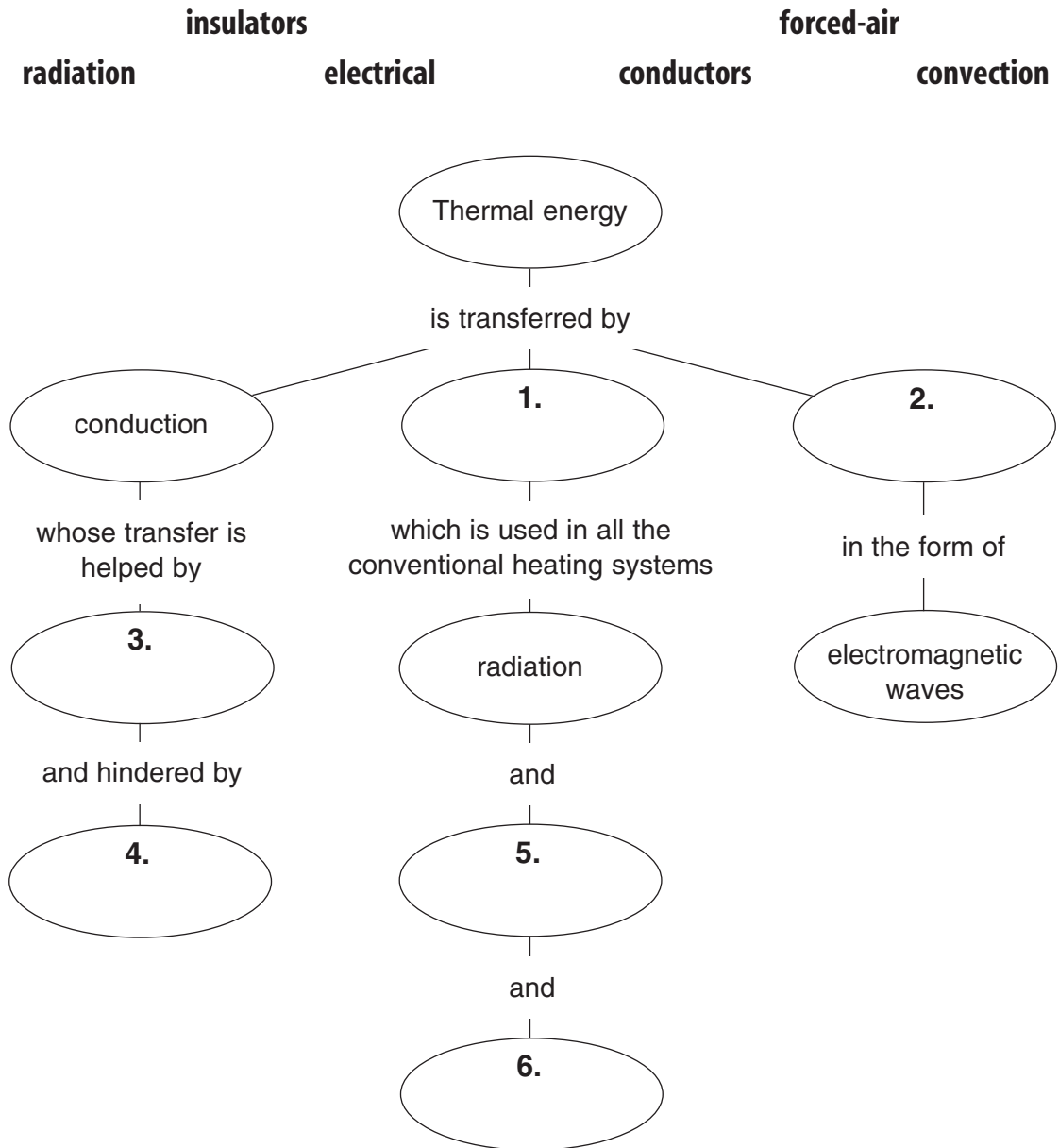


# Overview

## Thermal Energy

**Directions:** Complete the concept map using the terms listed below.





Directed Reading for  
Content Mastery

## Section 1 ■ Temperature and Heat

## Section 2 ■ Transferring Thermal Energy

**Directions:** In each of the following statements, a term has been scrambled. Unscramble the term and write it on the line provided.

- \_\_\_\_\_ 1. If particles move more *llsowy* the object's temperature falls.
- \_\_\_\_\_ 2. Conduction can take place in solids, liquids, and *sages*.
- \_\_\_\_\_ 3. Thermal energy includes both kinetic and *ttnepoail* energy.
- \_\_\_\_\_ 4. Any material that can flow is *lufdi*.
- \_\_\_\_\_ 5. Any material that allows heat to pass through it easily is a *roconcutd*.
- \_\_\_\_\_ 6. Materials with a high specific heat can absorb heat without a large *hngcae* in temperature.
- \_\_\_\_\_ 7. Radiation is the transfer of energy in the form of *vaews*.
- \_\_\_\_\_ 8. When an object increases in temperature it *naigs* thermal energy.
- \_\_\_\_\_ 9. Many conductors, such as silver and copper, are *lemtas*.
- \_\_\_\_\_ 10. Energy that travels by radiation is often called *darinta greeny*.
- \_\_\_\_\_ 11. Insulators, such as wood and air, are poor conductors of *thea*.
- \_\_\_\_\_ 12. The transfer of thermal energy by convection and conduction both require *atterm*.

**Directions:** On the lines provided, explain the differences between **conduction**, **convection**, and **radiation**. Use the information in the exercise above to help you. Write your answers in complete sentences.

13. \_\_\_\_\_  
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