

Grade 3 Science: Year-at-a-Glance

Overview

This year, students explore how materials can change, looking closely at what happens when matter is heated, cooled, mixed, or reshaped. They also investigate forces and how pushes and pulls make objects move differently. Students turn their attention to Earth's surface, learning that its layers can tell stories about the past. They study how plants and animals interact with each other and with their environments. Students use creativity alongside computational thinking to solve problems. Throughout the year, students build understanding through scientific investigation, learning methods that help reduce bias and increase objectivity. [See the curriculum: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.](#)

The year at a glance

Grade 3

Organizing idea	Guiding questions	Learning outcomes
Matter: Understandings of the physical world are deepened by investigating matter and energy.	How can materials change?	Students investigate and analyze how materials have the potential to be changed. (see the curriculum)
Energy: Understandings of the physical world are deepened by investigating matter and energy.	How can forces relate to changes in movement?	Students investigate and explain how forces affect the movement of objects. (see the curriculum)
Earth Systems: Understandings of the living world, Earth, and space are deepened by investigating natural systems and their interactions.	What visible changes can be identified by examining Earth's surface?	Students analyze changes in Earth's surface and explain how its layers hold stories of the past. (see the curriculum)
Living Systems: Understandings of the living world, Earth, and space are deepened by investigating natural systems and their interactions.	How do plants and animals interact?	Students analyze and describe how plants and animals interact with each other and within environments. (see the curriculum)
Computer Science: Problem solving and scientific inquiry are developed through the knowledgeable application of creativity, design, and computational thinking.	How does creativity contribute to computational thinking?	Students investigate creativity and its relationship to computational thinking. (see the curriculum)
Scientific Methods: Investigation of the physical world is enhanced through the use of scientific methods that attempt to remove human biases and increase objectivity.	How can investigation help to deepen understanding in science?	Students relate investigation to building knowledge. (see the curriculum)

Across the year

- Investigating matter and energy gives students hands-on ways to see cause and effect, whether they are changing materials or testing how forces move objects. [See the curriculum: 1, 2.](#)
- Studying Earth's surface and living systems together helps students see how land, plants, and animals shape and depend on one another. [See the curriculum: 1, 2.](#)
- Scientific methods run through every unit, giving students a consistent way to ask questions and test ideas no matter what they are studying. [See the curriculum: 1, 2.](#)

- Computational thinking connects to real problem-solving, encouraging students to bring creativity into how they investigate and design solutions. [See the curriculum: 1, 2.](#)
- Each organizing idea pairs a big question with a specific outcome, so students build toward clear understanding step by step. [See the curriculum: 1, 2, 3, 4, 5, 6, 7, 8.](#)