

Flight: Properties of Air

We cannot see air. But, without it, airplanes and birds couldn't fly.

We know that air takes up **space**, exerts a force (**pressure**), **expands or contracts** when temperature changes, can be **compressed** and has **mass**.

These properties of air that make flight possible.

Air is "stuff" that you must fly through, and it produces two forces of flight: lift and drag.

In order to achieve flight you need enough lift to overcome the weight of the aircraft and enough thrust to overcome the drag of the aircraft.

For each example, choose which property of air is being shown

Example	Property of Air
Ruler breaking experiment	
Balloon on a scale experiment	
Empty plastic bottle in hot and cold water experiment	
Trying to fit bag of air into container experiment	
Lungs fill with air	
The air in a hot air balloon is heated and fills the balloon	
A deflated basketball weights less than a full basketball	
A suction cup "sticks" to a window	
A SCUBA diver's tank lets them stay underwater	
Air in a bag of potato chips	

Are you sure?
Submit button below!

