

# BLIZZARD BAG #3

8<sup>th</sup> grade

Science

Mr. Sandora/Mr. Senk

Due date: April 22<sup>nd</sup>, 2014

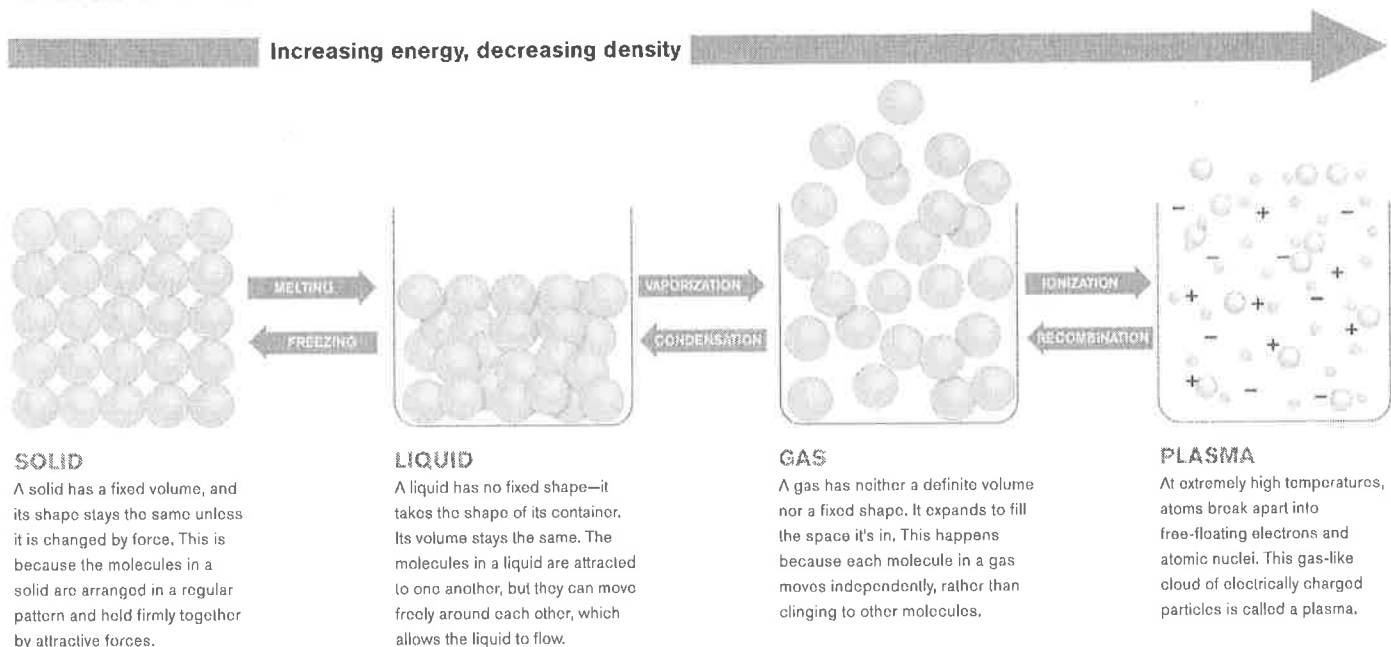
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# THE FOUR STATES

In "Destination Unknown" (p. 14), you learned that scientists determined that *Voyager 1* had entered interstellar space because of a change in the plasma outside the spacecraft. Like liquid, solid, and gas, plasma is a state of matter. Matter is anything that has mass and takes up space, or has a *volume*. Study the diagram below that shows the four states of matter. Then answer the questions that follow.

## STATES OF MATTER

In different states of matter, atoms behave differently. Matter can change from one state to another in a phase transition.



### ANALYZE IT

- Which state of matter retains its shape?
- Which is less dense: a gas or a solid?
- Gases can easily be squeezed into a smaller space, but liquids cannot. Based on the diagram, explain why that might be.
- What is the phase transition that turns a liquid into a gas?
- Which state of matter has the highest energy?