

1. A manometer (with one side open) measures gauge pressure. A barometer measures absolute pressure. A tire pressure gauge and a sphygmomanometer both measure gauge pressure.
5. There is practically no atmosphere on the Moon and hence practically zero pressure. Drinking from a glass with a straw would be impossible, since a pressure difference is required to push the liquid up the straw. With a sealed juice box, the astronaut could supply the necessary pressure by squeezing the box.
6. To be accurate, one should say that wood floats because it is less dense than water, and a stone sinks because it is more dense than water.
7. When measuring blood pressure, one is interested in the pressure of the blood in the heart to gauge how hard the heart is working. Therefore, the blood pressure cuff is wrapped around the arm at the same level as the heart. At a different level there would be a pressure change in the blood due to a difference in height.
12. As the speed of the train increases, the pressure of the outside air moving by it decreases. Because the air inside the train is in contact with the air outside, the inside pressure must also decrease. A passenger may experience a popping sensation in their ears when the pressure within their ears adjusts to equilibrate with the decreased pressure of the train.