

Watch the "States of Matter" movie to help you complete this worksheet.

1. What are the three main states of matter?

\_\_\_\_\_

2. Matter is anything that takes up \_\_\_\_\_. It makes up all the stuff in the \_\_\_\_\_. It is composed of \_\_\_\_\_.

3. Solids have a fixed \_\_\_\_\_ and \_\_\_\_\_. The particles in a solid are packed \_\_\_\_\_ to create a firm \_\_\_\_\_. Three examples of solids are \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

4. Liquids have a definite \_\_\_\_\_, but not a definite \_\_\_\_\_. The particles in a liquid are able to \_\_\_\_\_ around more than those in a \_\_\_\_\_. They take the shape of the \_\_\_\_\_ and are able to \_\_\_\_\_ like a river. Examples of a liquids are \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

5. Gases have no fixed \_\_\_\_\_ or \_\_\_\_\_. They have a tendency to \_\_\_\_\_ filling any container. Examples of a gases are \_\_\_\_\_, \_\_\_\_\_, or \_\_\_\_\_.

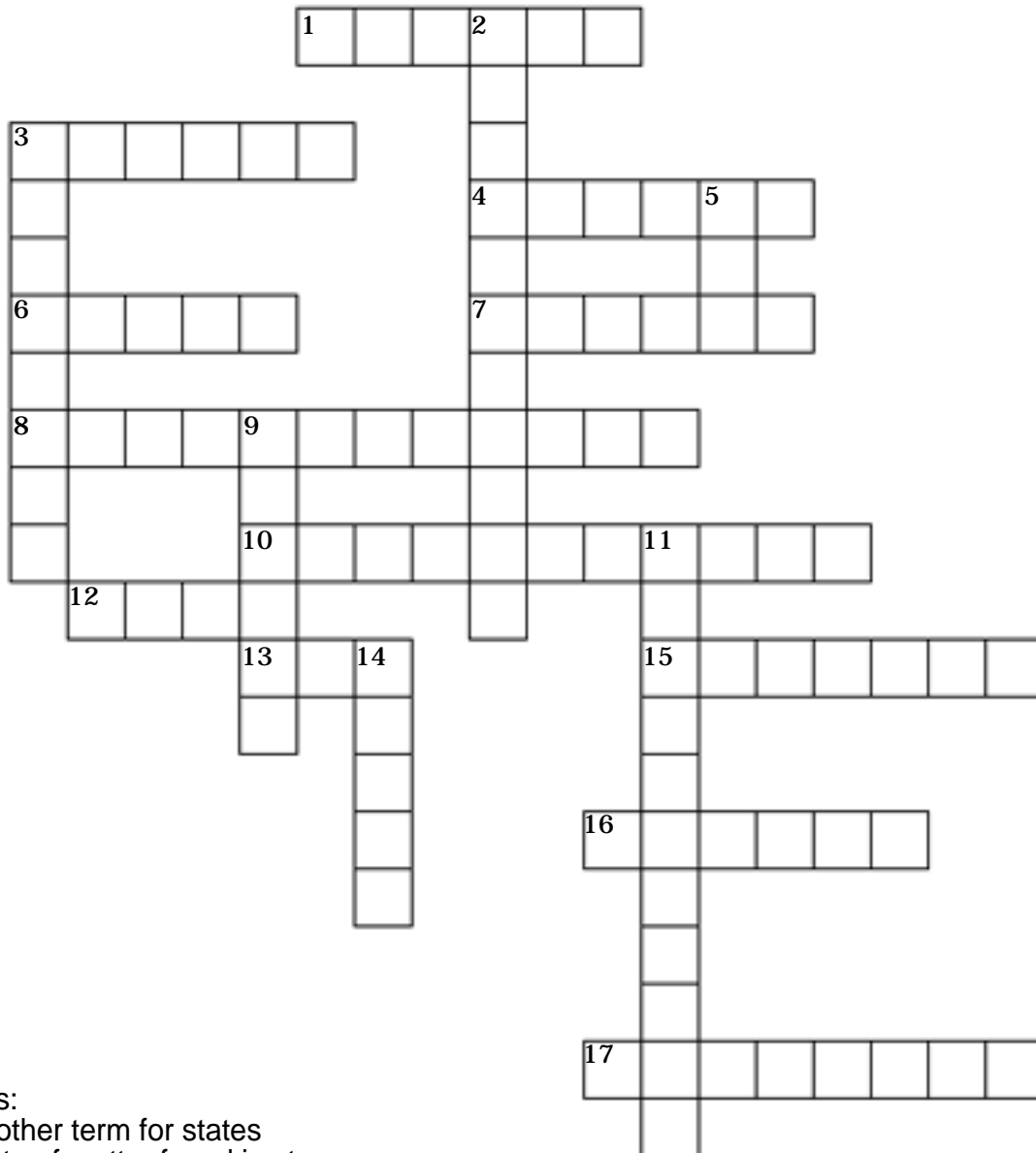
6. The fourth state of matter is \_\_\_\_\_. It can only be created at high \_\_\_\_\_ or low \_\_\_\_\_. It occurs naturally inside \_\_\_\_\_ or during lightning \_\_\_\_\_. Plasma is found in \_\_\_\_\_ lights or thermal \_\_\_\_\_ reactors.

7. Changing the \_\_\_\_\_ or \_\_\_\_\_ causes matter to change states.

Click "How do states of matter change?" when you are finished with the movie, then match each process to its best description.

- |                |   |
|----------------|---|
| Freezing •     | • Process of a liquid changing into a gas   |
| Melting •      | • Process of a gas changing into a solid or a solid changing into a gas without going through the liquid phase. |
| Evaporation •  | • Process of a liquid changing into a solid   |
| Condensation • | • Process of a solid changing into a liquid   |
| Sublimation •  | • Process of a gas changing into a liquid   |

Use the terms from the "States of Matter" lesson to complete the puzzle.



Across:

1. Another term for states
3. State of matter found in stars
4. State of matter with a fixed volume, but no fixed shape.
6. Gaseous state of water
7. Anything that has mass and occupies space
8. Gas changing into a liquid, such as water vapor changing into water
10. Liquid changing into a gas, such as water changing into water vapor
12. There are \_\_\_ states of matter including plasma.
13. State of matter with no fixed volume or shape.
15. Solid changing into a liquid, such as ice changing to water
16. Solid state of carbon dioxide
17. Liquid changing into a solid, such as water changing to ice

Down:

2. Gas changing into a solid or a solid changing into a gas; no liquid phase
3. A change in state is a \_\_\_\_ change.
5. Solid state of water
9. Solids have the lowest amount of \_\_\_\_\_.
11. Changing \_\_\_ causes a change in state
14. State of matter with a fixed volume and shape