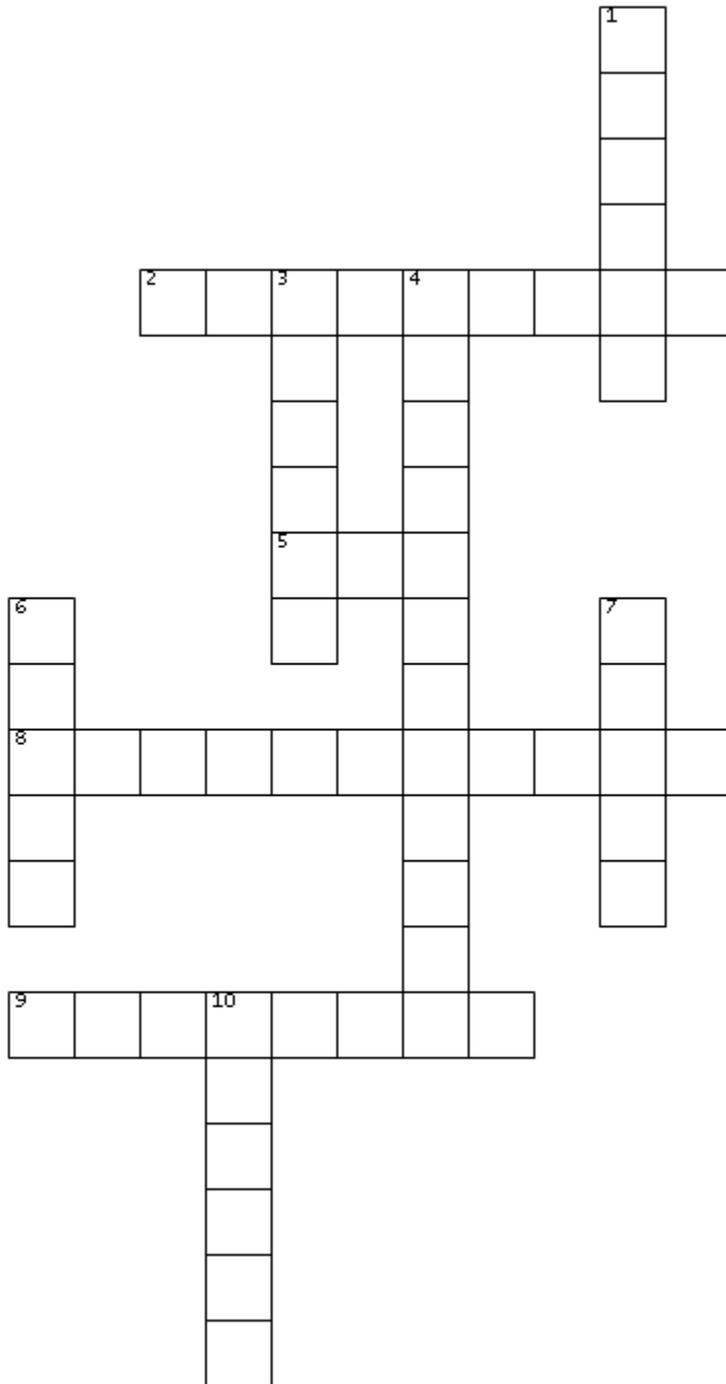


Phases of Matter Activity



ACROSS

2. Atoms that stick together to form a different small particle.

5. In the solid phase, molecules are very tightly packed together. The solid phase of water is called _____

8. When liquid water heats up, it turns into a gas. This process is called ____
9. When a liquid becomes a solid after the molecules slow down and pack close together.

DOWN

1. Water is a molecule made out of two atoms of hydrogen and one atom of ____
3. The three phases of matter are solid, ____ and gas.
4. When heat leaves a gas, it turns back into a liquid. This process is called ____
6. In the gas phase, molecules are floating very far apart. In water, this gas is called ____
7. The small particles that everything is made out of.
10. Heat is a type of ____ which makes molecules move faster.

Let's do an experiment to see the phases of matter!

Instructions:

You are going to be taking water in the solid phase (ice cubes) and placing them into a container of hot water to watch it melt. After it has melted, you will put some hot water in a cup and place an upside down cup on top of it. Water in the gas phase (steam) will begin to cover the inside of the upside down cup. After placing another ice cube on top, the steam will begin to condense back into liquid water droplets.

Make sure to get your teacher's help with the hot water!

Draw what you see!

Draw what you see as water is in solid, liquid, and gas phases.

Solid	Liquid	Gas

Questions

1. Why did the ice cube quickly disappear after dropping it into the hot water?
2. Why did little droplets appear on the upside down cup after placing an ice cube on top of it?
3. Why is ice cold and steaming water hot?
4. Explain what would happen to the molecules if you took the cup of hot water and put it into the freezer for a few hours.