

Glossary

air A mixture of gases. Air is a mixture of many different kinds of gases. Air is made up of tiny particles of gas that float around. You can't see air, but it is all around us.

air pressure The weight of air pushing on everything around it. Air pressure is the pushing force of air particles as they bounce off each other, off objects, and off the sides of their container.

air resistance The force that makes an object move slower through air. Particles of air push against objects that move through the air. When an object moves through air, air resistance slows it down.

barometer A tool used to measure air pressure. Air pushes on the liquid in the barometer and causes it to move. The position of the liquid tells you how much the air is pushing.

contract To get smaller in size. When something is cooled, its particles move closer together. The amount of space between particles gets smaller.

expand To get larger in size. When something is heated, its particles spread out. The amount of space between particles gets bigger.

force A push or a pull. When you push on something, you are exerting a force on that thing. You exert a force on a soccer ball when you kick it. Forces can cause objects to move. Moving air particles exert a force on objects they hit.

gas A material that spreads out to fill up the space it is in. Gas is one of the three states of matter. Air is made up of many different kinds of gases. Oxygen and helium are two kinds of gases.

gravity The force that pulls objects toward Earth. All objects fall to the ground because of gravity.

heat energy The energy of moving particles. The particles that make up solids, liquids, and gases are always moving. When heat energy is added, particles move even faster. When heat energy is taken away, particles move slower.

liquid A material that flows easily and fills the bottom of the container it is in. Liquid is one of the three states of matter. Water is a liquid. So is orange juice, maple syrup, and shampoo.

solid A material that has its own shape no matter what container it is in. Solid is one of the three states of matter. A rock is a solid. So is a car and an ice cube.

thrust The force that gives a jet airplane or a rocket its forward motion. Thrust makes a jet move forward through the air. Thrust also makes a rocket lift off of the ground.