



First Grade Science

Ecosystems and Heredity: It's Alive!

Dear Families,

Here is what your child is learning in First Grade, during the study of ecosystems and heredity with some specific ways you can help. Look for additional newsletters for upcoming units.

Ecosystems and Heredity: It's Alive!

Students need to:

- Identify four or more methods by which seeds travel and use the engineering design process to create a seed that is dependent on animals for dispersal.
- Identify many factors in soil that effect where seeds can grow by germinating seeds under different conditions.
- Identify the essential needs for a plant to grow based on changing the variables of a plants environment.
- Recognize, observe and record the different parts of a plant (roots, stems, leaves and flowers).
- Analyze how the parts of the plant work together to help the plant.
- Identify how seedlings and parent plants look similar and different and apply their understanding of plant traits by creating a seedling and parent plant.
- Identify how parents and their offspring look and act similar and different.
- Classify and sort animals by similar characteristics.
- Research and record characteristics of animals, plants or insects and present their findings to classmates.
- Design a Mystery Box, using their understanding of plant and animal adaptations, to protect a secret or special object from intruders.
- Identify 2 or more characteristics of the different habitats.
- Create a mini habitat "dourama" with a small group or partner that compares two different habitats.
- Create a hybrid animal that can survive in two different habitats using their knowledge of animal adaptations and behaviors for survival.

Key Vocabulary

Adaptation: the process plants and animals use to thrive in their environment

Analyze: to study or look closely

Characteristics: a feature or quality that describes a person, place, or object

Engineering Design Process: a series of steps engineers use to solve a problem (see the following page for an example of the process)

Evidence: facts or information proving something is true

Dourama: a 3D visual

Germinate: a seed beginning to grow

Habitat: the natural home or environment of an animal or plant.

Hybrid: the offspring of two plants or animals of different species.

Offspring: created by a parent animal or plant

Seed Dispersal: how seeds travel from one place to another

Seasons: the four seasons of the year, Winter, Spring, Summer, and Fall

Species: a group of plants or animals with similar characteristics

Thrive: to live and grow

Variable: something that can be changed

Ways FAMILIES Can Help

- Use the Discovery Education link to find more information about animals and their habitats.
- Talk with your child about how animals can protect themselves.
- Take a nature walk with your child and discuss what plants and animals they see.
- Plant a seed with your child and keep a journal observing how it grows over time.
- Have your child keep a journal of plants they find around your house and label the different parts.

An example of the Engineering Design Process:

