



### What is STEM?

An **acronym** relating to classes and careers in Science, Technology, Engineering, and Math.

A hands-on **approach** that allows students to apply their learning to solve real-world problems.

### Why STEM?

STEM helps people understand complex problems, and gives them a way to use their knowledge and problem-solving skills to make to a better world.

The skills developed through STEM activities help in all parts life.

A majority of fastest-growing and highest-paying jobs in the US are in STEM fields.

## Supporting STEM in the early years...

**Encourage experimentation** - children learn about themselves and their world this way.

**Ask lots of questions and explore** - help your child develop their own curiosity.

**Celebrate “mistakes”** – that’s how we learn!

**Count, sort, compare sizes**, and put things in order. (Playing this way builds beginning math skills).

**Use technology wisely**, if at all. Children’s brains grow best through bonding with loved ones, discovering themselves, and exploring their world.



## Winter STEM ideas!

### Go for a nature walk

Whether it's in your neighborhood or the mountains, any exploration is great.

Discuss: Observe what animals you see and don't see. Why are some animals here all year and some are not? Where might they be now? Try to explore possibilities, rather than jumping to "the right answer."

### Engineer a mini sledding ramp

Grab blocks or other supplies from around the house (boxes, toilet paper rolls, paper, foil, etc.). Make a "sled" out of a bottle cap or a small plastic container.

Slide it down the mini ramp.

Experiment: What changes make the sled go faster or slower? Why do you think that is?

### Make your own holiday puzzles

Cut up Christmas cards into 2-20 pieces (depending on age). You have a new puzzle!

Need a harder challenge? Mix up a few "puzzles" so that your child has to sort them out first.

### Build snowmen, igloos, towers, bridges...

with marshmallows and toothpicks. Packing peanuts also work well.

Challenges: See how tall of a tower you can build before it falls over. Can you engineer a tower to hold a Lego person or doll?

Discuss: How can we make our tower stronger? Experiment and keep improving the design!

