifted Programming Standards • Gifted Programming Glossary of Terms <p>Potential Accommodations for Advanced Learners</p> <ul style="list-style-type: none"> • Use of high level academic vocabulary/texts • Problem-based learning • Pre-assess to condense curriculum • Interest-based research • Authentic problem-solving • Homogeneous grouping opportunities
		Students with 504 Plans

*See individual units for Pacing Guide, NJSL Standards, Transfer Skills, Enduring Understandings, Essential Questions, Learning Objectives, Key Vocabulary, Skills, Resources, & Assessments

<ul style="list-style-type: none"> • Student restates information • Extra visual and verbal cues and prompts • Preferential seating • Verbal and visual cues regarding directions and staying on task • Checklists • Immediate feedback 	<ul style="list-style-type: none"> • Pre-teach unknown vocabulary through pictures or videos, and relate to prior knowledge • Work with fewer items per page and/or materials in a larger print size • Use a visual blocker • Use visual presentations of verbal material, such as word webs and visual organizers • Be given a written list of instructions/picture cues <p>Response accommodations:</p> <ul style="list-style-type: none"> • Give responses in a form (oral or written) that's easier for him/her • Dictate answers to a scribe • Capture responses on an audio recorder • Use a spelling dictionary or electronic spell-checker • Use a word processor to give responses in class • Use a calculator or table of "math facts" <p>Setting accommodations:</p> <ul style="list-style-type: none"> • Work or take a test in a different setting, such as a quiet room with few distractions • Sit where he/she learns best (for example, near the teacher) • Take a test in small group setting <p>Timing accommodations:</p> <ul style="list-style-type: none"> • Take more time to complete a task or a test • Have extra time to process oral information and directions • Take frequent breaks, such as after completing a task <p>Assignment modifications:</p> <ul style="list-style-type: none"> • Complete fewer or different homework problems than peers • Shorten assignment • Answer fewer or different test questions • Create alternate projects or assignments 	<p>Teachers are responsible for implementing designated services and strategies identified on a student's 504 Plan.</p>
---	--	---

At Risk Learners / Differentiation Strategies

<p>Alternative Assessments Choice Boards Games and Tournaments Group Investigations Guided Reading Learning Contracts Leveled Rubrics</p>	<p>Independent Research & Projects Multiple Intelligence Options Project-Based Learning Varied Supplemental Activities Varied Journal Prompts or RAFT Writing Tiered Activities/Assignments Tiered Products</p>	<p>Jigsaw Think-Tac-Toe Cubing Activities Exploration by Interest Flexible Grouping Goal-Setting with Students Homework Options</p>
---	---	---

**See individual units for Pacing Guide, NJSL Standards, Transfer Skills, Enduring Understandings, Essential Questions, Learning Objectives, Key Vocabulary, Skills, Resources, & Assessments*

Literature Circles
Multiple Texts
Personal Agendas

Graphic Organizers
Choice of Books/Activities
Mini-Workshops to Reteach or Extend
Think-Pair-Share by readiness or interest
Use of Collaboration of Various Activities

Open-Ended Activities
Use of Reading Buddies
Varied Product Choices
Stations/Centers
Work Alone/Together