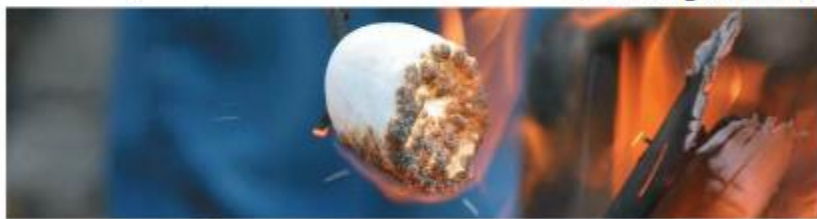


Name:  
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## Section 6.4 Review

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1. What is thermal equilibrium?
2. Which state of matter—solid, liquid, or gas—is the best at conducting heat? Why?
3. Cooking pots are made of metal but often the handle of a cooking pot is made of a type of plastic or rubber. Explain why this design makes sense.
4. A down jacket keeps your body warm mostly by reducing which form of heat transfer?
  - a. conduction
  - b. convection
  - c. thermal radiation
5. What is the advantage of designing a thermos so that it has a vacuum layer surrounding the area where hot liquids are stored?
6. What is the difference between forced and natural convection?
7. Examine the scene below. Explain what types of heat transfer are occurring in the scene and where each is occurring: **Toasting a marshmallow**



8. How does heat from the Sun get to Earth?
  - a. conduction
  - b. convection
  - c. thermal radiation
9. Explain the roles of density and temperature in convection.
10. A sailor on a sailboat depends on the process of convection. Explain why this is so.