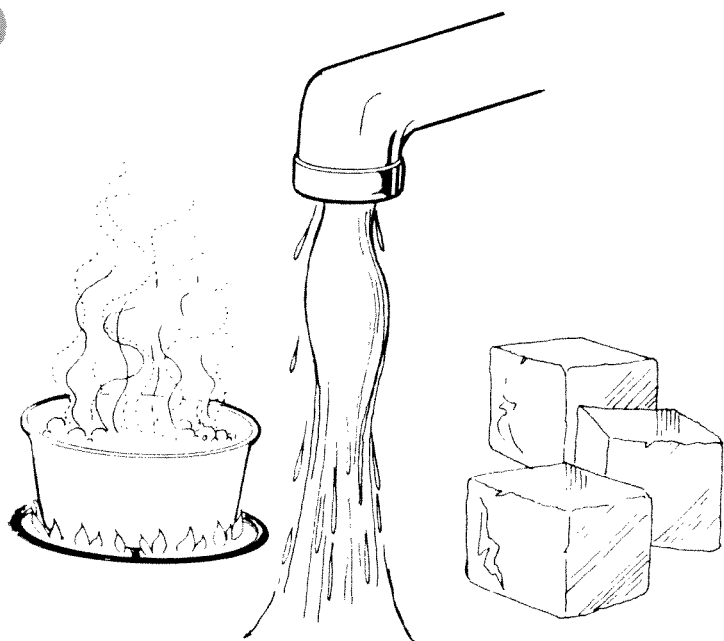


# PHYSICAL VS. CHEMICAL CHANGE

Name \_\_\_\_\_



In a physical change, the original substance still exists, it has only changed in form. Energy changes usually do not accompany physical changes, except in phase changes and when substances dissolve.

In a chemical change, a new substance is produced. Energy changes always accompany chemical changes. Chemical changes are always accompanied by physical changes.

Classify the following as examples of a physical change, a chemical change or both kinds of change.

1. Sodium hydroxide dissolves in water.
2. Hydrochloric acid reacts with sodium hydroxide to produce a salt, water and heat.
3. A pellet of sodium is sliced in two.
4. Water is heated and changed to steam.
5. Potassium chlorate decomposes to potassium chloride and oxygen gas.
6. Iron rusts.
7. Ice melts.
8. Acid on limestone produces carbon dioxide gas.
9. Milk sours.
10. Wood rots.

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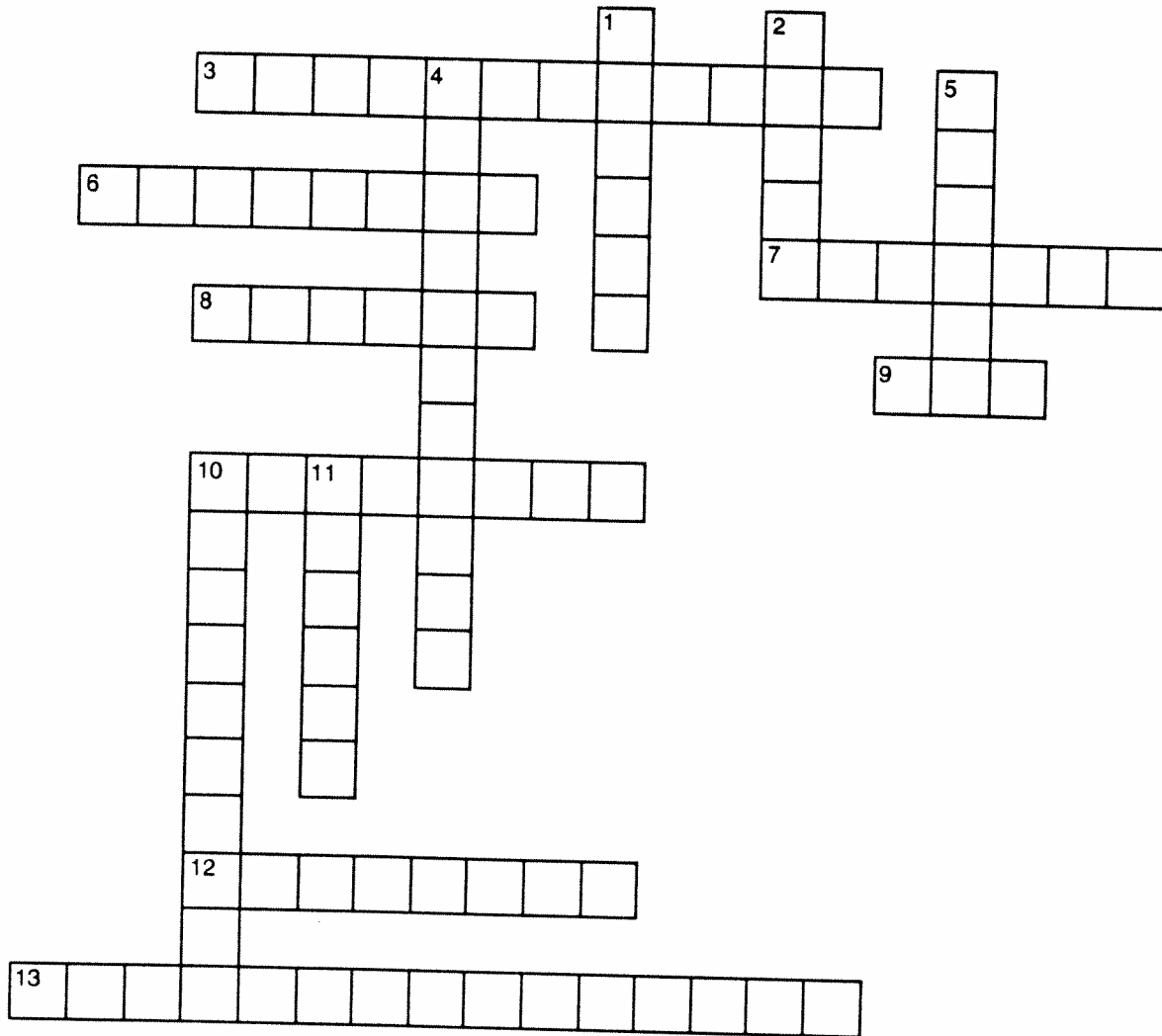
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# STATES OF MATTER CROSSWORD

Name \_\_\_\_\_



## ACROSS

3. Change of a gas to a liquid
6. This type of property can be observed without destroying the substance.
7. Mass of a substance divided by unit volume
8. Physical change of a solid to a liquid at the melting point
9. State of matter having no definite volume or shape
10. Homogeneous mixture
12. This type of change produces a new substance.
13. Change of a liquid to a solid

## DOWN

1. Anything that has mass and takes up space
2. State in which atoms or molecules are very close together and are regularly arranged
4. Change of a liquid to a gas
5. This state of matter consists of electrically charged particles.
10. Elements and compounds
11. State of matter having a definite volume but no definite shape.