

Conservation of Mass



- Lavoisier measured the mass of the substances in chemical reactions.

Chemical reaction

Reactant(s) → Product(s)

Example 1:

Hydrogen + Oxygen → Water

2 g

16 g

?



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Chemical reaction

Reactant(s) → Product(s)

Example 1:

Hydrogen + Oxygen → Water

2 g + 16 g → ?

18 g

Antoine-Laurent de Lavoisier (1743-1794)

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Chemical reaction

Reactant(s) → Product(s)

Example 2:

Hydrogen + Oxygen → Water

5 g

?

45 g



Antoine-Laurent de Lavoisier (1743-1794)



- Lavoisier measured the mass of the substances in chemical reactions.

Chemical reaction

Reactant(s) → Product(s)

Example 2:

Hydrogen + Oxygen → Water

5 g + ? → 45 g

40 g

Antoine-Laurent de Lavoisier (1743-1794)



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Chemical reaction

Reactant(s) → Product(s)

Example 3:

Hydrogen peroxide → Oxygen + Water

68 g

?

36 g

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- Lavoisier measured the mass of the substances in chemical reactions.

Chemical reaction

Reactant(s) → Product(s)

Example 3:

Hydrogen peroxide → Oxygen + Water

68 g

→

32 g

+

36 g

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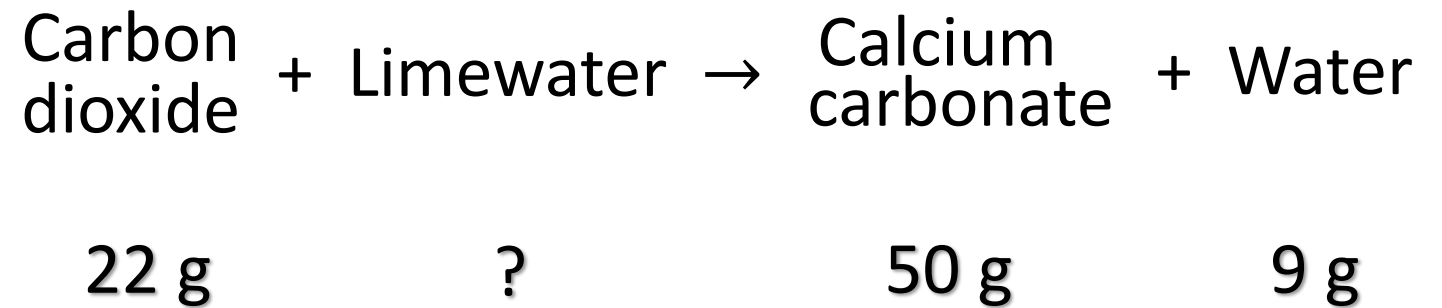


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Example 4:



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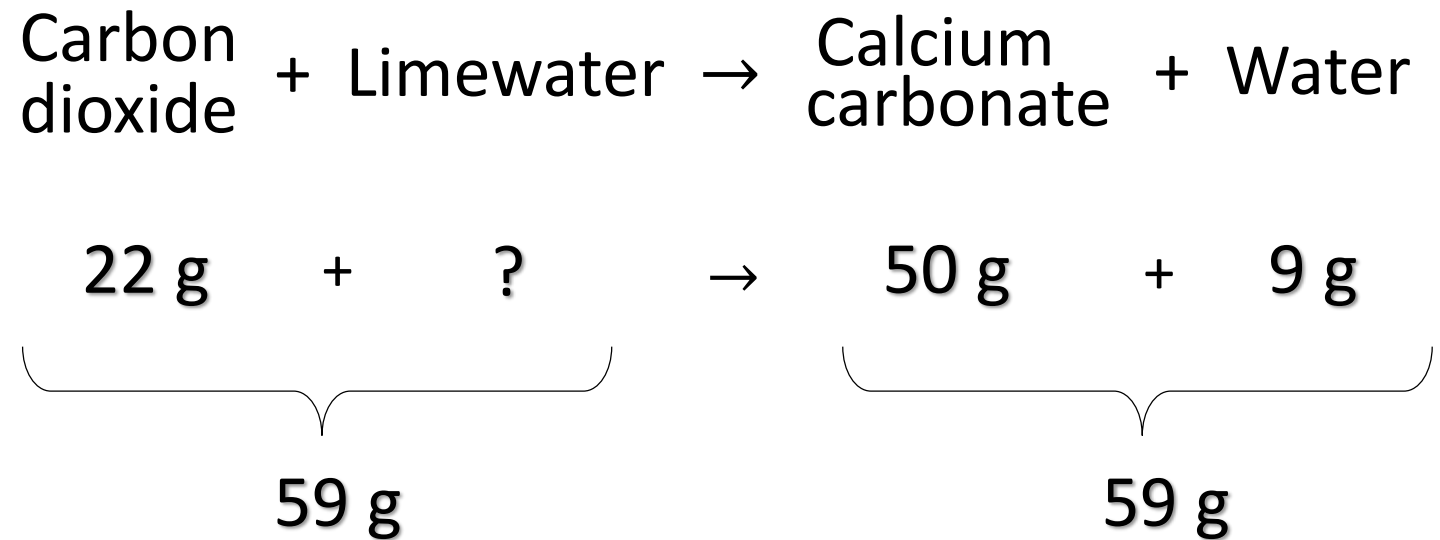


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Chemical reaction

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Example 4:



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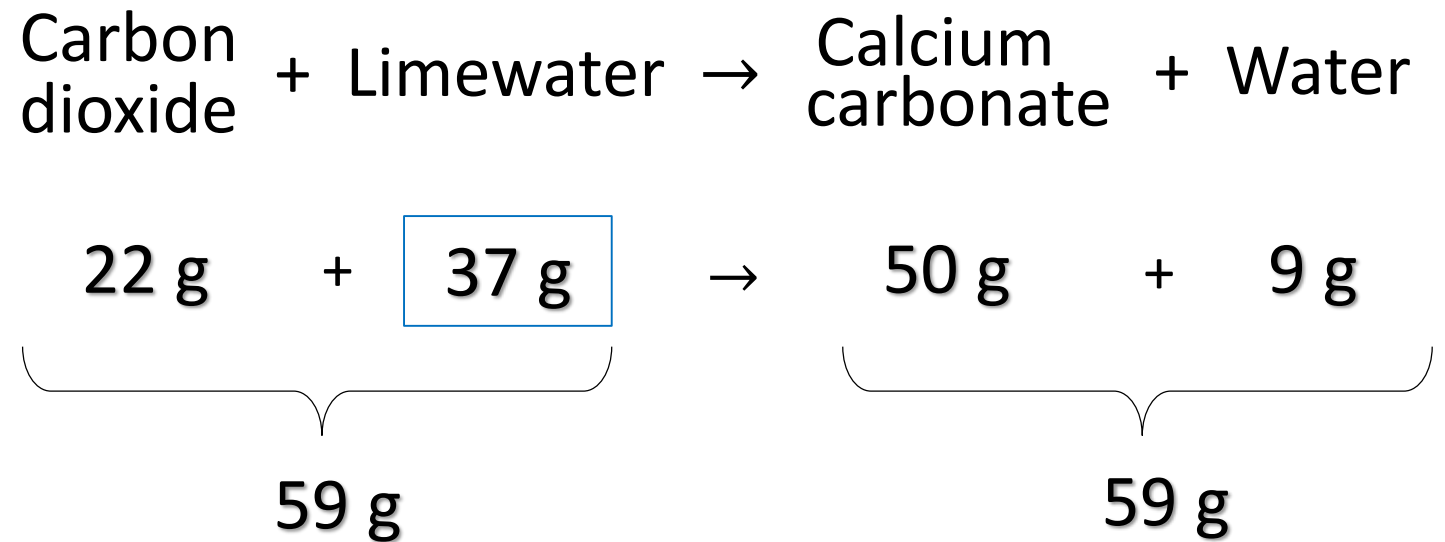


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Chemical reaction

Reactant(s) → Product(s)

Example 4:



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Law of Conservation of Mass

Workbook: Pages 12-13

Mass of Reactants = Mass of Products



