

Toyota Tapestry Grant

Pre-Kindergarten Science Lab

The Pre-K Children will imagine themselves as the scientist they are by becoming staff members in their own school laboratory. Children will choose from a variety of medical and scientific professions after visiting a hospital or science lab.

The children will choose a science profession and be photographed as a “staff” member. A staff registry will be displayed in the lab. For example, a child may decide to be called a “hematologist” and will be photographed in a lab coat with the corresponding title. Later, children will be exposed to the nature of the science profession and learn more through non-fiction books and guest speakers.

In the science laboratory, children will participate in many experiments that integrate the physical and environmental sciences into the literature and theme stands studied each month.

For example, during a study of the fairy tale, The Three Pigs, Pre-K scientists will learn about pigs, measure and make mud and tally the amount of days that it takes for it to harden to brick. These integrated exposures help children understand the relationships between many things in their natural world. While studying the story of Goldilocks and the Three Bears, Pre-K scientists will learn about the hibernation cycle of bears and classify different bears into geographic areas. In a table filled with ice, children can learn about the effects of blubber on winter animals by placing their hands in one empty glove and then the other hand in a glove that has been insulated with vegetable shortening, simulating blubber. As young scientists, children will record their thoughts and ideas about these kinds of learning in a Discovery Journal. The journal will act as a place where children can record data as needed. Art, oral language and science will blend together in this Pre-K keepsake.

The Science Lab will also serve as an important learning environment for daily science activities. Children will be encouraged to enter the lab during center time to observe small animals each day. Learning to care for hamsters, hermit crabs and fish will further their scientific understandings. Plants, seeds and gardens will flourish in this special place. The lab, which is separate from other classrooms will provide children with a respite from other play activities. Through investigation and self motivation, children can discover things without adult intrusion.

The goal of this project is to fund the materials, animals, supplies and trips that will support the science laboratory. Materials such as plants, microscopes, magnifying glasses, test tubes, soil, telescopes, magnets, animals, food, tanks, trips, guests, and the like will help to stimulate scientific children will give us the cues on what is important for them to learn.