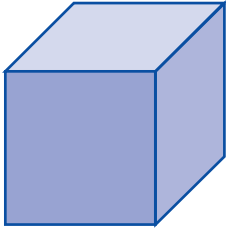
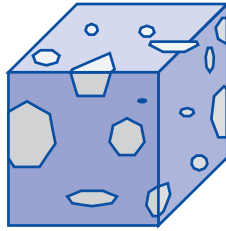


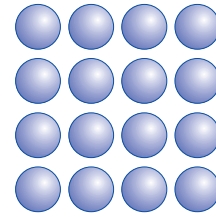
# Types of Matter



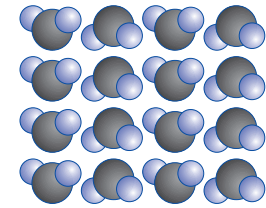
**Homogeneous mixture**



**Heterogeneous mixture**



**Element**

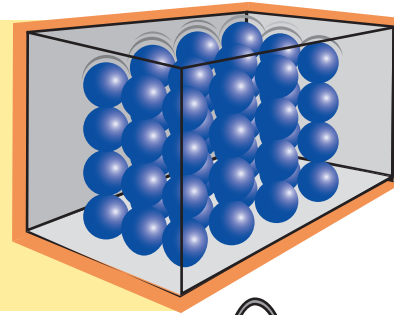


**Compound**

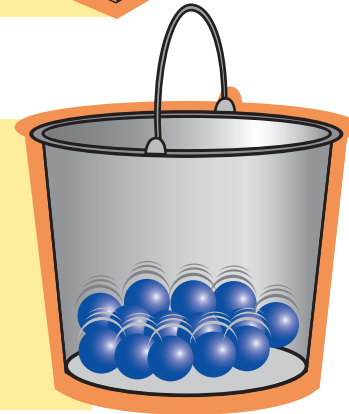
Type of matter	Definition	Examples
<b>Homogeneous mixture</b>	A mixture that contains more than one type of matter and is the same throughout.	soda pop, air, chocolate ice cream
<b>Heterogeneous mixture</b>	A mixture that contains more than one type of matter and is not the same throughout.	chicken soup, soil, fudge ripple ice cream
<b>Element</b>	A substance that contains only one type of atom.	copper metal, oxygen gas, liquid nitrogen
<b>Compound</b>	A substance that contains more than one type of atom.	table salt, rust (iron oxide), carbon dioxide gas

# Changes of State

Frozen water molecules vibrate, but can't switch places.



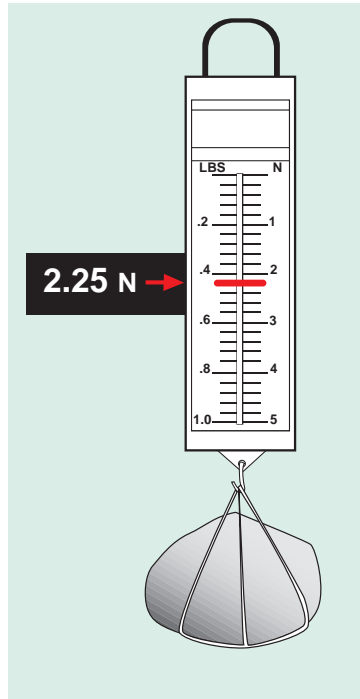
Water molecules in the liquid state slide over each other.



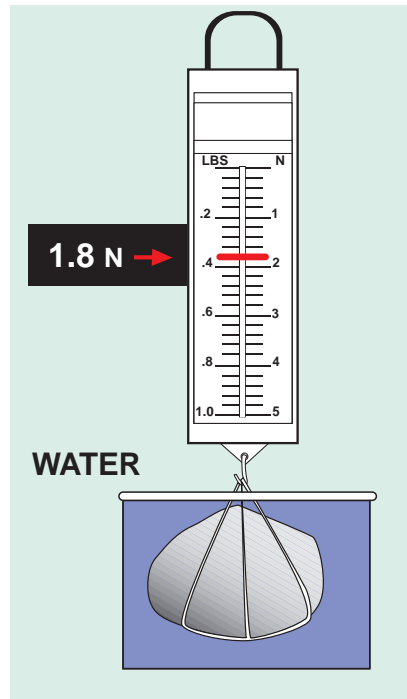
Water molecules in the gaseous state move randomly throughout their container.



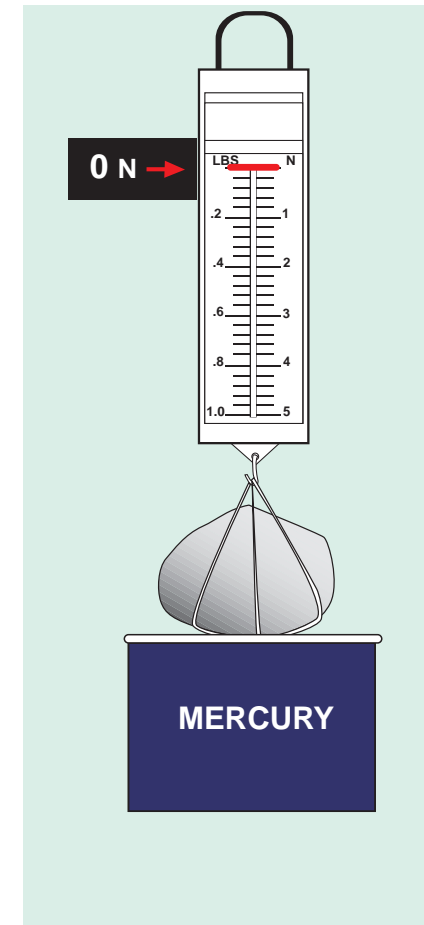
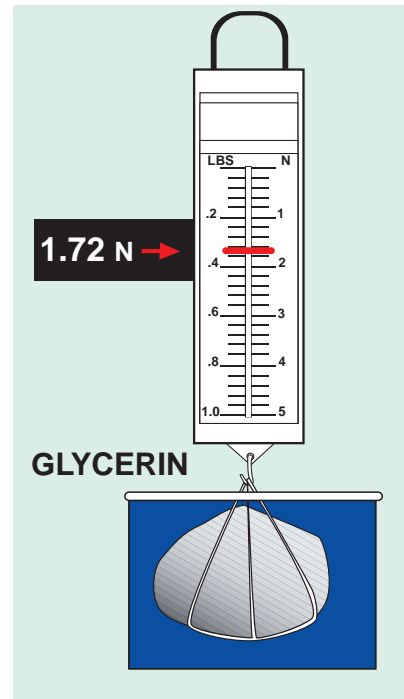
# Buoyancy



The rock weighs 2.25 N in air.



The rock weighs less in water and glycerin because these fluids exert an upward buoyant force on the rock. The rock weighs nothing in mercury. Why?



Which liquid exerts the most buoyant force on the rock?