A Letter to Families About Discovery

Dear Families,

Young children are born scientists. They are curious about the world around them and have many questions. They ask, "Where did the puddle go? What do worms eat? How can I make my truck go faster? Do fish go to sleep?"

In my family child care program, I encourage all of the children to explore and investigate to find answers to their questions about the physical and natural world. Infants learn by using all of their senses. They want to know how things look, feel, taste, smell, and sound. Toddlers and twos experiment, trying to discover how things work, what things do, and what they can make happen. Preschool and school-age children observe, experiment, measure, solve problems, take things apart, and investigate living and nonliving things.

With appropriate support, children do what scientists do: ask questions, plan and conduct investigations, gather information, construct an explanation, and communicate findings. They learn important concepts as they study plants, animals, magnets, light, shadows, rainbows, the human body, how things move and change, and more. They learn how to solve problems together and how to communicate with others. When children are very interested in a topic, we spend a lot of time investigating it.

You don't need to be an expert to help your child learn about science. Science is all around us, from making bubbles in the bathtub to boiling water on the stove. Your own curiosity and your ability to ask questions will encourage children to make discoveries. Let your child know that you don't have all the answers but that you can find them together by observing, guessing, experimenting, looking things up, and conducting investigations. Get in the habit of wondering out loud: "I wonder how that ant can carry that big piece of food," or "I wonder why your shadow is sometimes small and sometimes big."

Your questions and statements support your child's scientific thinking skills. Here are some examples of prompts that extend your child's thinking:

- "What do you think will happen if...?"
- "I wonder why..."
- "How do you think we can find out...?"

Look for opportunities to promote your child's scientific thinking during everyday activities: playing with toys, taking a bath, helping to make dinner, or playing in the backyard. It's a good sign if your child is curious, wants to discover everything, asks lots of questions, and wants more answers!

Sincerely,