WHAT DO FIRST GRADERS LEARN IN STEM?

STEM FLUENCY ✦ CAREER EXPLORATION ✦ ROBOTICS, CODING, & COMPUTATIONAL THINKING

NISD's STEM Program is Unique

NISD's STEM curriculum is based on the Technology Applications TEKS, Career and Technical Education alignment, Texas Career Clusters, and Texas Education Agency's STEM Fluency Skills and Computational Thinking documents.

STEM Fluency Skills

You may have heard people talk about the need for employees to have "soft skills" to be successful in a job. The Texas Education Agency provides educators with descriptions of "STEM Fluency Skills" rather than soft skills. STEM Fluency Skills include: Collaboration, Communication, Critical Thinking, Creativity, and Resilience.

They say this about STEM Fluency Skills: "STEM education also includes a fluency in the skills associated with career readiness and workforce development."

Keyboarding

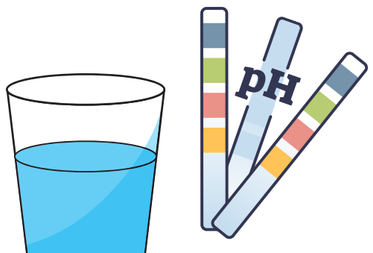
STEM Teachers introduce keyboarding to first grade students, so that they can locate uppercase and lowercase keys, the space bar, shift, and backspace.

Robotics, Coding, and Computational Thinking

Each year during STEM class, students practice the computation thinking skills to logically solve problems when coding and programming robots. These skills get more complex each year.

Career Explorations

During Career Explorations units each year students learn about and explore a variety of STEM careers. These careers align with CTE courses in middle and high school.



Environmental Engineering

Environmental engineers design solutions to problems in the environment using a design process. Students learn about some of the tools that environmental engineers use. Students may design solutions to improve the cleanliness of water, to grow plants in non-traditional ways, or to design systems that carry water safely to a new location.