

# Zedua Experiments

**Title:** Experience Gravity Free Water

What is air pressure?

Air pressure is the weight of air molecules pressing down on the earth. The pressure of the air molecules changes as you move upward from sea level into the atmosphere. The highest pressure is at sea level where the density of the air molecules is the greatest.

Let us make children understand air pressure by making the water stay inside the glass when held

## Materials Required:

1. A glass filled right to the top with water
2. A piece of cardboard

## Procedure:

1. Put the cardboard over the mouth of the glass, making sure that no air bubbles enter the glass as you hold onto the cardboard.
2. Turn the glass upside down (over a sink or outside until you get good).
3. Take away your hand holding the cardboard.

## What's happening?

Water doesn't spill out of glass even though the cup of water is upside down the water stays in place, defying gravity! Since there is no air inside the glass, the air pressure from outside the glass is greater than the pressure of the water inside the glass. The extra air pressure holds the cardboard in place, keeping you dry and water stays in glass defying gravity.



Source: pintrest