



Chemical and Physical Changes

Name: _____

Date: _____

Grade: Grade 5

Part A: Fill in the Blank

Write the missing word or number on each line.

1. If 16 grams of one reactant combines with 8 grams of another, the products will weigh _____ grams total.
2. A starting substance in a chemical reaction is called a _____, while the substance formed is called a product.
3. If 50 grams of vinegar reacts with 5 grams of baking soda in a sealed bag, the bag still weighs _____ grams.
4. When wood burns in an open fire, the ash weighs less because gases like carbon _____ escape into the air.
5. The new substance formed during a chemical reaction is called a _____ of that reaction.
6. If 10 grams of hydrogen reacts with 80 grams of oxygen to form water, the water weighs _____ grams.
7. Mass is neither created nor destroyed; it is _____ during any chemical reaction.
8. When iron rusts, it gains mass because oxygen from the _____ joins with the iron to form iron oxide.
9. If 12 grams of carbon burns completely with 32 grams of oxygen, the product weighs exactly _____ grams.

Part B: Matching

Match each item on the left to the correct answer on the right.

1. Match each item to its correct answer.

Total mass of 5g + 7g reactants	→ _____	Reactant
Word for starting materials	→ _____	12 grams
Word for new substances formed	→ _____	Conservation
_____	→ _____	_____

Part A: Fill in the Blank

Write the missing word or number on each line.

1. If 16 grams of one reactant combines with 8 grams of another, the products will weigh 24 grams total.
2. A starting substance in a chemical reaction is called a reactant, while the substance formed is called a product.
3. If 50 grams of vinegar reacts with 5 grams of baking soda in a sealed bag, the bag still weighs 55 grams.
4. When wood burns in an open fire, the ash weighs less because gases like carbon dioxide escape into the air.
5. The new substance formed during a chemical reaction is called a product of that reaction.
6. If 10 grams of hydrogen reacts with 80 grams of oxygen to form water, the water weighs 90 grams.
7. Mass is neither created nor destroyed; it is conserved during any chemical reaction.
8. When iron rusts, it gains mass because oxygen from the air joins with the iron to form iron oxide.
9. If 12 grams of carbon burns completely with 32 grams of oxygen, the product weighs exactly 44 grams.

Part B: Matching

Match each item on the left to the correct answer on the right.

1. Match each item to its correct answer.

Total mass of 5g + 7g reactants	→ <u>12 grams</u>	Reactant
Word for starting materials	→ <u>Reactant</u>	12 grams
Word for new substances formed	→ <u>Product</u>	Conservation
Mass law during reactions	→ <u>Conservation</u>	Product