

Overflowing Cups (Surface Tension)

Instructions

Materials:

Water

2 Cups

Pennies

Liquid soap

Demo Procedure:

1. Fill 1 cup with water to the rim.
2. Fill a second cup with soapy water to the same level.
3. Count the number of pennies that can be added into the cup until the surface tension of the water breaks and the water spills down the side of the cup.
4. The cup with the water can hold over 30 pennies before the surface tension breaks.
5. The soap molecules interferes with the water molecules' surface tension so the cup with the soapy water will not hold as many pennies. In our trial less than 20 pennies was used before the soapy water spilled down the side.