


Pressure Comparisons For Kids

 aitoolforkids.in/pressure-comparisons-for-kids/

May 1, 2025

Question1: Which is higher?

A balloon popping: 0.2 atm

Air pressure at sea level: 1 atm

Question2: Which has more pressure?

Underwater at 10 meters deep:
2 atm

Surface pressure (on land): 1 atm

Question3: Which has more pressure on the ground?

Elephant standing on one foot: high pressure due to weight over small area

Same elephant lying down: lower pressure due to large surface contact

Question4: Which cuts better?

Knife edge pressing into a fruit:

High pressure

Spoon pressed on the same fruit: Lower pressure

Question5: Which sinks deeper?

High heels vs. flat shoes on soft ground

Question6: Which sinks more into snow?

Person standing vs. sitting on snow

Question7: Atmospheric pressure on your body: ~10 tons

But why don't we feel crushed?

Question8: Which has more pressure?

Vacuum vs. sea-level pressure

Question9: Which has more pressure?

Hydraulic car lift pressure: 150 atm

Bicycle tire pressure: 5 atm

Question10: Which is lower?

Typhoon center (low pressure):

0.9 atm

Normal air pressure: 1 atm

Question11: Which is stronger?

Human bite pressure: 160 psi (1.1 MPa)

Crocodile bite pressure: 3,700 psi (25 MPa)

Question12: Which has less pressure?

A vacuum cleaner suction: 0.2 atm

Space vacuum: 0 atm

Question13: Who experiences more pressure?

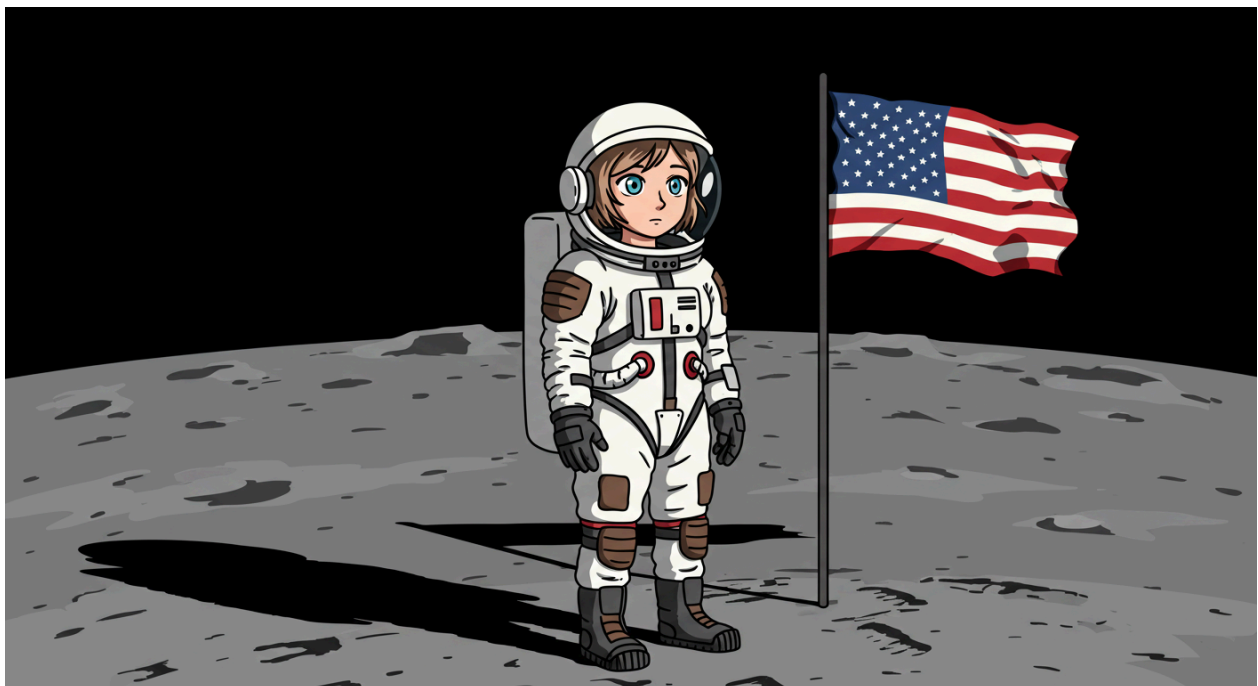
Scuba diver at 30 meters deep: 4 atm

Mountain climber at high altitude (~5000m):
0.5 atm

Question14: Which is lower?

Airplane cabin pressure: 0.8 atm

Ground level pressure: 1 atm



Answers

1. Air pressure at sea level is higher — that's why balloons pop when overinflated!

2. Underwater pressure increases with depth — it doubles at 10 meters!

3. Standing elephant — less area = more pressure.

4. Knife — because pressure increases as contact area decreases.

5. High heels — smaller surface area causes greater pressure.

6. Standing — less area under feet creates more pressure.

7. Internal body pressure balances it out — cool fact!

8. Sea level — vacuum has almost no pressure.

9. Car lift — much higher pressure for lifting heavy vehicles.

10. Typhoon center — and that's what causes storm winds!

11. Crocodile — it crushes bones!

12. Outer space — it's almost completely pressureless.

13. The scuba diver — pressure increases underwater with depth.

14. Inside a plane — that's why your ears pop!