My Greenhouse

Design Intent

On the fundamental level of necessity, we all have our roots in the soil. The plants that grow in it provide the sustenance and visual appeal that fuel us day to day. *My Greenhouse* is set in the backyard garden. A tree stretches out over the potting tables, where kids are busy getting dirty, planting and counting seeds, and all the while, growing a bit themselves. Warmth and texture set the stage for connecting with the world around them. So put on a smock, pick up a shovel, and watch the excitement sprout.

Technology Components

- Wall Magnifier-A wall magnifier is a powerful tool for encouraging curiosity and close observation. Children can use it to examine natural objects like leaves, petals, insects, seeds, or rocks, noticing details they might otherwise miss, such as tiny veins in a leaf or the texture of an insect's wing. It supports early science skills by helping children explore size, shape, texture, and patterns. Using a magnifier also promotes language development as children describe what they see and ask questions.
- Hydroponics Table- A hydroponics table is a flat, elevated system designed to grow plants without soil by delivering water directly to the roots by flooding a tray. It typically consists of a sturdy frame supporting a shallow tray or channels where plants are placed, with a water reservoir and pump system circulating the solution. This setup allows for efficient water use, faster plant growth, and easy nutrient management.

Mural Features

- Autumn-In the Northern Hemisphere, autumn spans from the September equinox through the December solstice, and is generally characterized by decreasing daylight, cooler temperatures, and leaves changing colors. The Earth's axis is decreasing its tilt relative to the Sun throughout autumn.
- Spring-In the Northern Hemisphere, spring spans from the March equinox through the June solstice, and is generally characterized by an increase in temperature, longer days, and the return of plant growth. The axis of the Earth is increasing its tilt relative to the Sun throughout spring.
- Winter-In the Northern Hemisphere, winter spans from the December solstice through the March equinox, and is generally characterized by cold weather, shorter days, and in many regions, snowfall. Winter occurs when a hemisphere is tilted away from the Sun.

Mural Features

- Sunflower- A sunflower is a tall, bright yellow flower with a round center filled with seeds. The entire sunflower plant is edible, including the seeds. Sunflowers turn to face the sun throughout the day (heliotropism), which helps them get more sunlight for photosynthesis.
- Apple Tree-Apple trees are hardy trees and produce more than 240 million bushels of apples in the U.S. each year. There are more than 8,000 different varieties of apples and they are generally produced by grafting (joining an existing tree to a root stock) or from seeds. They are easily grown in all climates, depending on the variety.
- Tomato Plant-Tomatoes grow on an annual vine plant that produces flowers, classifying them as a fruit. Believed to have originated in Peru, they now grow all around the world. Each year, Americans consume over 4.3 billion pounds of tomatoes, with more than 10,000 varieties.
- Bluebonnet Plant- The bluebonnet is a hardy, drought-resistant wildflower known for its vibrant blue petals and white-tipped blossoms. Native to Texas and the southwestern United States, it grows in open fields and along roadsides, blooming in early spring. Its dense clusters and bright coloring attract pollinators like bees and butterflies.
- Snow-Snow forms in the atmosphere as water vapor. When the temperature drops below freezing, the vapor turns into ice crystals that fall to the ground as snow. Snow may look white but it's actually colorless. Its icy surfaces reflect light in a way that makes it appear white. Each snowflake has six sides, and no two snowflakes are exactly the same.
- Ladybugs-There are about 5,000 different species of ladybugs in the world. They are also known as lady beetles or ladybird beetles. Ladybugs are beneficial to the farming industry as they eat aphids and other plant-eating pests. They are brightly colored to warn predators to stay away. If they feel threatened, they release a smelly, bad-tasting fluid from their leg joints to protect themselves.
- Hummingbirds-Hummingbirds are small, weighing just 2 to 20 grams, with long, narrow bills and small wings. Males are generally characterized by their colorful gorget, the reflective feathers on the throat and upper chest. Hummingbirds can flap their wings up to 70 times per second, creating the namesake humming sound. They are the only birds that can fly backward, and they can also hover in place.

Themes to Explore

- Types of Plants
- Insects and Pollination
- Recycling
- Germination
- Food Origin
- Plant Life Cycle
- Composting
- Gardening Tools
- Healthy Eating
- Weather and Seasons

Mounted Artifacts

- Wheelbarrow Sensory Bin-Wheelbarrows are single-wheeled transport tools, used to carry small loads by hand. Their design helps distribute the weight between the wheel and the operator, making heavy loads easier to move.

To Find Out More

- U.S. Department of Agriculture
- USDA Nutrition.Gov
- Texas Farm Bureau