



# Chemical and Physical Changes

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Grade: Grade 5

## Part A: Multiple Choice

Circle the best answer for each question.

1. A Grade 5 student mixes sand and salt in a bowl. Which method best separates them?

- A) Burn the mixture to remove the salt
- B) Add water, filter the sand, then evaporate the water to get the salt
- C) Wait for the mixture to chemically react and split apart
- D) Use a magnet to pull out the salt

2. Which best describes salt water as a type of mixture?

- A) A chemical compound formed from salt and water
- B) A solution where salt is evenly dissolved in water
- C) A pure substance with one kind of particle
- D) A precipitate of salt at the bottom of the cup

3. A baker notices the cake batter has risen, browned, and smells different after baking. Which change happened?

- A) Only a physical change, because the batter was just heated
- B) A chemical change, because new substances with new properties formed
- C) No change, because the ingredients are still in the cake
- D) A reversible physical change that can be undone by cooling

4. Which scenario is a physical change rather than a chemical change?

- A) A nail rusts after sitting in water for a week
- B) A log burns in a fireplace and turns to ash
- C) A glass of water evaporates and leaves it empty
- D) Milk turns sour after sitting on the counter

## Part B: Fill in the Blank

Write the correct answer on each line.

1. A \_\_\_\_\_ is a combination of two or more substances that are physically mixed but not chemically combined.

2. When salt dissolves evenly in water, the result is called a \_\_\_\_\_ because one substance is spread evenly through another.

3. To get the salt back from salt water, you can \_\_\_\_\_ the water until only solid salt remains in the dish.

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### Part B: Fill in the Blank

Write the correct answer on each line.

1. A mixture is a combination of two or more substances that are physically mixed but not chemically combined.
2. When salt dissolves evenly in water, the result is called a solution because one substance is spread evenly through another.
3. To get the salt back from salt water, you can evaporate the water until only solid salt remains in the dish.
4. Mixing iron filings and sand can be separated using a magnet to pull the iron out of the mixture.