# Kindergarten Science
# Course Compendium

## UNITS OF STUDY*

Unit 1- *Basic Needs of Living and Human Things*

Unit 2- *Pushes and Pulls*

Unit 3- *Weather*

Unit 4- *Effects of the Sun*


## INTERDISCIPLINARY CONNECTIONS

## ELA Standards:

- RI.K.1. With prompting and support, ask and answer questions about key details in a text.
- RI.K.2. With prompting and support, identify the main topic and retell key details of a text.
- RI.K.3. With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text
- W.K.1 Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about, state an opinion or preference about the topic or book. (K-ESS2-2)
- W.K.1 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. (K-ESS2-2)
- W.K.2 Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). (K-LS1-1)
- W.K.7 Add drawings or other visual displays to descriptions as desired to provide additional detail. (K-ESS3-1)
- W.K.6.With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers. (K-2-ETS1-1)
- W.K.8. Recall information from experiences or gather information from provided sources to answer a question. (K-2-ETS1-1)
- SL.K.5 With prompting and support, ask and answer questions about key details in a text. (K-ESS2-2) R.K.1

## Math Standards

- K.MD.A.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. (K-LS1-1)
- MP.2 Reason abstractly and quantitatively. (K-ESS3-1) MP.2
- MP.4 Model with mathematics. (K-ESS3-1) MP.4
- MP.5. Use appropriate tools strategically. (K-2-ETS1-1)
- K.CC. Counting and Cardinality (K-ESS3-2)
- K.CC.A. Know number names and the count sequence. (K-ESS2-1)
- K.MD.A.1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. (K-ESS2-1)

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- K.MD.B.3. Classify objects into given categories; count the number of objects in each category and sort the categories by count. (K-ESS2-1)
- 2. MD. D.10. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. (K-2-ETS1-1)

- K.CC Counting and Cardinality (K-ESS3-1) K.CC

## 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.
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## 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 | | |
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| **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></ul><br>*Use WIDA Can Do Descriptors in coordination with Student Language Portraits (SLPs).<br><br>**Potential Accommodations for ELLs**<br><ul><li>Personal glossary</li><li>Text-to-speech</li><li>Extended time</li><li>Simplified / verbal instructions</li><li>Frequent breaks</li><li>Small group/One to one</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></ul><br>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.<br><br>**Potential Accommodations for Special Education** | <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></ul><br>**Potential Accommodations for Advanced Learners**<br><ul><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> |

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| | | **Students with 504 Plans** |
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| ● Additional time<br>● Review of directions<br>● Student restates information<br>● Extra visual and verbal cues and prompts<br>● Preferential seating<br>● Verbal and visual cues regarding directions and staying on task<br>● Checklists<br>● Immediate feedback | **Presentation accommodations**:<br>● Listen to audio recordings instead of reading text<br>● Pre-teach unknown vocabulary through pictures or videos, and relate to prior knowledge<br>● Work with fewer items per page and/or materials in a larger print size<br>● Use a visual blocker<br>● Use visual presentations of verbal material, such as word webs and visual organizers<br>● Be given a written list of instructions/picture cues<br>**Response accommodations**:<br>● Give responses in a form (oral or written) that's easier for him/her<br>● Dictate answers to a scribe<br>● Capture responses on an audio recorder<br>● Use a spelling dictionary or electronic spell-checker<br>● Use a word processor to give responses in class<br>● Use a calculator or table of "math facts"<br>**Setting accommodations**:<br>● Work or take a test in a different setting, such as a quiet room with few distractions<br>● Sit where he/she learns best (for example, near the teacher)<br>● Take a test in small group setting<br>**Timing accommodations**:<br>● Take more time to complete a task or a test<br>● Have extra time to process oral information and directions<br>● Take frequent breaks, such as after completing a task<br>**Assignment modifications**:<br>● Complete fewer or different homework problems than peers<br>● Shorten assignment<br>● Answer fewer or different test questions<br>● Create alternate projects or assignments | Teachers are responsible for implementing designated services and strategies identified on a student's 504 Plan. |
| **At Risk Learners / Differentiation Strategies** | | |

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| Alternative Assessments | Independent Research & Projects | Jigsaw |
| Choice Boards | Multiple Intelligence Options | Think-Tac-Toe |
| Games and Tournaments | Project-Based Learning | Cubing Activities |
| Group Investigations | Varied Supplemental Activities | Exploration by Interest |
| Guided Reading | Varied Journal Prompts or RAFT Writing | Flexible Grouping |
| Learning Contracts | Tiered Activities/Assignments | Goal-Setting with Students |
| Leveled Rubrics | Tiered Products | Homework Options |
| Literature Circles | Graphic Organizers | Open-Ended Activities |
| Multiple Texts | Choice of Books/Activities | Use of Reading Buddies |
| Personal Agendas | Mini-Workshops to Reteach or Extend | Varied Product Choices |
| | Think-Pair-Share by readiness or interest | Stations/Centers |
| | Use of Collaboration of Various Activities | Work Alone/Together |

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