

STEM Building Challenge: Group Activity

Name:

Date:

Marshmallow Towers

Materials:

Marshmallows, toothpicks



Instructions:

Build the tallest tower possible using only marshmallows and toothpicks. Your tower must stand on its own for at least 10 seconds.

Floating Boat Challenge

Materials:

Aluminum foil. small container of water. coins



Instructions:

Create a boat out of aluminum foil. Test how many coins your boat can hold before it sinks.

Balloon Rockets

Materials:

Balloons, string, tape, straw



Instructions:

Thread the string through the straw and tape it tightly across the room. Blow up the balloon (don't tie it), tape it to the straw, and let it go. Observe how far your "rocket" travels!

Paper Airplane Distance

Materials:

Paper



Instructions:

Design and fold a paper airplane. Test how far it can fly. Try different designs to see which one flies the farthest.

Sink or Float

Materials:

Materials: Various small objects, container of water



Materials:

Popsicle sticks, tape, or glue



Instructions:

Build a bridge using popsicle sticks and tape or glue. Test how much weight it can hold using small items like coins or blocks.

Instructions:

Predict if each object will sink or float. Test your predictions in the water.

Shadow Shapes

Materials:

Flashlight, various objects



Instructions:

Shine a flashlight on an object to create a shadow. Move the object closer or farther from the light to change the shadow size. Try to make different shapes or figures with the shadows.

Magnetic Maze

Materials:

Materials: Magnet, paperclip, paper, markers



Instructions:

Draw a maze on a piece of paper. Place a paperclip on the maze and move it through using a magnet underneath the paper.