



Chemical and Physical Changes

Name: _____

Date: _____

Grade: Grade 5

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence:

When iron rusts, it is just a physical change because the iron looks different on the outside.

Rewrite: _____

2. Fix the sentence:

Burning wood is a physical change because the wood just gets smaller as it burns away.

Rewrite: _____

3. Fix the sentence: Baking cookie dough in the oven only changes the shape, so it is a physical change.

Rewrite: _____

Part B: Fill in the Blank

Write the missing word or number on each line.

1. When leaves change color in fall, chemicals inside the leaf break down, which is a _____ change.
2. A nail left outside in the rain forms a reddish-brown coating called _____, which is a sign of a chemical change.
3. When wood burns, the new substance _____ floats away as a dark cloud, showing a chemical change.
4. Chemical changes are usually _____ because we cannot easily turn the new substances back into the original ones.

Part C: Short Answer

Answer each question in one or two complete sentences.

1. Explain why baking cookies is considered a chemical change in Grade 5 science.

2. Describe two examples of chemical changes outdoors and explain how you know they are chemical.

Answer Key · Chemical and Physical Changes · Grade: Grade 5

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence:

When iron rusts, it is just a physical change because the iron looks different on the outside.

Rewrite: **When iron rusts, it is a chemical change because iron and oxygen combine to form a new substance called rust.**

2. Fix the sentence:

Burning wood is a physical change because the wood just gets smaller as it burns away.

Rewrite: **Burning wood is a chemical change because the wood combines with oxygen to make ash, smoke, and gases.**

3. Fix the sentence: *Baking cookie dough in the oven only changes the shape, so it is a physical change.*

Rewrite: **Baking cookie dough is a chemical change because heat causes new substances to form, giving cookies their brown color and crisp texture.**

Part B: Fill in the Blank

Write the missing word or number on each line.

1. When leaves change color in fall, chemicals inside the leaf break down, which is a **chemical** change.
2. A nail left outside in the rain forms a reddish-brown coating called **rust**, which is a sign of a chemical change.
3. When wood burns, the new substance **smoke** floats away as a dark cloud, showing a chemical change.
4. Chemical changes are usually **irreversible** because we cannot easily turn the new substances back into the original ones.

Part C: Short Answer

Answer each question in one or two complete sentences.

1. Explain why baking cookies is considered a chemical change in Grade 5 science.

Baking cookies is a chemical change because the heat causes the ingredients to react. Sugars brown, dough firms up, and gases form, creating new substances. The baked cookies cannot be turned back into raw dough, which proves a chemical change happened.