

Welcome to Science Grades K-2

Teacher: Mrs. Anzalone

I am excited to embark on a journey of discovery and exploration with your children this year. In our K-2 science classes, we focus on developing curiosity, observation skills, and a love for the natural world through hands-on experiences.

Curriculum Overview

Our K-2 science curriculum is based on the Next Generation Science Standards (NGSS) and focuses on three main areas:

Physical Science

- Properties of matter
- Pushes and pulls (forces)
- Light and sound

Plants and animals

- Plants and animals
- Living vs. non-living things
- Habitats and survival needs
- Life cycles

Earth and Space Science

- Weather and seasons
- Day and night sky
- Water and land on Earth
- Natural resources

Grade-Specific Units

Kindergarten

- Weather and Climate: Observing, recording, and predicting weather patterns
- Forces and Interactions: Push, pull, and motion

- Interdependent Relationships in Ecosystems: Animals, plants, and their environments
- Plants and Animals: Basic needs and structures

First Grade

- Light and Sound: Properties and applications
- Structure, Function, and Information Processing: Plant and animal parts and their functions
- Space Systems: Patterns and cycles in the sky
- Engineering Design: Solving problems with technology

Second Grade

- Structure and Properties of Matter: Different materials and their uses
- Interdependent Relationships in Ecosystems: Plants, animals, and their environments
- Earth's Systems: Processes that shape the Earth
- Engineering Design: Designing solutions to problems

Class Expectations

In our science classes, students are expected to:

- Follow safety rules at all times
- Participate in discussions and activities
- Work cooperatively with classmates
- Show respect for living things and the environment
- Ask questions and share observations
- Take care of science materials and equipment

Science Process Skills

Throughout the year, we will focus on developing these important science process skills:

- Observing: Using the five senses to gather information

- Classifying: Grouping objects based on similarities and differences
- Measuring: Using tools to collect data
- Communicating: Sharing observations and ideas
- Predicting: Making informed guesses based on observations
- Inferring: Drawing conclusions from evidence

Home Connections

You can support your child's science learning at home by:

- Taking nature walks and discussing observations
- Growing plants together
- Observing and discussing weather patterns
- Exploring simple machines around the house
- Reading books about science topics
- Visiting museums, zoos, aquariums, and parks
- Asking "What do you notice?" and "Why do you think that happens?"

Contact Information

If you have any questions or would like to discuss your child's progress, please feel free to contact me:

Email: ranzalone@schools.nyc.gov

Class Dojo: Please make sure you are connected to our class

Welcome to 3-5 Science!

Teacher: Ms. Oliveri

I am thrilled to work with your children in our science program this year. In grades 3-5, we build upon earlier scientific knowledge and deepen our understanding of core concepts while developing more sophisticated scientific practices and critical thinking skills.

Curriculum Overview

Our 3-5 science curriculum aligns with the Next Generation Science Standards (NGSS) and explores the following disciplinary core ideas in greater depth:

Physical Science

- Matter and its interactions
- Forces and interactions
- Energy
- Waves and their applications

Life Science

- Structures and processes of organisms
- Ecosystems
- Heredity
- Biological evolution

Earth and Space Science

- Earth's place in the universe
- Earth's systems
- Earth and human activity

Grade-Specific Units

Third Grade

- Forces and Interactions: Balanced and unbalanced forces, patterns of motion
- Interdependent Relationships in Ecosystems: Environmental traits, adaptations, and survival
- Inheritance and Variation of Traits: Life cycles and inherited traits
- Weather and Climate: Weather patterns, climate in different regions

Fourth Grade

- Energy: Transfer, conversion, and relation to matter
- Waves: Properties, patterns, and information transfer
- Structure, Function, and Information Processing: Plant and animal structures
- Earth's Systems: Processes that shape Earth's features

Fifth Grade

- Matter and Its Interactions: Properties, changes, and conservation of matter
- Energy in Earth's Systems: Energy from the sun, energy in food
- Earth's Systems: Interaction of Earth's major systems
- Space Systems: Stars and the solar system
- Engineering Design: Defining problems and designing solutions

Scientific Practices

Students will engage in these essential scientific practices:

- Asking questions and defining problems
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
- Using mathematics and computational thinking
- Constructing explanations and designing solutions
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

Class Structure

Our science classes typically include:

- Engagement activities to spark curiosity
- Hands-on investigations and experiments
- Scientific discussions and debates
- Data collection and analysis
- Science notebooks for recording observations and reflections
- Collaborative group work
- Connections to real-world applications

Assessment

Student progress will be assessed through:

- Science notebook entries
- Participation in investigations and discussions
- Project-based assessments
- Written explanations and models
- Unit quizzes and tests

Resources**Recommended resources to support science learning:**

- Mystery Science (online platform)
- National Geographic Kids
- NASA Kids' Club website
- STEM activities from PBS Kids
- American Museum of Natural History
- Liberty Science Center
- Local parks and nature centers

Contact Information**Please reach out with any questions:**

Email: joliveri2@schools.nyc.gov

Class Dojo: Please make sure you are connected to our class