HOLLISTON Public Schools

Unit 4: Plant Adaptations

Subject Area: Science	**Course**: Second Grade Science		
Unit Title: Plant Adaptations	**Grade(s)**: 2	**Start**: May	**End**: June
Unit Summary: In this unit, students continue to explore the needs of plants through hands-on investigations. They explore why and how plants disperse their seeds, what those seeds need in order to grow, and what the adult plants need in order to survive and thrive.			

Stage 1: Desired Results

Massachusetts Learning Standards

- 2-LS2-3(MA). Develop and use models to compare how plants and animals depend on their surroundings and other living things to meet their needs in the places they live.
- 2-LS4-1. Use texts, media, or local environments to observe and compare (a) different kinds of living things in an area, and (b) differences in the kinds of living things living in different types of areas.
- 2-ESS2-3. Use examples obtained from informational sources to explain that water is found in the ocean, rivers and streams, lakes and ponds, and may be solid or liquid.

Transfer (Authentic, relevant application of learning to new situations)

Students will be able to independently use their learning to…

- Understand that many (not all) plants produce seeds. Seeds can grow and produce new plants.
- Realize that seeds do not grow unless they are exposed to water.
- Realize that while plants can grow in the dark, they can't do it for long without becoming sick. Light is a requirement for plants to fully grow and be healthy.
- Understand that all plants require water and light to grow and be healthy. (the requires vary based on the type of

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plant)
- Understand that plants need to be planted in the right environment in order to survive. (You cannot plant a cactus in the Placentino Courtyard)

Meaning	
Enduring Understandings **Students will understand that…** ● All plants depend on light and water to grow. Different plants require different amounts of each resource. ● Different habitats have different amounts of light and water available for plants to use. The same habitat may have different amounts of light and water at different times of the year. ● Seeds are a key component in the process of reproduction for many plants.	**Essential Questions** **Students will consider…** ● How did a tree travel halfway around the world? ● Could a plant survive without light? ● Why do trees grow so tall? ● Should you water a cactus? ● Where do plants grow best? ● How can anything live in Death Valley?
Acquisition	
Knowledge **Students will know…** ● Seeds ● Wind ● Sea bean ● Current ● Glider ● Spinner	**Skills** **Students will be skilled at…** ● Generating questions, making observations and finding clues to compare plant growth in different areas ● Creating models to explain the natural phenomenon of plant life. ● Creating models to explain seed dispersal

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• Rotocopter • Roots • Root hairs • Minerals • Hydroculture • Survive • Sunlight • Energy • Forest canopy • Orchid • Forest floor • Seed pod • Fern • Desert • Cactus • Spine • Aloe	• Growing plants from seed to discover that plants can grow without light but need light to survive. • Making predictions about plant growth and survival