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
2. State of matter found in stars
3. State of matter with a fixed volume, but no fixed shape.
4. Gaseous state of water
5. Anything that has mass and occupies space
6. Gas changing into a liquid, such as water vapor changing into water
7. Liquid changing into a gas, such as water changing into water vapor
8. There are ___ states of matter including plasma.
9. Solid changing into a liquid, such as ice changing to water
10. Solid state of carbon dioxide
11. 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.
4. Solid state of water
5. Solids have the lowest amount of ______.
6. Changing ___ causes a change in state
7. State of matter with a fixed volume and shape