

BEYOND THE SCIENCE LAB

USING SCIENCE TO TEACH GOD'S WORD

God Gives Us Strength **EXPERIMENT**

BIBLE TRUTH

God gives us strength to do things we never imagined.

WHAT THE BIBLE SAYS

Job 5:9

9 Which doeth great things and unsearchable; marvellous things without number.

HANDS-ON EXPERIMENT

Soaring Toilet Paper

Ingredients

- Leaf Blower
- Toilet Paper
- Dowel Rod

Instructions

STEP 1: Place the toilet paper on the dowel rod and unroll a few pieces of tissue.

STEP 2: Hold the dowel rod horizontally so the roll will unroll away from you.

STEP 3: Turn on the leaf blower and aim the stream of air just over the top surface of the roll.

Explanation

Bernoulli's Principle states that the pressure exerted by a fluid decreases as its velocity increases. Increasing the velocity over the top surface of the toilet paper lowers the pressure of the air pushing down on the paper. The paper is lifted because there is now an unbalanced force of air pressure acting upward.



Bible Connection

Just as the strong air flowing from the leaf blower gives strength to the toilet paper, God gives us strength to do things we never imagined.

SCIENCE TERMS

- **Bernoulli's Principle** - States that the pressure exerted by a fluid decreases as its velocity increases.
- **High Pressure System** - A high, high-pressure, or high-pressure area is a region where the atmospheric pressure is greater than the surrounding area.
- **Low Pressure System** - A low-pressure area, or a low for short, is a region where the atmospheric pressure is lowest with relation to the surrounding area.

Science Quiz



- ① Define Bernoulli's Principle, High Pressure System, and Low Pressure System.
- ② What happened when you increased the velocity over the top surface of the toilet paper?
- ③ Why is the toilet paper lifted?