



STEAM Team Monthly Activity

March

Hello 4-h Leaders!

Here are some fun and engaging warm-up STEM activities that are perfect for your next 4-h club meeting.

1. **Build a Paper Bridge**

Materials: Paper, tape, and small weights (like coins or small blocks).

Task: Challenge students to create a bridge using just paper and tape that can hold the most weight. This introduces basic concepts of engineering and structural design.

2. **Balloon Rocket**

Materials: Balloon, string, straw, tape, and a piece of string.

Task: Set up a string between two objects and tape a balloon to a straw. As the balloon inflates and releases air, the straw will race along the string. This is a fun way to demonstrate basic principles of physics like air pressure and motion.

3. **Color Mixing with Science**

Materials: Clear cups, food coloring, water, and droppers.

Task: Give students primary-colored water and challenge them to mix different colors to create secondary colors. This introduces them to the concept of color theory and basic chemical reactions.

4. **Marshmallow Towers**

Materials: Marshmallows and spaghetti noodles.

Task: In teams, students build the tallest free-standing tower possible using just marshmallows and spaghetti noodles. This helps students understand the basics of structural design and teamwork.

5. **Floating Paperclips**

Materials: Paperclips, a bowl of water, and a piece of tissue paper.

Task: Challenge students to balance a paperclip on a piece of tissue paper and gently place it in water. The goal is to see how surface tension works to keep the paperclip floating.

6. **How Strong is Your Egg?**

Materials: Plastic eggs, cotton balls, and tape.

Task: Give students a challenge to protect a raw egg using cotton balls and tape. They will drop the egg from a certain height and see if it survives, learning about impact forces and protection strategies in the process.

7. **Sink or Float?**

Materials: A container of water, various small objects (rocks, paper clips, plastic toys,



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etc.).

Task: Ask students to predict whether an object will sink or float before placing it in water. Afterward, they can discuss why some objects float while others sink, introducing them to concepts of density.