

Marionettes in Motion

Companion Text: The Jakry Kids: Curiosity Shop, by Lin Jakary & illustrated by Ryan Olson

Subject Area & Grade Level: Science, 2nd Grade

Materials: Straws, yarn, cereal-box-weight cardboard, scissors, tape

Objectives


After this lesson, students will be able to:

- Define “push” and “pull” as forces that cause movement
- Describe how forces are at work in the movement of a marionette
- Model the relationship between the strength of a force and the degree of motion it produces

Staging Activity

Read the story once through without stopping. Then, return to pages 8 and 9, and point out the marionettes in the illustrations (They are hanging from a pole). Ask students if they know what a marionette is, and describe that it is a kind of puppet that is controlled with external strings instead of a hand inserted internally.

Core Activity

Tell students they will each be making a marionette of their own to practice using pushes and pulls to cause movement. Pass the following out to each student: A 4-inch square piece of a cereal box or other light cardboard, 4 feet of yarn, 3 straws, a pair of scissors, and 4 pieces of tape. Have students cut the corners off of their cardboard squares at 90-degree angles, so that they end up with a cross-shaped piece, such as . Then, have each student cut their piece of yarn in half and then feed the two pieces through a straw, the body. Next, have students cut their last two straws in half, and feed the top and bottom of each piece of yarn through a ½ of straw, making arms and legs. Finally, have students attach the four ends of their yarn to the four ends of their cardboard cross with tape to complete their marionettes. Model how to make the marionettes move by pushing or pulling on the ends of the cardboard cross where the strings are attached.

Extension

Invite students to create short skits involving their marionettes doing a simple physical activity, such as pouring a cup of juice, skiing down a hill, or dancing. They should narrate the movement of their marionette using the terms “push” and “pull.” Ask students what would happen if you push or pull harder on the strings. They should be able to describe that the greater the force they exert, the greater the motion produced (i.e. the hand or leg moves up farther if they pull up harder on that string).

