Air Has Weight

Air is a real substance. It not only takes up space, but it has weight. Here's proof.

**What to do:** Suspend the ruler from the hanger by attaching a string to the middle of it. Then tape each balloon the same distance from the ends of the ruler. Make sure that the ruler is in balance.

Now remove one of the balloons and blow it up. Tie a knot to keep it closed. Replace it at the same place on the ruler.

**What happens:** The balloon filled with air pulls the ruler down.

**Why:** The balloon filled with air is heavier than the other one.

Air has weight. It is actually quite heavy. At sea level air weighs 14.7 pounds (6.6 kg)square inch (2.5 cm). On a mountaintop, air is a little thinner and weighs less.