Grade 3 - Science Pacing Calendar

Newsela: Seasonal STEAM Projects

	Week 1	Week 2	Week 3	Week 4
September **Generations of Butterflies (9 weeks) Start: 9/8/25** **Password: Cycle26**	Beginning of the Year Assessments **Newsela Link:** Engineering Design Process **Newsela link:** Science Claim-Evidence-Reasoning Activities Lab Safety	**Inheritance + Variation of Traits - Life Cycles + Traits:** **Grade 3:** 3-LS1-1 – Develop models to describe that organisms have unique and diverse life cycles. **Grade 4:** 4-LS1-1 – Construct an argument that animals and plants have internal and external structures that support survival. **Grade 5:** 5-LS1-1 – Support an argument that plants get the materials they need for growth chiefly from air and water. **Plant Life Cycles** Newsela Link **Research:** Model the life cycle of a plant.	**Inheritance + Variation of Traits - Life Cycles + Traits:** **Grade 3:** 3-LS1-1 – Develop models to describe that organisms have unique and diverse life cycles. **Grade 4:** 4-LS1-1 – Construct an argument that animals and plants have internal and external structures that support survival. **Grade 5:** 5-LS1-1 – Support an argument that plants get the materials they need for growth chiefly from air and water. **Animal Life Cycles** Newsela Link **Research:** Model the life cycle of an animal. **Generation Genius:** Animal + Plant Life Cycles	**Inheritance + Variation of Traits - Life Cycles + Traits:** Inherited traits **Grade 3:** 3-LS3-1 – Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents. **Grade 4:** 4-LS1-1 – (applies to structure-function relationship). **Grade 5:** 5-LS1-1 – Supports understanding of how traits support function and survival. Newsela Link **Activity:** Create a data table of traits inherited from your parents. Attach a family picture. **Science Benchmark**
October	**Inheritance + Variation of Traits - Life Cycles + Traits:** **Grade 3:** 3-LS3-2 – Use evidence to support the explanation that traits can be influenced by the environment. **Grade 4:** 4-LS1-1 – Explores structural variation and function. **Grade 5:** 5-LS1-1 – Related to adaptation for growth. **Inheritance of traits**	**Inheritance + Variation of Traits - Life Cycles + Traits:** **Grade 3:** 3-LS3-2 – Traits influenced by environment. **Grade 4:** 4-LS1-1 **Grade 5:** 5-LS2-1 – Describes interactions in ecosystems. **How the Environment Affect Traits** Newsela Link **Generation Genius:**	**Inheritance + Variation of Traits - Life Cycles + Traits:** **Grade 3:** 3-LS4-2 – Use evidence to construct an explanation for how variations in traits help individuals survive. **Grade 4:** 4-LS1-1 **Grade 5:** 5-LS2-1 – Emphasizes interdependence and survival. **Natural Selection + Adaptation**	**NYS Elementary- Level Science Investigation** **Inheritance and Variation of Traits: Circle of Life** **Literacy:** (Compare + Contrast) Compare and contrast 2 organisms. In your essay, explain how the variation in their traits allowed them to survive in a specific environment.

	Week 1	Week 2	Week 3	Week 4
	Variation of traits Newsela Link	Variation of Traits	Newsela Link **Activity:** Bird competition (How the shape and size of beaks helps birds to survive in certain environments) Toddle reflections	
November **Where are the Wolves? (9 weeks) Start: 11/17/25** **Password: Evidence26**	**STEM Night Projects** Research, model and build your STEM projects based on the activities and topics under Inheritance + Variation of Traits - Life Cycles + Traits	**STEM Night November 13, 2025** Toddle reflections	**Interdependent Relationships in Ecosystems:** **Grade 3:** 3-LS2-1 – Construct an argument that some animals form groups to help members survive. **Grade 4:** 4-LS1-1 **Grade 5:** 5-LS2-1 **Social interactions and group behavior: Animals working together to find food, provide safety, and survive in the environment** Newsela Link **Generation Genius:** Animal group behavior	**Interdependent Relationships in Ecosystems:** **Grade 3:** 3-LS4-3 – Construct arguments about how some organisms can survive well, less well, or not at all in changed environments. **Grade 4:** 4-ESS3-1 – Human impacts on Earth's systems. **Grade 5:** 5-ESS3-1 – Generate and compare solutions to reduce human impacts on the environment. **Adaptation: Habitats help an organisms survive well, survive less, or not survive** Biodiversity + humans Newsela Link **Literacy:** (Argumentative): Choose an organism and present a claim that changing its environment can help it survive well, less, or not at all. **Generation Genius:** Adaptations and the environment

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December	**Interdependent Relationships in Ecosystems:** **Grade 3:** 3-LS4-1 – Analyze fossils to determine organism characteristics and environments. **Grade 4:** 4-ESS1-1 – Identify evidence from patterns in rock formations and fossils. **Grade 5:** 5-ESS1-1 – Earth's place in the universe (time scales context). **Common ancestry + diversity: Fossil stud**y Newsela Link **Literacy:** (Expository): Research an extinct organism. Provide details of their fossil records including where they once lived, and the environmental features. Provide an explanation of why they became extinct. **Generation Genius:** Fossils + Extinction	**Interdependent Relationships in Ecosystems:** Ecosystems, Dynamics, Functioning, + Resilience: Environmental changes affect the areas physical characteristics, temperature, and available resources. These may result in organisms surviving and reproducing, moving to a new location, while others stay, +/or die. Newsela Link	**Interdependent Relationships in Ecosystems:** **Grade 3:** 3-LS4-4 – Make a claim about the merit of a solution to reduce the impact of environmental change. **Grade 4:** 4-ESS3-1 – Human impact on Earth. **Grade 5:** 5-ESS3-1 – Environmental protection solutions. **Literacy:** (Argumentative): Make a claim 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. Toddle reflections	Holiday Recess School Closed

	Week 1	Week 2	Week 3	Week 4
January **Invisible Forces (7 weeks) Start: 1/12/26** **Password: Goldberg26**	Holiday Recess School Closed	**Forces + Interactions:** **Grade 3:** 3-PS2-1 – Plan and conduct an investigation on balanced/unbalanced forces. **Grade 4:** 4-PS3-3 – Energy and forces; relationship to speed. **Grade 5:** 5-PS2-1 – Motion and force on Earth. **Newton's 1st Law** - (Law of inertia) An object at rest stays at rest, and an object in motion stays in motion unless acted upon by an external force. N**ewton's 2nd Law** - (Law of acceleration) The force acting on an object is equal to the mass of the object times its acceleration (F = ma) **Newton's 3rd Law** – (Action-Reaction) For every action there's an equal and opposite reaction	**Forces + Interactions:** **Grade 3:** 3-PS2-1 **Grade 4:** 4-PS3-3 **Grade 5:** 5-PS2-1 **Forces + motion: Balanced + Unbalanced forces** Newsela Link **Generation Genius:** Balanced + unbalanced forces **Patterns of motion** Newsela Link **Activity:** Make predictions of the pattern of movement of an object based on applying balanced and unbalanced forces. **Activity:** Test different weights on an object to determine if it's balanced/unbalanced forces, and the direction of motion. Measure the distance and record it on a data table.	**Forces + Interactions:** **Grade 3:** 3-PS2-4 – Define a simple design problem using magnets or static electricity. **Grade 4:** 4-PS3-2 – Make observations to show energy transfer through electric currents. **Grade 5:** 5-PS1-3 – Matter and energy interaction in design. **Electricity + magnetic interactions** Newsela Link **Activity:** Make observations of electricity on various objects. **Activity:** Make observations on the magnetic force between two permanent magnets, an electromagnet on paperclips, and the force exerted on one magnet vs two. Include how the orientation of the magnet affects the force (attract/repel). **Generation Genius:** Magnets + static electricity
February	**Forces + Interactions:** **Grade 3:** 3-PS2-4 **Grade 4:** 4-PS3-2 **Grade 5:** 5-PS1-3 Newsela Link **Engineering Design:** Home renovation project – use magnets in a	**Forces + Interactions:** **Grade 3:** 3-PS2-4 **Grade 4:** 4-PS3-2 **Grade 5:** 5-PS1-3 Newsela Link **Engineering Design:** Home renovation project – use magnets in a	Winter Recess School Closed	**Forces + Interactions:** **Grade 3:** 3-5-ETS1-1 – Define a simple design problem with constraints. **Grade 4:** 4-PS3-4 – Apply scientific ideas to design and test solutions. **Grade 5:** 3-5-ETS1-1

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	home diorama to close a door /cabinet or keep them open.	home diorama to close a door /cabinet or keep them open.		**Research:** Research different airplane designs and how their design affects flight speed and distance.
March **Investigating Weather and Climate (13 weeks) Start: 3/30/26** **Password: Hazards26**	**Forces + Interactions:** **Grade 3:** 3-5-ETS1-2 – Generate and compare multiple solutions. **Grade 4:** 4-PS3-4 **Grade 5:** 3-5-ETS1-2 **Engineering Design:** Develop an airplane model with/without magnets, variations in shape and weight. Measure the distance it travels.	**Forces + Interactions:** **Grade 3:** 3-5-ETS1-2 – Generate and compare multiple solutions. **Grade 4:** 4-PS3-4 **Grade 5:** 3-5-ETS1-2 **Grade level competition:** Airplane toss	**Forces + Interactions:** **Grade 3:** 3-5-ETS1-3 – Plan and carry out fair tests and refine designs. **Grade 4:** 4-ESS3-2 – Earth impact from human tools/technology. **Grade 5:** 3-5-ETS1-3 Trip: Cradle of Aviation Toddle reflections	**EARTH DAY PROJECTS**
April	NYS Assessments **EARTH DAY PROJECTS** **Grade 3:** 3-ESS3-1 – Make a claim about ways to reduce human impact. **Grade 4:** 4-ESS3-2 **Grade 5:** 5-ESS3-1	Spring Recess School Closed	NYS Assessments **EARTH DAY PROJECTS** **Earth Day – April 22, 2026**	NYS Assessments **EARTH DAY CELEBRATIONS** **Gallery walks + Celebrations**

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May	**Weather + Climate:** **Grade 3:** 3-ESS2-1 – Represent data in tables and graphs to describe typical weather conditions. **Grade 4:** 4-PS4-3 – Develop models of light and sound for understanding waves (related). **Grade 5:** 5-ESS2-1 – Develop a model describing water movement in Earth systems. Weather: What is weather? Newsela Link **Activity:** Create a data table describing weather conditions during each season Weather Hazards: Review natural weather hazards. Weather Predictions + Patterns: Review weather across different times and places to predict weather conditions. **Literacy:** (Cause + Effect): make a claim to design a solution to weather related problems in an area	**Weather + Climate:** **Grade 3:** 3-ESS2-2 – Obtain and combine information to describe climates in different world regions. **Grade 4:** 4-ESS2-2 – Analyze maps of Earth features. **Grade 5:** 5-ESS2-1 Climate: What is climate? Review + the Water cycle Climate in different regions of the world Newsela Link **Generation Genius:** Weather vs Climate **STEM Night Projects** **STEM Night** **May 19, 2025**	**NYS Elementary- Level Science Investigation** **Weather and Climate: Cloud in a Bottle** Unit assessment Toddle reflections	**Weather + Climate:** **Grade 3:** 3-ESS2-1 **Grade 4:** 4-ESS2-1 **Grade 5:** 5-ESS2-1 Becoming a Weather forecaster presentations Weather Forecaster visit Toddle reflections **Lab make-ups**
June	**Lab make-ups**	**End of Year Assessments**	**End of Year Activities**	**End of Year Activities**