

What is STEAM?



STEAM is an educational approach to learning that encompasses Science, Technology, Engineering, the Arts and Mathematics. This type of learning encourages hands-on and active instruction.

WHY STEAM?

While the children are building an understanding through communication and inquiry, STEAM can help develop cognitive skills such as critical thinking and problem-solving skills.

Inspire STEAM Discovery Through These Methods

- ◆ **Problem Solving** - Ask children to be problem solvers with you. How can we make sure everyone gets a turn? How can we organize our space? How can we work together to get ready for this project?
- ◆ **Sensory Bins** - Fill containers with various things that children can feel with their hands: sand, water, beads and yarn, cotton balls, paper and hole punchers, or letter and shape manipulatives.
- ◆ **Maker's Space Area** - Bring in a variety of materials for children to reimagine: newspapers, craft materials, magazines, cardboard, plastic. Can they make something new with an old jug?
- ◆ **Age-Appropriate Science and Math Centers** Include things like plastic beakers, manipulatives to discover, a magnifying glass, plastic tools such as tweezers, eye droppers, large magnets, counting blocks, or color cubes.
- ◆ **Dress Up Station** - Let children imagine with different costumes and props.

Encourage STEAM Thinking Through Open-Ended Questions

- ◆ What do you think is happening here?
- ◆ What do you think will happen next? What do you think happened before to make this happen?
- ◆ Tell me about what you're thinking as you make this, play this, read this...
- ◆ What do you notice?
- ◆ How can we find out about...
- ◆ How did this make you feel? How do you think it made others feel?
- ◆ How or why do you think that happened?
- ◆ How can we make this better or do this differently next time?
- ◆ What can we learn from this?

