

L37 — Pressure Inside and Outside

Read Aloud Passage

Air pressure pushes equally in every direction, so you usually don't notice it pressing on your body. Sucking air out of a space, like your mouth or a straw, lowers the pressure there, and the stronger pressure outside pushes in to fill the gap.

That outside push, not an inward pull, is what moves a drink up a straw. The same idea explains why a suction cup grips a smooth surface: pressing the air out from underneath lets the air outside hold it in place.

Activity 1

One statement below does NOT belong with the others about pressure inside and outside. Circle it and explain why it does not belong.

- A.** Air pressure pushes equally in every direction, so you usually don't notice it pressing on your body.
- B.** Sucking air out of a space, like your mouth or a straw, lowers the pressure there, and the stronger pressure outside pushes in to fill the gap.
- C.** That outside push, not an inward pull, is what moves a drink up a straw.
- D.** Friction converts the energy of motion into heat.

Why does it not belong?

Activity 2

Because / But / So — complete each sentence three different ways.

Air pressure pushes equally in every direction, so you usually don't notice it pressing on your body because

Air pressure pushes equally in every direction, so you usually don't notice it pressing on your body but

Air pressure pushes equally in every direction, so you usually don't notice it pressing on your body so

Activity 3

Start with the kernel sentence. Use the prompts to expand it into a more detailed sentence.

Kernel sentence: That outside push, not an inward pull, is what moves a drink up a straw.

How?

Why?

Write your expanded sentence:

Activity 4

Write one of each type of sentence about pressure inside and outside.

Statement (Declarative):

Question (Interrogative):

Exclamation (Exclamatory):

Command (Imperative):

Adapted from Building Foundations of Scientific Understanding by Bernard J. Nebel, PhD. Copyright (c) 2014 Bernard J. Nebel.