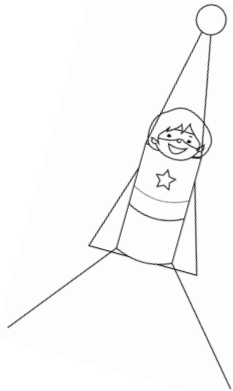


FLYING SUPERHERO

Learn about tension in engineering



Materials:

- Empty toilet paper roll
- Crayons or markers
- Glue
- Scissors
- Yarn
- Doorknob or a hook

Directions:

Step 1: Color the suit, cape, and head of your superhero.

Step 2: Glue the suit around an empty toilet paper roll. Glue the head to the front of the roll. Glue the cape on the back of the roll. Let the roll dry.

Step 3: Cut out 4 ft. of yarn. Hang the yarn on a doorknob or a hook by the center of the string.

Step 4: Thread the two ends through the top of the toilet paper roll. To play with this superhero, pull the two ends apart and watch your hero fly up the string! See what happens when you pull the strings apart quickly or slowly.

The forces at work are gravity and tension. Tension in the yarn pulls the superhero up like a lever. Gravity pulls the superhero down when there is no tension pulling it up.

