



Antigravity water



GET READY FOR A
SHOW!

What you need:

- SHORT-NECKED GLASS BOTTLE
- RUBBER BAND
- CHEESECLOTH
- WOODEN MATCHES

What to do:

- FILL THE BOTTLE WITH WATER.
- CUT A PIECE OF CHEESECLOTH LARGE ENOUGH TO COVER THE MOUTH OF THE BOTTLE.
- USE A RUBBER BAND TO SECURE THE CHEESECLOTH IN PLACE.
- PLACE A PIECE OF CARDBOARD OR A PLASTIC/METAL SHEET OVER THE OPENING AND INVERT THE BOTTLE QUICKLY OVER THE SINK.
- SLOWLY REMOVE THE CARD FROM THE BOTTLE AND THE WATER SHOULD STAY IN THE BOTTLE.
- FEED WOODEN MATCHES THROUGH THE CHEESECLOTH. VERY LITTLE WATER SHOULD ESCAPE!

What's going on?

IF YOU DIP A PIECE OF THE CHEESECLOTH INTO A GLASS OF WATER, YOU NOTICE THAT THE WATER FILLS THE TINY HOLES IN THE FABRIC. A FORCE CALLED COHESION, WHICH IS THE ATTRACTION OF MOLECULES THAT ARE THE SAME TO EACH OTHER, CAUSES THIS EFFECT. THE WATER STAYS IN THE BOTTLE EVEN THOUGH THE CARD IS REMOVED BECAUSE THE MOLECULES OF WATER ARE JOINED TOGETHER TO FORM A THIN MEMBRANE BETWEEN EACH OPENING IN THE SCREEN. TIPPING THE BOTTLE TOO FAR WILL BREAK THE SURFACE TENSION AND CAUSE THE WATER TO FLOW OUT.