

Next Generation Science Standards

- 5-PS1 Matter and Its Interactions
- 5-PS2 Motion and Stability: Forces and Interactions
- 5-PS3 Energy
- 5-LS1 From Molecules to Organisms: Structures and Processes
- 5-LS2 Ecosystems: Interactions, Energy, and Dynamics
- 5-ESS1 Earth’s Place in the Universe
- 5-ESS2 Earth’s Systems
- 5-ESS3 Earth and Human Activity
- 3-5-ETS1 Engineering Design

Technology

SMART Board, Elmo, iPads, YouTube, United Streaming, Encyclopedia Britannica, ReadWorks

Standards	Essential Questions	Content	Skills	Assessment	Resources
Scientific Method and Matter 5-PS1 3-5-ETS1	Scientific Method and Matter How do scientists use the scientific method to measure matter?	Scientific Method and Matter -Question -Information collection -Hypothesis -Experiment -Variable -Data -Conclusion -Properties -States -Chemical reactions	Scientific Method and Matter -Brainstorm questions about a scientific topic -Infer knowledge from observations -Write a hypothesis that can be tested -Carry out a guided experiment -Identify the variable in the experiment -Collect and analyze data -Prove or disprove hypothesis -Communicate what was learned -Conduct experiments that involve measuring the properties of matter, states, and chemical reactions	Scientific Method and Matter -Interactive notebooks -Hands on activities/labs/ experiments -Vocabulary quizzes -Unit test	Scientific Method and Matter - <i>Elevate Science</i> Grade 5 by Pearson (2019) - <i>Sandwich Bag Science</i> by Steve Tomecek -Non-fiction articles from ReadWorks - <i>Exploring Science 5</i> by National Geographic

Science 5th grade

Standards	Essential Questions	Content	Skills	Assessment	Resources
Ecosystems 5-PS3 5-LS1 5-LS2 MS-LS2	Ecosystems How do living and non-living things interact in an ecosystem?	Ecosystems -Energy pyramid -Photosynthesis -Interdependent relationships -Chains and webs -Decomposers -Consumers -Producers -Predator and prey -Habitats -Adaptations: behavioral and structural	Ecosystems -Understand the flow of energy as it's transferred from one organism to the next -Explain the role of photosynthesis in the flow of energy -Demonstrate how living and non-living things are dependent on each other -Construct food chains and webs to show interdependent relationships -Provide examples of how living things adapt to survive	Ecosystems -Interactive notebooks -Hands on activities/labs/ experiments -Vocabulary quizzes -Unit test	Ecosystems - <i>Elevate Science</i> Grade 5 by Pearson (2019) -Non-fiction articles from ReadWorks - <i>Exploring Science 5</i> by National Geographic - <i>Food Chains and Webs</i> science module by Delta Education (2011)
Earth's Systems 5-ESS2 5-ESS3	Earth's Systems How are the interactions of the four spheres constantly changing the Earth?	Earth's Systems -Spheres: geosphere, biosphere, hydrosphere, atmosphere -Human impact	Earth's Systems -Know the four spheres -Explain how each sphere interacts with other spheres to affect Earth's surface materials and processes -Explain human impact on the four spheres	Earth's Systems -Interactive notebooks -Hands on activities/labs/ experiments -Vocabulary quizzes -Unit test	Earth's Systems - <i>Elevate Science</i> Grade 5 by Pearson (2019) -Non-fiction articles from ReadWorks - <i>Exploring Science 5</i> by National Geographic
Earth's Place in the Universe 5-PS2 5-ESS1	Earth's Place in the Universe How does the Earth, sun, stars, and moon interact?	Earth's Place in the Universe -Gravity -Orbit -Rotation -Revolution -Sun -Stars -Moon phases -Patterns -Seasons	Earth's Place in the Universe -Explain how the Earth, sun, stars, and moon interact -Understand how the Earth's location in space impacts observable patterns	Earth's Place in the Universe -Interactive notebooks -Hands on activities/labs/ experiments -Vocabulary quizzes -Unit test	Earth's Place in the Universe - <i>Elevate Science</i> Grade 5 by Pearson (2019) -Non-fiction articles from ReadWorks - <i>Exploring Science 5</i> by National Geographic