

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 _____.

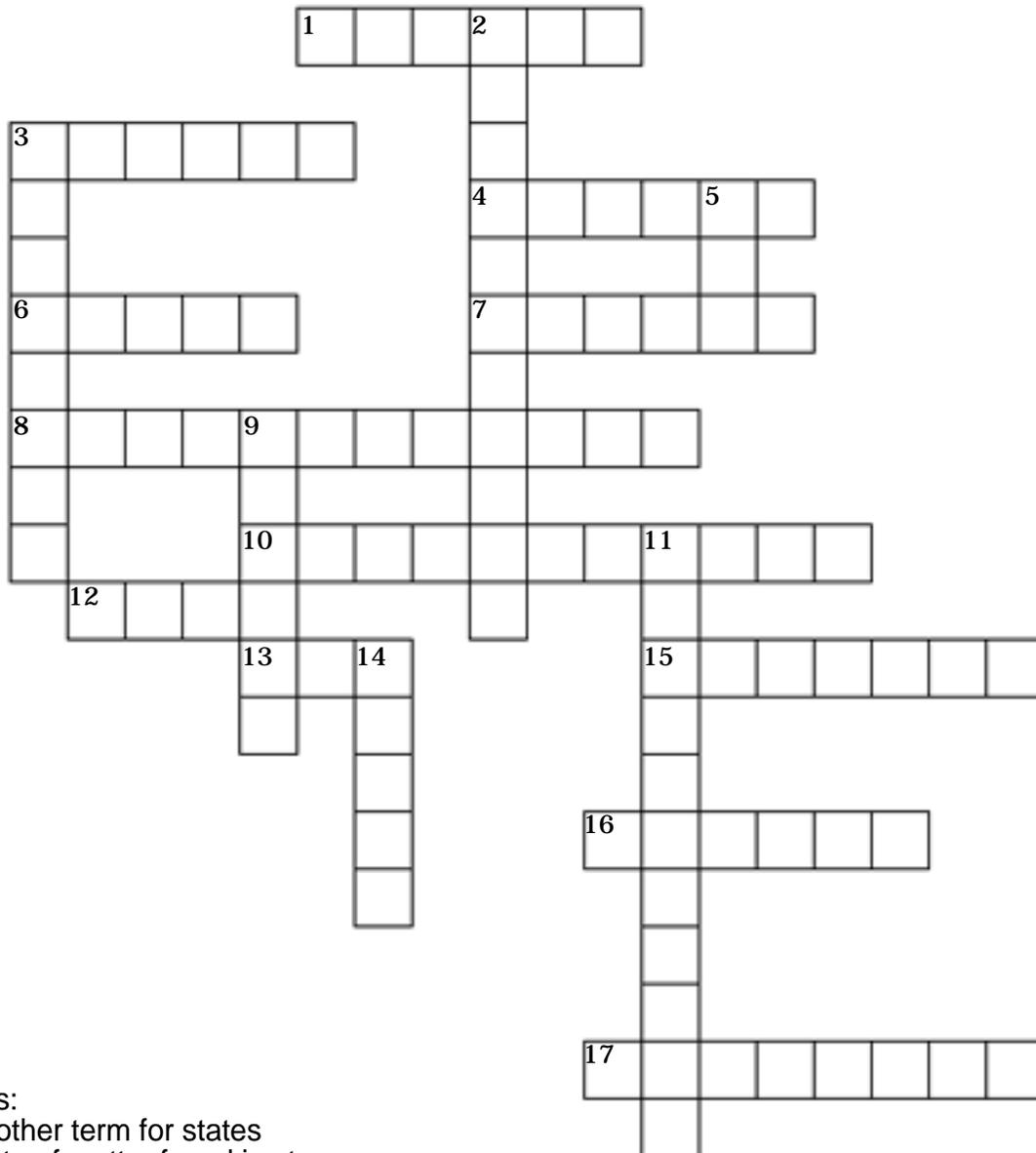
6. The fourth state of matter is _____. It can only be created at high _____ or low _____. It occurs naturally inside _____ or during lightning _____. Plasma is found in _____ lights or thermal _____ reactors.

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