

# JR-ENGINEERS

# PULLEY

**This simple pulley is easy and fun to make!**

## INSTRUCTIONS

**STEP 1:** Poke two holes in your cup and tie your string so it will lift the cup in the center.

**STEP 2:** Cut two circles from cardboard and poke a hole in the center of each.

**STEP 3:** Glue the cardboard circles to each side of the thread spool.

**STEP 4:** Thread the spool through a wire and then suspend the wire.

**STEP 5:** Fill your cup with marbles.

**STEP 6:** Pull your string across the thread spool pulley to lift your cup of marbles with ease!

## PULLEY

Pulleys are commonly used to lift objects, especially heavy objects. The object lifted by a pulley is called the load. The force applied to the pulley is called the effort. This is the transition of energy into motion.

The earliest evidence of pulleys dates back to Ancient Egypt. In modern times you will find pulleys on a clothesline, a flagpole, and a crane.

## SUPPLIES

Thread spool  
String  
Cardboard  
Scissors  
Cup  
Marbles  
Wire  
(for suspension)

