



**Danville Area School District**  
**Course Overview and Scope and Sequence**

**Course Title:** 3rd Grade Science

**Content Area:** Science

**Grade Level:** 3rd Grade

**Date Developed:** Fall of 2023

**COURSE OVERVIEW:** Throughout this course students will integrate relevant science and engineering practices and crosscutting concepts into their learning and understanding of the core ideas. The core ideas found in the course are: Forces and Motion, Electricity and Magnetism, Life Cycles and Traits of both Plants and Animals, Animal Survival and Adaptations, Fossils, Observing Weather, and Natural Hazards in the Environment.

**ANCHOR STANDARDS:**

- 3.1.4.A. Know that natural and human-made objects are made up of parts.
- 3.1.4.B. Know models as useful simplifications of objects or processes.
- 3.1.4.C. Illustrate patterns that regularly occur and reoccur in nature.
- 3.1.4.D. Know that scale is an important attribute of natural and human made objects, events and phenomena.
- 3.2.4.A. Identify and use the nature of scientific and technological knowledge.
- 3.2.4.B. Describe objects in the world using the five senses.
- 3.2.4.C. Recognize and use the elements of scientific inquiry to solve problems.
- 3.2.4.D. Recognize and use the technological design process to solve problems.
- 3.3.4.A. Know the similarities and differences of living things.
- 3.3.4.B. Know that living things are made up of parts that have specific functions.
- 3.3.4.C. Know that characteristics are inherited and, thus, offspring closely resemble their parents.
- 3.3.4.D. Identify changes in living things over time.
- 3.4.4.A. Recognize basic concepts about the structure and properties of matter.
- 3.4.4.B. Know basic energy types, sources and conversions.

3.4.4.C. Observe and describe different types of force and motion.  
 3.4.4.D. Describe the composition and structure of the universe and the earth's place in it.  
 3.5.4.A. Know basic landforms and earth history.  
 3.5.4.B. Know types and uses of earth materials.  
 3.5.4.C. Know basic weather elements.  
 3.5.4.D. Recognize the earth's different water resources.

KEY COURSE TEXT AND MATERIALS: Inspire Science, Science Investigator Magazine, McGraw-Hill Online Platform, and Teacher Made Materials

KEY ASSESSMENTS:  
 Diagnostic: 8th Grade PSSA, 4th Grade PSSA, and 5th Grade PSSA 2025  
 Formative: Labs and Activities, Simulations and Model Construction, Bell Ringers, CER and Class Discussions  
 Summative: Projects and Lesson Reviews/Checks

SCOPE AND SEQUENCE					
Unit	PRIORITY STANDARDS	SUPPORTING STANDARDS	ASSESSMENT	MATERIALS	TIMEFRAME
Unit 4: Observing Weather	3.3.3.A Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.  3.3.3.B Obtain and combine information to describe climates in different regions of the world.	S4.A.1.1 S4.A.1.3 S.4.A.1.3.1 S4.A.2.1 S4.A.2.2 S4.A.3.1 S4.A.3.2 S4.A.3.3	Module Pretest Vocabulary Check Lesson Assessments Module Test CER	Inspire Science Teacher Manual Student Workbooks Investigator Magazines Leveled Science Readers Module Project Kits McGraw Hill Website Teacher made materials	25 days

	3.3.3.C Make a claim supported by evidence about the merit of a design solution that reduces the impacts of a weather-related hazard.				
Unit 3: Different Environments Part 1: Survive the Environment (Organisms)	<p>3.1.3.A Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.</p> <p>3.1.3.B Construct an argument that some animals form groups that help members survive.</p> <p>3.1.3.C Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these</p>	<p>S4.A.2.1.3 S4.A.3.1.2 S4.A.3.1.3 S4.A.3.2 S4.B.1.1.5 S4.B.2.1.1 S4.B.2.2 S4.B.3.1.1 S4.B.3.2.1 S4.B.3.2.2</p>	<p>Module Pretest Vocabulary Check Lesson Assessments Module Test CER</p>	<p>Inspire Science Teacher Manual Student Workbooks Investigator Magazines Leveled Science Readers Module Project Kits McGraw Hill Website Teacher made materials</p>	25 Days

	<p>traits exists in a group of similar organisms.</p> <p>3.1.3.D Use evidence to support the explanation that traits can be influenced by the environment.</p>				
<p>Unit 3: Different Environments Part 2: Change the Environment (Fossils)</p>	<p>3.1.3.E Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.</p>	<p>S4.B.2.1.2</p>	<p>Module Pretest Vocabulary Check Lesson Assessments Module Test CER</p>	<p>Inspire Science Teacher Manual Student Workbooks Investigator Magazines Leveled Science Readers Module Project Kits McGraw Hill Website Teacher made materials</p>	<p>25 days</p>
<p>Unit 2: Life Cycles and Traits (Plants)</p>	<p>3.1.3.H Make a claim supported by evidence about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live</p>	<p>S4.A.3.1.2 S4.A.3.1.3 S4.B.2.1.1 S4.B.3.1.1</p>	<p>Module Pretest Vocabulary Check Lesson Assessments Module Test CER</p>	<p>Inspire Science Teacher Manual Student Workbooks Investigator Magazines Leveled Science Readers Module Project Kits</p>	<p>25 Days</p>

	<p>there may change.</p> <p>3.1.3.G Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.</p>			<p>McGraw Hill Website</p> <p>Teacher made materials</p>	
<p>Unit 2: Life Cycles and Traits (Animals)</p>	<p>3.1.3.H Make a claim supported by evidence about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.</p> <p>3.1.3.G Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.</p>	<p>S4.A.3.1.2</p> <p>S4.A.3.1.3</p> <p>S4.B.2.1.1</p> <p>S4.B.3.1.1</p>	<p>Module Pretest</p> <p>Vocabulary Check</p> <p>Lesson Assessments</p> <p>Module Test</p> <p>CER</p>	<p>Inspire Science Teacher Manual</p> <p>Student Workbooks</p> <p>Investigator Magazines</p> <p>Leveled Science Readers</p> <p>Module Project Kits</p> <p>McGraw Hill Website</p> <p>Teacher made materials</p>	<p>25 Days</p>

<p>Unit 1: Forces Around Us Part 1: Forces and Motion</p>	<p>3.2.3.A Make and communicate observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion. 3.2.3.B Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.</p>	<p>S4.A.2.1 S4.A.2.1.4 S4.A.2.2 S4.A.2.2.1 S4.C.3.1 S4.C.3.1.1 S4.A.1.3 S4.A.4 S4.A.1.3.1 S4.C.3.1.3</p>	<p>Module Pretest Vocabulary Check Lesson Assessments Module Test CER</p>	<p>Inspire Science Teacher Manual Student Workbooks Investigator Magazines Leveled Science Readers Module Project Kits McGraw Hill Website Teacher made materials</p>	<p>30 Days</p>
<p>Unit 1: Forces Around Us Part 2: Electricity and Magnetism</p>	<p>3.2.3.C Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.  3.2.3.D Define a simple design problem that can be solved by applying scientific ideas</p>	<p>S4.A.2.1 S4.A.2.1.4 S4.A.2.2 S4.A.2.2.1 S4.C.3.1</p>	<p>Module Pretest Vocabulary Check Lesson Assessments Module Test CER</p>	<p>Inspire Science Teacher Manual Student Workbooks Investigator Magazines Leveled Science Readers Module Project Kits McGraw Hill Website Teacher made materials</p>	<p>25 Days</p>

	about magnets.				
--	----------------	--	--	--	--