

## How will students learn science in the classroom?

Each year, students in our schools should be able to demonstrate greater capacity for connecting knowledge across, and between, the physical sciences, life sciences, earth and space sciences, and engineering design. During grades K–2, your child will begin to form connections between concepts and skills such as understanding relationships between objects, planning and carrying out investigations, and constructing explanations.

## Upon completion of grades K–2, your child should have a deeper understanding of:

- Motion and properties of matter;
- Relationship between sound and vibrating materials;
- Factors that impact what plants and animals need to survive; and
- How objects can be changed or improved through engineering.

### Physical Sciences

Physical sciences during grades K–2 may explore questions including:

- How does pushing or pulling an object change the speed or direction of its motion?
- How do objects change motion when they touch or collide?
- What are some effects of sunlight on earth's surface?

### Life Sciences

Life Sciences during grades K–2 may explore questions including:

- What do plants and animals need to live and grow?
- How does the insect survive the winter if the plant is dead?
- How are parents and their children similar and different?

### Earth and Space Sciences

Earth and space sciences during grades K–2 may explore questions including:

- What are the different kinds of lands and bodies of water?
- Why is it usually cooler in the mornings than in the afternoons?
- What objects are in the sky and how do they seem to move?

### Engineering Design

Engineering design during grades K–2 may explore questions including:

- What is a local example of engineering design?
- What materials were used to construct the project?
- What kinds of problems can be solved through engineering?

For additional information about academic expectations for students in Grades K-2, visit [www.nextgenscience.org/parentguides](http://www.nextgenscience.org/parentguides).