

Spool Racer

Stretch and twist a rubber band to create moving energy in this speedy racer!

Instructions

Materials

- 1 wooden spool
- 1 pencil
- 1 rubber band
- 1 washer
- 1 paper clip
- Tape

1. Hook the paper clip on to the end of the rubber band. Use the paper clip to thread the rubber band through the spool without pulling the rubber band all the way through.
2. Tape the pulled through paperclip so that it lies flat on one end of the spool.
3. On the other end of the spool, pull the rubber band through the middle of a washer.
4. Stick a pencil through the rubber band next to the washer and twirl the pencil.
5. Once the rubber band is wound tight, put the spool down on a smooth surface and let it go! How far did it go?
6. Extend the learning! Try spools with different diameters. Run your racer on different surfaces.

Why does this work?

Twisting and stretching the rubber band stores potential energy. Potential energy is stored energy that has the ability to do work. When you put the spool down on the surface, the rubber band unwinds. The potential energy changes into kinetic energy, which is the energy of motion.