



# EASTON and REDDING

## NGSS CURRICULUM UNITS

### K-8

In 2015, Connecticut adopted the Next Generation Science Standards (NGSS) put out by the National Science Teachers Association, Achieve and the National Research Council of the National Academies. In 2016, Easton and Redding began the roll out of these standards. During the 2017-18 school year, implementation of the grade level units were developed and instructed in Grades K-3 and 6. In the 2018-19 school year grades 4,5, 7 & 8 began implementation of their respective units.

The units were developed in collaboration with CREC (Capitol Region Education Council) led by Dr. Jaime Rechenberg. The units were built from the curriculum bundles set forth by Nextgenscience.org. The bundles include:

- Performance Expectations
- Disciplinary Core Ideas (content)
- Science and Engineering Practices (How scientists do science)
- Crosscutting Concepts (ideas that go across disciplines)

Each grade level has 3-4 bundles per instructional year. All disciplinary areas of science (Life, Physical, Earth and Engineering and Technology) are covered during each grade level and often multiple areas are within a bundle showing the real-world interdisciplinary approach to science.

Each bundle is developed around a scientific question or phenomena. The goal of the unit is to teach the science behind the phenomena so that students can understand the why behind the scientific event.

As you will see below, concepts are covered in grade-level bands, including K-2, 3-5, and 6-8. Concepts are introduced in the first grade level band and then the concepts are developed in subsequent grade bands with understanding progressing from the concrete to the abstract.



Grade Level	Units
K	<a href="#">Link to Bundle Overview</a> Plants and Animal's Needs ~ <a href="#">Class Pet</a> Force and Motion ~ <a href="#">Push Pull Play</a> Weather ~ <a href="#">Waiting For Weather</a>
1	<a href="#">Link to Bundle Overview</a> <a href="#">Sun and Moon Patterns</a> Communicating with <a href="#">Light and Sound</a> Structure and Function of Plants & Animals <a href="#">Learning About Nature Through Our Senses</a> Seasons and Animal Traits ~ <a href="#">Seasons Change So Does Nature</a>
2	<a href="#">Link to Bundle Overview</a> <a href="#">Matter and Its Interactions ~ The Fourth Little Pigs House</a> <a href="#">Beavers, Nature's Engineers ~ Erosion</a> <a href="#">Ecosystem Dynamics ~ The Koa Tree Problem</a>

Grade Level	Units
3	<a href="#">Link to Bundle Overview</a> <a href="#">Motion Detectives on the Playground</a> <a href="#">Differences in Organisms ~ What do we learn from Fossils?</a> <a href="#">Survival of Organisms ~ Monarchs</a> <a href="#">Changing Environments</a>
4	<a href="#">Link to Bundle Overview</a> Erosion and Weathering ~ <a href="#">The Changing Earth</a> Biomimicry ~ <a href="#">Mimicking the Natural World</a> Earth's Energy ~ <a href="#">Plate Tectonics ~ Moodus Noises</a>
5	<a href="#">Link to Bundle Overview</a> Matter and Sun, Moon, & Stars <a href="#">Blue Blood Moon</a> <a href="#">Habitats &amp; Ecosystems</a> <a href="#">Stability and Change in the Earth's Systems ~ Antarctica</a>

Grade Level	Units
6	<a href="#">Link to Bundle Overview</a> Weather and Climate ~ <a href="#">Destructive Weather</a> <a href="#">Energy Transfer</a> ~ <a href="#">Penguin Habitats</a> <a href="#">Cells and Body Systems</a> ~ <a href="#">Lyme Disease</a> Traits and Reproduction ~ <a href="#">Declining Bee Population</a>
7	<a href="#">Link to Bundle Overview</a> <a href="#">The Chemistry of Energy Drinks</a> <a href="#">Ecosystems</a> ~ <a href="#">Bio Bottle</a> <a href="#">Changing Earth Features</a> ~ <a href="#">India</a>
8	<a href="#">Link to Bundle Overview</a> Force and Motion ~ <a href="#">Car Collisions</a> or <a href="#">The Science of Jet Packs</a> <a href="#">Energy in Waves</a> Mechanisms and Diversity ~ <a href="#">Jurassic Park</a> Changing Earth ~ <a href="#">Moon</a>