



**Grade 1 Overview:** The clusters below are bench-marked against the Next Generation Science Standards: <http://www.nextgenscience.org/>

## **Unit 1: Engineering Design/Unit of Science**

Introduce and build a scientific classroom within the first three weeks by exposing children to the design process and the scientific method through hands-on experiences. Teaching lab safety processes ensures safe practices throughout the year and ensures proper identification and usage of lab equipment. The Engineering Design and Nature of Science practices should be implemented within each unit throughout the course of the entire year.

Each main unit can be taught in 6 weeks. Teachers are encouraged to incorporate STEM and hands-on activities throughout each unit.

## **Unit 2: Plant & Animal Superpowers**

This unit focuses on comparing and contrasting what living things have and do in order to survive and respond to their environment.

- Explore plant parts that help them grow and survive (roots, stem, leaves, flower, fruits)
- Identify uses of animal parts that help them grow and survive
- Analyze how plants and animals may respond to their environment.

## **Unit 3: Light and Sound**

This unit focuses on the properties of light and sound. Students will develop the idea that by exploring the properties of light and sound, human beings create fun and useful things.

Investigate how various materials affect how light travels.

- Recognize the relationships between sounds and vibrations.
- Design a model that allows students to communicate over a distance.
- Identify how things are illuminated.

## **Unit 4: Space Systems: Patterns in the Sky**

This unit focuses on space and the objects we see in the sky. Students will develop the idea that by observing patterns of the sun, moon, and stars, they can describe how the sky changes over time.

- Compare and contrast where objects in the sky appear at different times of the day.

- Explain how the amount of daylight changes throughout the year.
- Cite evidence as to why stars are not visible during the daylight and why sometimes the moon is visible during the daylight.