



Science 21 Vision Statement

The Science 21 Elementary Science Curriculum Project envisions that science classrooms in member districts will foster a learning environment where all students learn the practices, the core idea, and crosscutting concepts of science and engineering to become independent and collaborative, problem-solvers, and self-directed learners in their present and future lives.

In such an environment students will:

- ❖ Engage in the active construction of essential core ideas in science and engineering that is developmentally appropriate and relevant to their lives in the life sciences, earth/space sciences, physical science, and engineering.
- ❖ Be encouraged to evaluate phenomena and then construct meaning through hands-on activities using appropriate materials and skills.
- ❖ Be encouraged to identify real-world human problems, designing solutions, evaluating solutions and communicating this information in a variety of ways including spoken, written, pictorial, graphical, and mathematical forms.
- ❖ Engage in a variety of child-centered learning experiences where they must apply Science and Engineering Practices and Crosscutting Concepts to other disciplines and in areas beyond the classroom.
- ❖ Be assessed in a variety of ways, including performance tasks, exhibitions, written and oral tests and portfolios, to demonstrate what they know and can do in science



Kindergarten

- ❖ Unit 1 Weather and Climate/ Matter and Its Interactions
- ❖ Unit 2 Forces and Interactions: Pushes and Pulls
- ❖ Unit 3 Interdependent Relationships in Ecosystems:
Animals, Plants and Their Environment



Grade 1

- ❖ Unit 1 Earth's Systems: Patterns and Cycles
- ❖ Unit 2 Waves: Light and Sound
- ❖ Unit 3 Structure, Function, and Information Processing



Grade 2

- ❖ Unit 1 Structure and Properties of Matter
- ❖ Unit 2 Earth's Systems: Processes that Shape the Earth
- ❖ Unit 3 Interdependent Relationships in Ecosystems



Grade 3

- ❖ Unit 1 Forces and Interactions
- ❖ Unit 2 Interdependent Relationships in Ecosystems
- ❖ Unit 3 Weather and Climate
- ❖ Unit 4 Inheritance and Variation of Traits



Grade 4

- ❖ Unit 1 Organizing Ourselves for Doing Science
- ❖ Unit 2 Digestion, Nutrients, Food Chains and Food Webs
- ❖ Unit 3 Simple Machines
- ❖ Unit 4 Organization of the Earth (constructive and destructive forces, rocks and minerals)



Grade 5

- ❖ Unit 1 Interactions of Chemical Matter (focus on controlled studies)
- ❖ Unit 2 Interactions in the Microworld (cells lead into...)
- ❖ Unit 3 Interactions in the Human Body (respiratory/circulatory & muscular/skeletal systems and genetics)
- ❖ Unit 4 Interactions in the Environment- Energy Transfer



Grade 6

- ❖ Investigating the Nature of Science and Technology
- ❖ Investigating Energy (Electromagnetism, Potential/Kinetic)
- ❖ Unit 3 Investigating Earth in Space
- ❖ Unit 4 Investigating the Environment (Ecosystems, Human interactions with the Environment)