

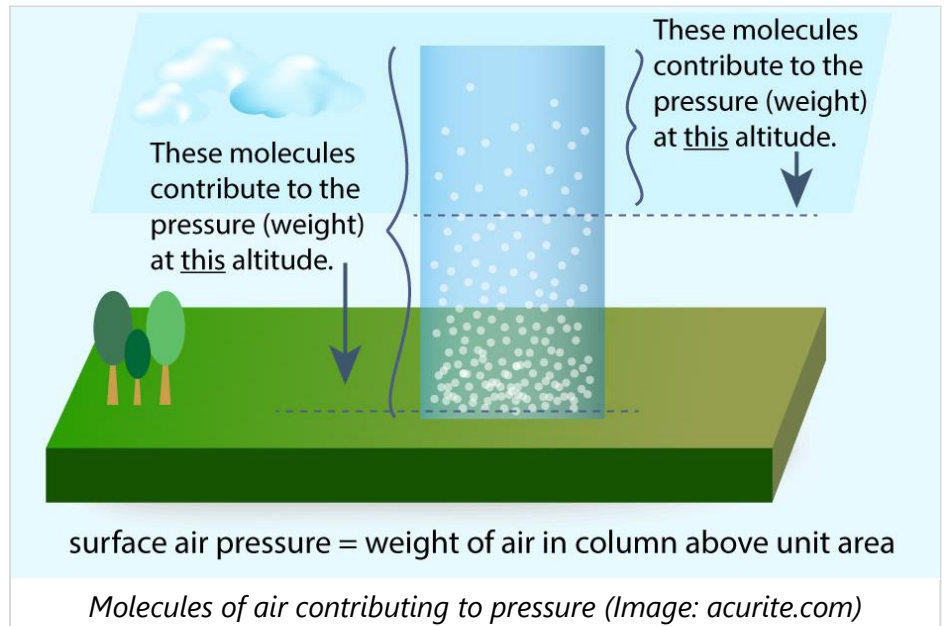
Under Pressure

Try It Out

Make sure the rubber square with the hook is lying flat and centered in the middle of the museum. Try to lift the rubber square by pulling straight up on the hook. Is it easier or harder than you expected?

What's Going On?

The air around us has weight. In fact, on every square inch of your body, there's about *14 pounds* of **air pressure** right now! Can you feel it? We're pretty used to it, because we're born into it. And the air moves easily around us, pressing on us equally from all sides, so we don't notice. But, when the air *can't* push equally from all sides, we notice the weight. In this demonstration, the air can't squeeze in very easily



between the rubber mat and the wood base of the museum. So you're left feeling the weight of the air pushing down on the mat while you try to lift it.

Why Does It Matter?

Understanding air pressure's effects on the human body have allowed us to do all sorts of amazing things. Flying in planes is possible because the inside is pressurized to mimic the pressure we normally feel on the ground. We also try to mimic normal air pressure when we send astronauts to space, because there's *no* air up there!

Wonder While You Walk...

We talk about changes in pressure when we talk about the weather. Why would low pressure be associated with stormy weather approaching?