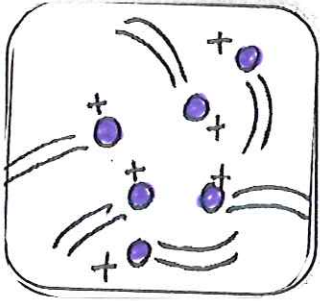
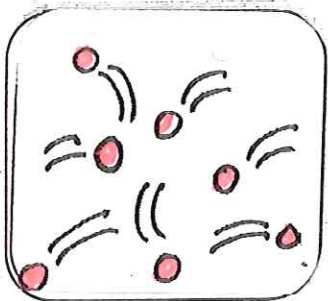


# STATES OF MATTER



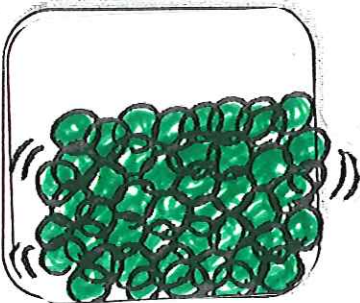
## plasmas

Super high energy ionized gas particles colliding violently.



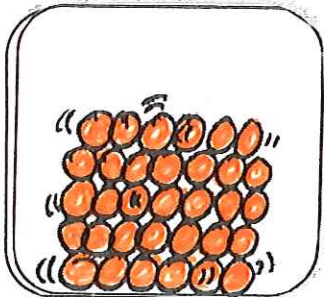
## gases

High energy particles moving at high speeds in random directions. Has no definite volume or definite shape.



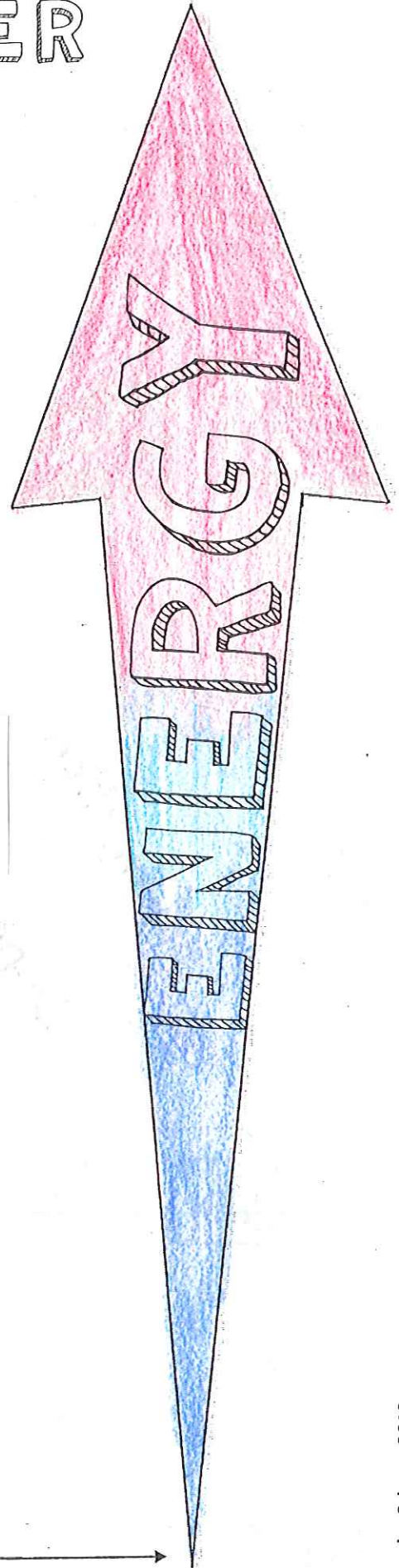
## liquids

Close-together particles slip-sliding around one another. Has a definite volume but no definite shape.



## solids

Packed together particles vibrating in place. Has definite volume and definite shape.



## Absolute Zero

Temperature at which all motion would theoretically stop.

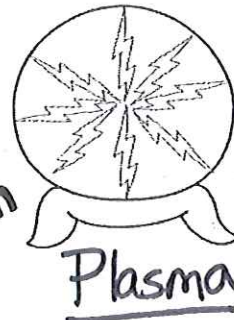


# PHASE CHANGES

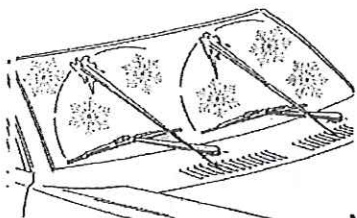
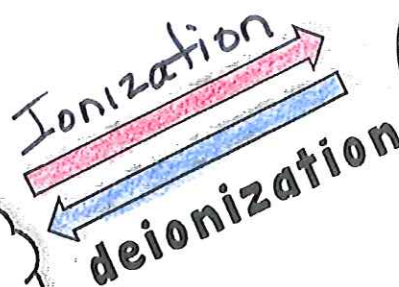
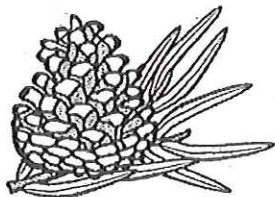
**Directions:**

1. Label the four states of matter present in the diagram.
2. Read each caption.
3. Label the appropriate arrow with the name of the phase change occurring.
4. Color the arrow red where an increase of thermal energy (temperature) is occurring.
5. Color the arrow blue where a decrease of thermal energy (temperature) is occurring.

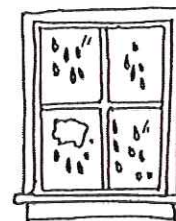
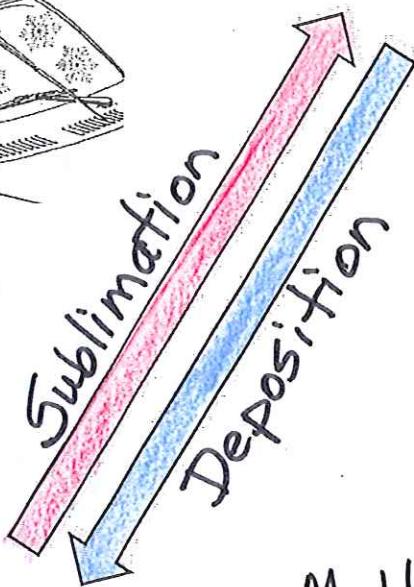
The gas with an electric current running through it in a plasma ball is an example of ionization.



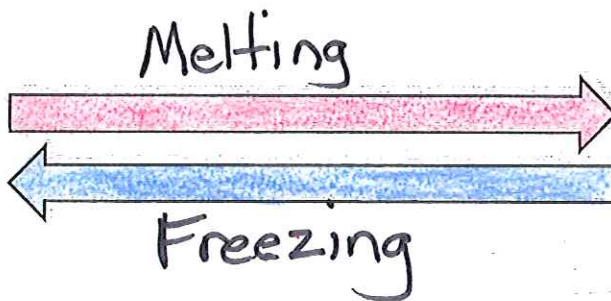
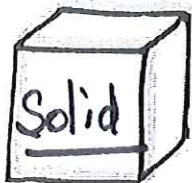
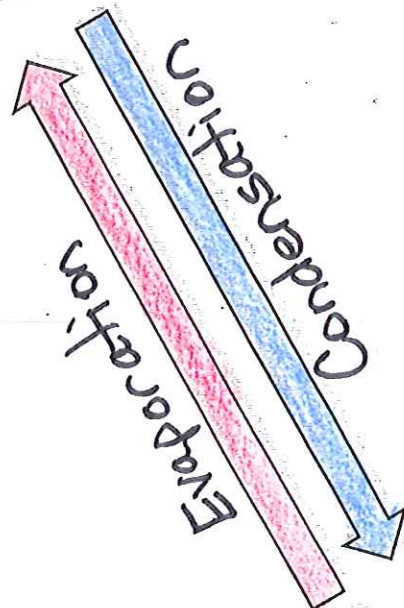
The smell from potpourri is an example of sublimation.



Frost on a windshield is an example of deposition.



The droplets of water on the inside of a window is an example of condensation.



Evaporation and boiling are both examples of vaporization.



Ice turning into water is an example of melting.

The formation of icicles is an example of freezing.

