# Third Grade Science Course Compendium

## **UNITS OF STUDY\***

Unit 1- Weather and Climate

Unit 2- Force and Motion

Unit 3- Electrical and Magnetic Forces

Unit 4- *Life Cycles and Traits* 

Unit 5 - Organisms and Change in Environments

# **INTERDISCIPLINARY CONNECTIONS**

# **ELA Standards:**

- RI.3.1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- RI.3.2. Determine the main idea of a text; recount the key details and explain how they support the main idea.
- RI.3.3. Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
- RI.3.8. Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).
- RI.3.9.Compare and contrast the most important points and key details presented in two texts on the same topic.
- W.3.8. Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.
- SL.3.3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

# **Math Standards**

- MP.4. Make sense of problems and persevere in solving them.
- MP.5. Use appropriate tools strategically.
- 3.MD.A.2Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.
- 3. MD.B.3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in bar graphs.
- 3.MD.B.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.
- 3.NBT. Number and Operations in Base Ten
- 3. NF. Number and Operations—Fractions

\*See individual units for Pacing Guide, NJSLS 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> <li>WIDA Can Do Descriptors for Kindergarten*</li> <li>WIDA Essential Actions Handbook</li> <li>FABRIC Paradigm</li> <li>Wall Township ESL Grading Protocol</li> <li>*Use WIDA Can Do Descriptors in coordination with Student Language Portraits (SLPs).</li> <li>Potential Accommodations for ELLs</li> <li>Personal glossary</li> <li>Text-to-speech</li> <li>Extended time</li> <li>Simplified / verbal instructions</li> <li>Frequent breaks</li> </ul> | <ul> <li>New Jersey Tiered System of Supports</li> <li>National Center on Universal Design for Learning - About UDL</li> <li>UDL Checklist</li> <li>UDL Key Terms</li> <li>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.</li> <li>Potential Accommodations for Special Education</li> </ul> | <ul> <li>Knowledge and Skill Standards in Gifted Education for All Teachers</li> <li>Pre-K-Grade 12 Gifted Programming Standards</li> <li>Gifted Programming Glossary of Terms</li> <li>Potential Accommodations for Advanced Learners</li> <li>Use of high level academic vocabulary/texts</li> <li>Problem-based learning</li> <li>Pre-assess to condense curriculum</li> <li>Interest-based research</li> <li>Authentic problem-solving</li> <li>Homogeneous grouping opportunities</li> </ul> |  |
| <ul> <li>Small group/One to one</li> <li>Additional time</li> <li>Review of directions</li> </ul>   | Presentation accommodations:  | Students with 504 Plans   |  |
| <ul> <li>Review of directions</li> <li>Student restates information</li> <li>Extra visual and verbal cues and prompts</li> <li>Preferential seating</li> </ul>  | <ul> <li>Listen to audio recordings instead of reading text</li> <li>Pre-teach unknown vocabulary through pictures or videos, and relate to prior knowledge</li> <li>Work with fewer items per page and/or materials in a</li> </ul>  | Teachers are responsible for implementing designated services and strategies identified   |  |

<sup>\*</sup>See individual units for Pacing Guide, NJSLS Standards, Transfer Skills, Enduring Understandings, Essential Questions, Learning Objectives, Key Vocabulary, Skills, Resources, & Assessments

| • | Verbal and visual cues regarding<br>directions and staying on task<br>Checklists<br>Immediate feedback |
|---|--|

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

#### Response accommodations:

- 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"

#### Setting accommodations:

- 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

# Timing accommodations:

- 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

### **Assignment modifications:**

- Complete fewer or different homework problems than peers
- Shorten assignment
- Answer fewer or different test questions
- Create alternate projects or assignments

### At Risk Learners / Differentiation Strategies

Alternative Assessments
Choice Boards
Games and Tournaments
Group Investigations
Guided Reading
Learning Contracts
Leveled Rubrics
Literature Circles
Multiple Texts
Personal Agendas

Independent Research & Projects
Multiple Intelligence Options
Project-Based Learning
Varied Supplemental Activities
Varied Journal Prompts or RAFT Writing
Tiered Activities/Assignments
Tiered Products
Graphic Organizers
Choice of Books/Activities
Mini-Workshops to Reteach or Extend

Jigsaw
Think-Tac-Toe
Cubing Activities
Exploration by Interest
Flexible Grouping
Goal-Setting with Students
Homework Options
Open-Ended Activities
Use of Reading Buddies
Varied Product Choices

on a student's 504 Plan.

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| Think-Pair-Share by readiness or interest Use of Collaboration of Various Activities | Stations/Centers<br>Work Alone/Together |
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