

# Describing Chemical Reactions

(Chapter 6, section 2)

Name \_\_\_\_\_

Period \_\_\_\_\_

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1. What is a chemical equation?

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2. What are reactants in a chemical equation? What are products in a chemical equation?

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3. What is the general plan for a chemical equation?

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4. Write the equation shown in Figure 8 and label the parts of the equation.

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5. What is the principle of conservation of mass?

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6. Complete this sentence:

The principle of \_\_\_\_\_ of \_\_\_\_\_ states that in a chemical reaction, the \_\_\_\_\_ of the \_\_\_\_\_ must \_\_\_\_\_ the \_\_\_\_\_ of the \_\_\_\_\_.

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7. What is an open system? What is a closed system?

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8. What must a chemical equation show to describe a reaction accurately? What is the equation called when shown this way?

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9. What are the four steps used in balancing chemical equations?

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10. What is a coefficient? What does it tell you in a chemical equation?

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11. What is a synthesis reaction? Write the equation for the synthesis of water.

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12. What is a decomposition reaction? Write the equation for the decomposition of hydrogen peroxide.

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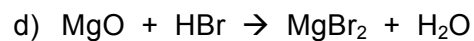
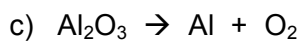
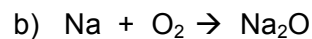
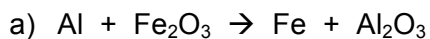
13. What is a single replacement reaction? Write the equation for the single replacement reaction of copper oxide and carbon.

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13. What is a double replacement reaction? Write the equation for the double replacement reaction of iron sulfide and hydrochloric acid.

### Try These

Balance the following equations and classify each as synthesis, decomposition, single replacement, or double replacement:



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