

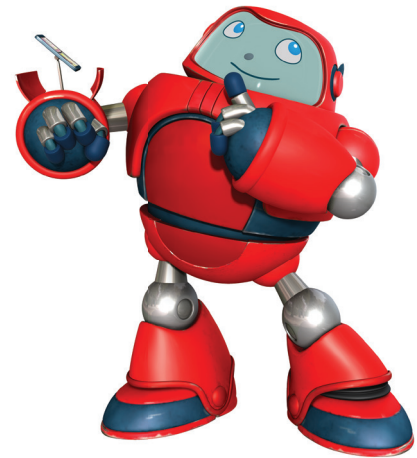
STEM ACTIVITY

SERMON ON THE MOUNT

Total Time: Approx. 20 minutes
In-Class Time: 10 minutes

You will need:

- Clear, plastic 2-liter bottle with the label removed
- Dark room
- Duct tape
- Water
- Sink or bucket
- Colored flashlight or colored laser pointer
- Scissors or knife



NOTE: Be sure to test this project out in advance.

STEP 1: To prepare, make one hole in the lower half of the bottle using a sharp object. The hole should be no more than 1/4 inch in diameter. Cover the hole with a piece of duct tape.

STEP 2: Fill the bottle with water. Place a bucket or tub under the bottle to catch the flowing water, or place the bottle over a sink.

STEP 3: Gather the children around the bottle. **TEACH:** Jesus wants us to be a light to the world. Sometimes, our light doesn't seem very strong or very big. How can we make a difference when we don't have very big 'lights' like some famous people, or pastors with large congregations, or even Sunday School teachers with a classroom of kids? The answer is God! Jesus just needs us to shine the light He gives each of us. The rest is up to Him. Let's pretend we are this flashlight/laser, and God is this bottle of water. Let's see what happens when our light mixes with God's grace and Spirit.

STEP 4: Turn the room lights out. Shine the light into the bottle on the opposite side of the hole. Remove the tape and let the water flow out. Let the students feel the colored water if they want.

STEP 5: **TEACH:** God will expand our little light and really make it shine! He makes it flow to others as we obey Him. We can be a blessing to others when we talk about God and show the love of Jesus.

EXPLAINING THE SCIENCE:

Total Internal Reflection: The light beam bounces around inside the water bottle, reflecting back and forth off the walls. The water is used to help this process. The light is able to bend and refract off the various surfaces and follows the water out of the bottle.