

STEM: Bridge Chain Reaction

Learning Value:

This activity promotes development and learning by encouraging children to demonstrate an understanding of cause-and-effect, maintain focus, and sustain attention.

Materials Needed:

- ▶ Craft sticks
- ▶ Cups

Participants:

This activity is intended for independent play for school-age children, preschoolers may need help with the initial set up.

Directions:

Step 1: Place 2 cups across from each other. Balance one stick across the cups.



Step 2: Add another cup and stick, resting the new stick (2) on the middle of the first stick.



Step 3: Add another cup across from the last cup and place another stick (3) with one end on the cup and one end on the middle of the new stick.



Step 4: Continue adding cups and sticks. Every stick will have one end on a cup and the other on the stick before it.



Step 5: When you have completed the bridge, remove one cup from the beginning of the bridge and watch what happens! The way the bridge collapses is a chain reaction.

Step 6: Rebuild the bridge and play again. How can the cups be moved to create a new shape. Can the cups be moved to make a letter, number, or shape?