Science Fables

The Mystery of Everyday Changes

Story Quiz

This quiz checks what you learned about physical and chemical changes — and how to tell them apart.

1. What is the main difference between a physical change and a chemical change?

A. Physical changes always involve heat
B. Chemical changes form one or more new substances
C. Physical changes always change color
D. Chemical changes are always reversible

2. Which of the following is a physical change?

A. Rusting iron
B. Burning a matchstick
C. Melting ice
D. Toasting bread

3. Why is burning candle wax considered a chemical change?

A. The wax changes from solid to liquid
B. The candle becomes shorter
C. New substances such as carbon dioxide and water vapor are formed
D. The wax becomes softer

4. Why is rusting iron considered a chemical change?

A. The iron changes shape
B. Iron reacts with oxygen and moisture to form new substances
C. The iron becomes colder
D. The rust can be easily washed away

5. What is the most important question to ask when deciding whether a change is physical or chemical?

A. Did the substance change size?
B. Did the substance change color?
C. Was a new substance formed?
D. Can the change be reversed?

Answer Key

1. B — Chemical changes form one or more new substances

Chemical changes form one or more new substances, while physical changes do not.

2. C — Melting ice

Melting ice is a physical change — water changes state but no new substance forms.

3. C — New substances such as carbon dioxide and water vapor are formed

Burning wax produces new substances such as carbon dioxide and water vapor.

4. B — Iron reacts with oxygen and moisture to form new substances

Rusting is a chemical change because iron reacts with oxygen and moisture to form new substances.

5. C — Was a new substance formed?

Ask: Was a new substance formed? If yes, it is a chemical change; if no, it is a physical change.