

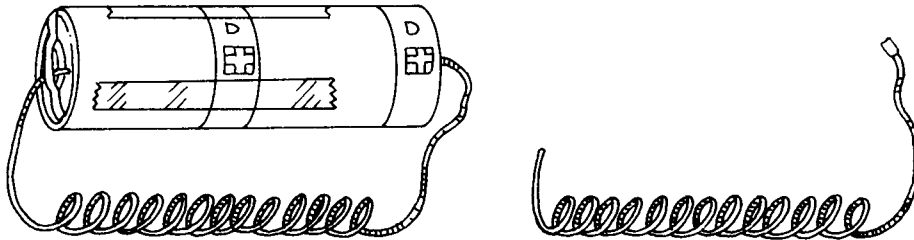
## Chapter 9

Use with Section 2

## REINFORCEMENT

## ● Electricity and Magnetism

Use the diagram below to answer questions 1-5.



- In the figure on the left, when electrons move in the coiled wire, what is produced?  
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- In the figure on the left, if you changed the direction of electron flow by switching the connections to the battery, what would happen? \_\_\_\_\_
- In the figure on the left, if an iron bar were inserted into the wire coil, what would happen to the iron bar? \_\_\_\_\_
- Suppose you wrapped an iron bar with wire and connected the ends of the wire to a battery. What is this device called? What would happen to this device if you disconnected the battery?  
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- In the figure on the right, if you repeatedly moved a bar magnet in and out of the wire coil, what would be produced? What is this process called? \_\_\_\_\_

Complete the following. Write your answers on the lines provided.

- What is the function of an electric motor in terms of electric power and motion?  
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- Briefly explain how an electric motor works. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- What is the function of an electric generator in terms of electric power and motion?  
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- Briefly explain how an electric generator works. \_\_\_\_\_  
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- What is the function of a transformer? \_\_\_\_\_
- In a transformer, what is the significance of the number of coils on the input side compared to the number of coils on the output side? \_\_\_\_\_  
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\_\_\_\_\_
- Contrast direct current with alternating current. \_\_\_\_\_  
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