Early STEM Learning

**Science**: wondering, observing, exploring, making predictions, and discovering new things

**Engineering**: designing and building structures and products, learning about shapes and symmetry, defining a problem and working to find a solution

**Technology**: using tools, creating, problem-solving, and building confidence

**Math**: measuring, sorting, counting, using patterns, matching shapes, and making comparisons

The Take-Home

STEM is a way of thinking that involves observing, questioning, testing ideas, and creating. We all use STEM every day. STEM skills help us analyze information, think critically, and solve problems throughout our lives. Just like learning a language, it takes practice and active engagement to become fluent in STEM!

Science Says

- Even very young children are capable of mathematical and scientific reasoning. With help from adults, the skills children build during everyday interactions form an important foundation for later STEM skills.
- Young children learn STEM through self-directed exploration, guided experimentation, and by talking with adults about how and why things work.
- Doing STEM as a group can help children stay motivated and enjoy these activities even more.

Try it at Home

- Ask children questions involving “why?” “how?” and “what if?” Ask how they are using a tool, and if there are other ways to use it.
- Provide objects and materials for children to explore, play with, and manipulate, such as paper towel rolls or coffee filters.
- Cook or bake with your child. You can practice counting, measuring, and following steps as you prep your next meal together.
- Use pots and pans, or fence railings as musical instruments. You and your child can experiment with different patterns and rhythms.

Want to Learn More?

http://modules.ilabs.uw.edu/module/early-stem-learning/

Questions?: ilabsout@uw.edu

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