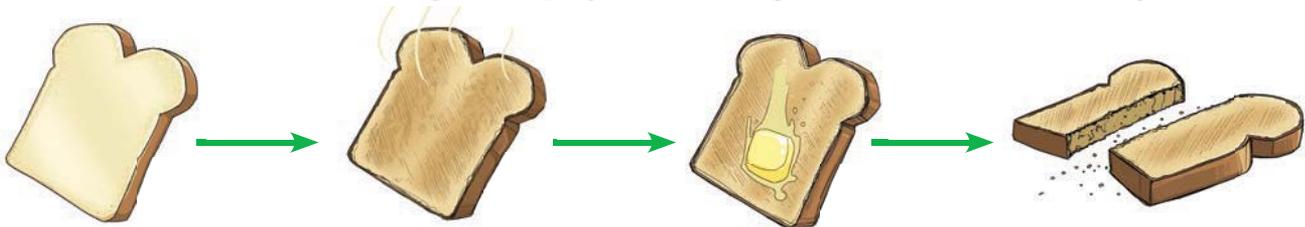


Sum It Up »

The outline below is a summary of the lesson. Complete the outline.

- I. Matter undergoes changes.
- A. One type of change is a (1) _____.
1. Matter does not change identity.
 2. Example: (2) _____
- B. (3) _____
1. Matter changes identity.
 2. Example: (4) _____
- II. Temperature affects matter.
- A. When temperature increases,
1. the speed of a chemical change (5) _____.
 2. the rate of melting and boiling (6) _____.
- B. When temperature decreases,
1. the speed of a chemical change (7) _____.
 2. the rate of freezing or condensing (8) _____.
- III. During physical or chemical changes, the total mass of matter (9) _____.

Tell whether each change is a physical change or a chemical change.



(10) _____ (11) _____ (12) _____



Name _____

Vocabulary Review

1

It's easy to get tongue-tied when talking about how matter changes. Look at the statements below. Switch the red words from one sentence to another until each statement makes sense.

- A. In a **chemical change**, the identity _____
of matter does not change.
- B. Water will **melt** faster on a very _____
cold soft drink can than it will on a
cool soft drink can.
- C. Another name for a chemical _____
change is a **chemical property**.
- D. Ice will **condense** more slowly in _____
cold water than in warm water.
- E. In a **physical change**, the identity of _____
the matter changes.
- F. When water freezes, its mass _____
decreases.
- G. A **reaction** of matter will stay the _____
same during a physical change.
- H. When water freezes, it **contracts**. _____

Challenge The words in the boxes below are jumbled. Put them in the correct order to make a meaningful sentence.

changes are rusting and chemical
burning

is physical and mass changes in
chemical conserved

Apply Concepts

2 Each of the pictures shows a change. Write a *P* by the pictures that show physical changes and a *C* by the pictures that show chemical changes.



3 Make a list of physical changes and chemical changes that you observe or see the effects of in your school.

Physical Changes

Chemical Changes

4 What would make each of the following processes happen faster? On each line, write *increase in temperature* or *decrease in temperature*.

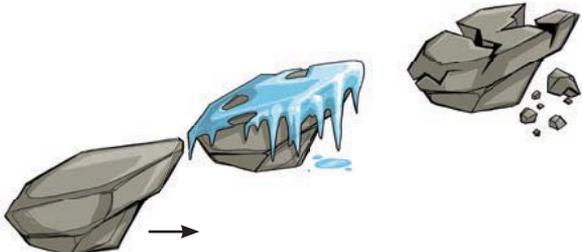
Ice cream melting

Boiling water to cook potatoes

Water condensing on the outside of a glass

Water freezing overnight on a street

5 Explain what is happening in these pictures. Tell whether the changes are physical or chemical.



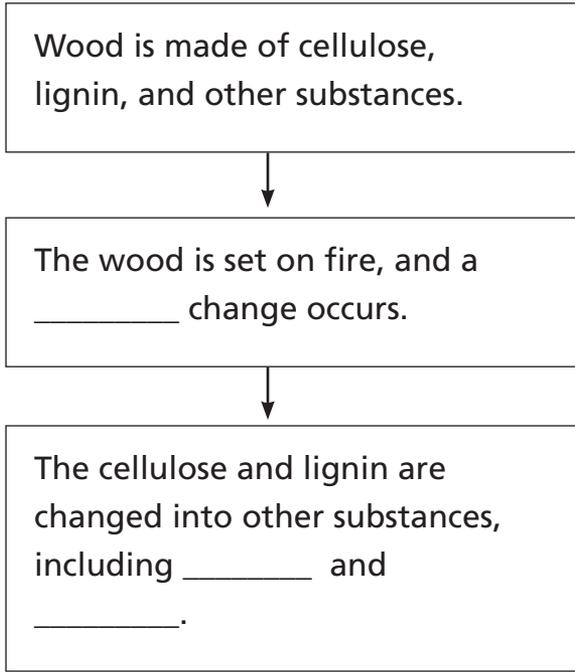
6 Why is it important to follow the instructions on this jar of food?



7 Draw a picture of a chemical reaction. Then explain what happens and why mass is conserved during the reaction.

8 Explain why most sidewalks have built-in cracks every few feet.

9 Explain what happens in a campfire.



Take It Home!

Ask an adult to help you practice taking the temperature of someone in your family. Determine whether any of your family members have a fever. Explain to family members why people get fevers.