# The Mystery of the Missing Mass

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5th Grade Science Review

Name: _____ Date: _____

*Answer the following questions based on the lesson about mass conservation in chemical reactions.*

**1.** What does the conservation of mass state about chemical reactions?

- **A.** Mass can be created
- **B.** Mass can be lost
- **C.** Mass remains constant

**2.** In a closed system, all reaction products are kept _____.

**3.** How can gases trick us into thinking mass is lost during a reaction?

**4.** A closed system is not necessary for tracking reaction products.

◯ True ◯ False

**5.** Why is it important to design a closed system for chemical reactions?

**6.** What can happen to matter during a chemical reaction?

- **A.** It disappears completely
- **B.** It changes form but is still present
- **C.** It doubles in amount

**7.** Colossians 1:17 states that God holds all things together.

◯ True ◯ False

**8.** Matter changes form but the total mass _____ during a chemical reaction.

**9.** What makes a scientific experiment reliable according to our lesson?

**10.** What is one reason gases can make mass seem lost?

- **A.** They are invisible
- **B.** They are lighter than air
- **C.** They escape into the environment

**Answer Key**

1. Mass remains constant 2. contained 3. Gases can escape into the air, making it seem like some mass has disappeared. However, the mass is still there but in a different form. 4. False 5. A closed system ensures that no reactants or products escape, allowing for accurate measurement of mass before and after the reaction. 6. It changes form but is still present 7. True 8. remains constant 9. A reliable experiment is repeatable and follows a clear procedure. It also controls variables and uses closed systems to ensure accurate results. 10. They escape into the environment