



Word list: contact, dense, four, denser, shape, container, density, fixed, attracted, move, flow, properties, structure, plasma, shape, bonds, fix, gas, liquid

There are 1 _____ common states or phases of matter in the Universe: solid, 2 _____, gas, and 3 _____. The state of matter affects a substance's 4 _____, such as 5 _____, viscosity (how well it flows), malleability (how easy it is to bend), and conductivity (how well it carries heat or electricity).

Common States of Matter

Solids

In a solid, the positions of atoms are 6 _____ relative to each other over long time. That is due to the cohesion or "friction" between molecules. This cohesion is provided by metallic, covalent or ionic 7 _____. Only solids can be pushed on by a force without changing 8 _____, which means that they can be resistant to deformation. Solids also tend to be strong enough to hold their own shape in a 9 _____. Solids are generally 10 _____ than liquids. Solid becoming a 11 _____ is sublimation.

Liquids

In a liquid, molecules are 12 _____ to other molecules strongly enough to keep molecules in 13 _____, but not strong enough to 14 _____ a particular 15 _____. The molecules can continually 16 _____ with respect to each other. This means that liquids can 17 _____ smoothly, but not as smoothly as gases. Liquids will tend to take the 18 _____ of a container that they are in. Liquids are generally less 19 _____ than solids, but denser than gases.