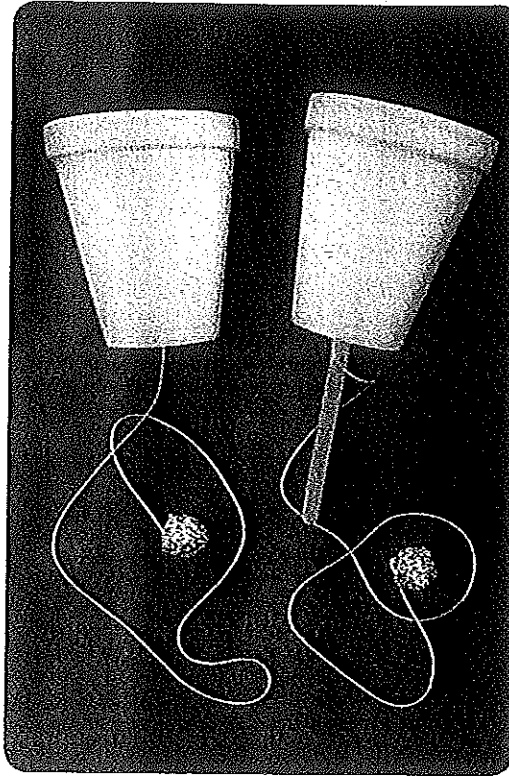


BALL IN A CUP



Making Ball in a Cup incorporates and utilizes: dexterity, hand-eye coordination, measurement

Playing Ball in a Cup utilizes: hand-eye coordination, healthy competition skills, math skills (counting, percentages, etc.), persistence, strategy development

Supplies:

- Disposable drinking cup
- 18-in (45.7-cm) length of string or yarn
- Sharpened pencil
- Aluminum foil
- Tape

To Make:

- Begin by turning the cup upside down on a flat surface. While holding the cup firmly on the flat surface, very carefully and slowly poke the tip of the pencil through the center of the bottom of the cup. Do not push the pencil all the way through. The hole should be just big enough to fit the string through. Remove the pencil.
- Holding the cup in one hand, thread the string partway through the bottom of the cup into the inside of the cup. Tie a knot in the part of the string that came through the inside, leaving 1–2 in (2.5–5.1 cm) of string after the knot. When the knot is tied, pull the string so that the knot rests on the inside of the bottom of the cup. Tape the remaining 1–2 in (2.5–5.1 cm) of string to the inside of the cup to help prevent the knotted string from slipping.
- Crumple some foil to make a small, 1-in (2.5-cm) ball. Tie the loose end of the string tightly around this ball. Wrap more foil around the attached ball so that it is 1.5–2 in (3.8–5.1 cm) in diameter. The final ball can be rolled on a flat surface to make it smoother.

To Play:

- Hold the cup in one hand, letting the ball on the string dangle below.
- Using only the hand holding the cup, flip the ball up into the cup.
- Find the best strategy for getting the ball into the cup every time.

Suggestions:

- Count how many times the ball lands in the cup and how many times it misses: What percentage of the time does the ball make it into the cup?
- Is the game harder or easier with a smaller cup?
- Is the game harder or easier with a bigger cup?
- What different materials could be used to create the ball? Does the type of material make the game harder or easier?

Variation:

1. The traditional game uses a cup on a stick. For this version, instead of poking a hole in the bottom of the cup, use scissors to carefully cut a small slit—slightly smaller than the width of a craft stick. Tape the end of the string to the end of the craft stick. Slide the end of the craft stick with the string attached through the slit in the bottom of the cup from outside to inside. There should be about 0.75–1 in (1.9–2.5 cm) of the craft stick inside the cup. Make sure that the rest of the string still hangs outside of the cup. The stick might need to be reinforced by taping to the inside or outside bottom of the cup, depending on how snugly it fits. Proceed according to the above instructions for making the ball. To play, hold by the stick.

