



A Faithful Force

Supplies

- medium to large bucket
- 5-ounce paper cups (1 per child)
- chenille wires (1 per child)
- hole punches (1 per small group)
- pompoms (enough to fill half the bucket, plus about 5 per child)
- "A Faithful Force Instructions" handout (download [here](#))

Tip

- Practice swinging the bucket filled with pompoms a few times to make sure you know how much force and speed you need to apply in your swing to keep the pompoms in the bucket.

Experiment With Centrifugal Force

Say: **We've heard today how God was faithful to Abraham, but God is faithful to us today, too. God always does what he says he'll do, even if it's not in the time or way we expect. God sometimes shows his faithfulness in surprising ways. Let's dig in to this some more with an experiment of *centrifugal force*, which can also be dependable or "faithful" in surprising ways!**

- Place the bucket where kids can see it, and fill it halfway with pompoms.
- Explain that you're going to swing the bucket around and around and it'll even turn upside down.
- Have kids guess what will happen with the pompoms.
- With a smooth, quick, upward motion, swing the bucket in arm-extended circles to the side of your body so the bucket turns upside down at the peak of its rotation.
- Let kids give it a try on their own. Have small-group leaders give a paper cup and a chenille wire to each child, and have small groups each share a hole punch and follow the directions on the "A Faithful Force Instructions" handout to make their own buckets.
- Everyone can make small buckets of their own by punching holes in opposite sides of the cup's mouth about $\frac{1}{4}$ inch down from the rim.
- Next, thread one end of the chenille wire through one of the punched holes and twist the wire around itself to attach that end of the wire to the cup.
- Repeat with the other end of the chenille wire in the opposite punched hole to create and secure a chenille wire handle for the cup.

- Have small-group leaders give each child about five pompoms to place in his or her “bucket.”
- Everyone can experiment with centrifugal force by looping the cup handle over a pointer finger and spinning the cup quickly and smoothly around that finger.
- Allow kids to experiment with their spinning to guess what makes the pompoms stay in the cup.

Talk About It

Ask: • **What surprised you about how the pompoms stayed in the bucket and your cups even when they turned upside down?**

• **Tell about a time your life felt turned upside down or out of control.** Have small-group leaders share first, and then have kids share in their small groups.

• **How might God show us he is faithful even in the hard times in our lives?** Have kids share in their small groups, and then ask a couple of kids to share with everyone.

Say: **In our experiment, centrifugal force held the pompoms in place. Centrifugal force is a force that pushes things outward as they move in a circle. God’s faithfulness means he sticks with us even when life feels upside down. No matter what happens in our lives, God is faithful.**