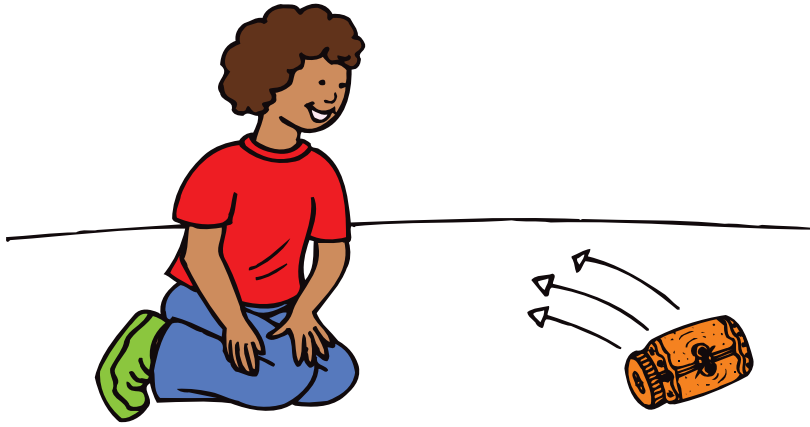


Older Elementary Craft

Frenetic-Kinetic Machine (15–20 minutes)

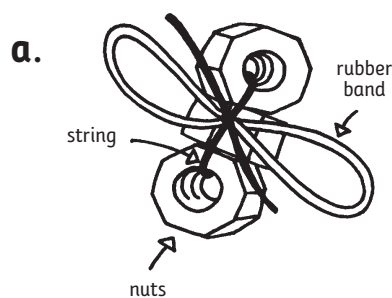


Preparation

Use drill and bit to make a hole in the center of each lid and the bottom of each jar. Cut string into 6-inch (15 cm) lengths, making one for each child.

Instruct each child in the following procedures:

- Secure three nuts together by threading string piece through the center of the nuts and tying in a knot. Lay the rubber band on top of knot. Tie and knot string around rubber band (image a).



- Place the nuts and rubber band inside the jar. Thread one end of rubber band through the hole in the bottom of jar.
- Insert a toothpick through rubber band loop to hold it in place (image b). Break ends of toothpick off to make it about 1 inch (2.5 cm) long.

Materials

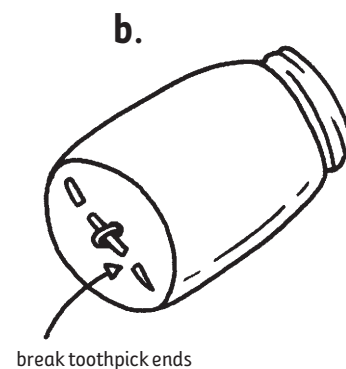
- hand or power drill
- 1/4-inch (0.6 cm) drill bit
- string
- metallic confetti or glitter
- variety of paint markers

For Each Child

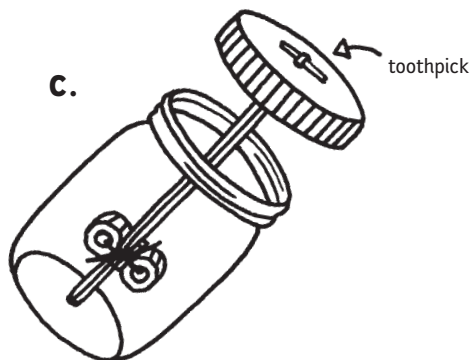
- 28-oz. clear plastic peanut butter jar and lid with label removed
- three large metal nuts
- one 3x1/8-inch (7.5x0.3 cm) rubber band
- two toothpicks

Standard Supplies

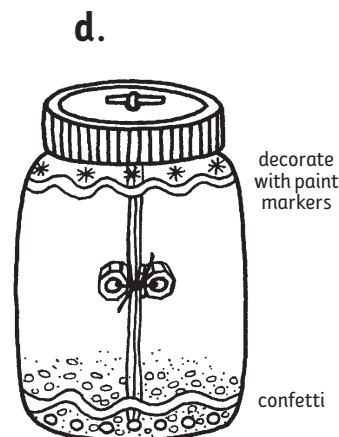
- scissors
- rulers



- Pull the other end of rubber band out of the jar. Ask a partner to hold the jar lid while you push the rubber band through the hole in the lid. Insert toothpick to hold in place, and break off ends as in previous step (image c).



- Pull jar lid away from opening and place some confetti and/or glitter inside jar.
- Screw lid on jar.
- Decorate jar with paint markers as desired (image d). Allow paint to dry.
- Slowly roll your jar across a flat, smooth surface such as a table or linoleum floor. It will roll back to you!



Conversation

Your rolling jar contains something called kinetic energy. Motion is a form of kinetic energy. As the jar rolls, the rubber band twists and stores up that energy. When the jar stops, the rubber band unwinds and releases the stored-up energy, making the jar roll backward. Today we've been talking about the law of motion, which tells us that objects at rest stay at rest until a force puts them in motion. For hundreds of years, people were stuck in sin until Jesus came and put God's plan in motion. How would you describe Jesus? No one has seen God, but we can know that God is also (characteristics children named to describe Jesus) because Jesus said that if we know Him, we know God the Father as well!