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The Greenhouse Ecosystem

Grade Levels: 3rd - 5th

Students investigate Hildene's warm and cold houses to discover how thriving plants are grown year-round. While learning about pests and beneficial insects of a greenhouse, students perform "plant health checks." They also plant, harvest and enjoy one of our most popular greenhouse crops, microgreens, while looking closely at plants' structure and function.

Next Generation Science Standards Addressed:

Third Grade

- 3-LS1-1. Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.
- 3-LS3-2. Use evidence to support the explanation that traits can be influenced by the environment.
- 3-LS4-2. Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.
- 3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.
- 3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.
- 3-ESS3-1. Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.

Fourth Grade

- 4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support growth, behavior, and reproduction.

Fifth Grade

- 5-PS3-D The energy released [from] food was once energy from the sun that was captured by plants in the chemical process that forms plant matter (from air and water).
- 5-LS1-1. Support an argument that plants get the materials they need for growth chiefly from air and water.