

Energy Transfer test review Name _____ Per. _____

1. Explain in detail the difference between heat and temperature. How can ice have heat?
2. Explain in detail the heat transfer processes of convection, radiation and conduction.
3. Describe on a particle level what happens in convection, radiation and conduction. (Pictures might help) Use a particle-level to explain the difference in heat transfers between solids, liquids and gases.
4. Give at least 3 examples each of situations where heat is transferred through convection, radiation and conduction.
5. What causes ice to melt? What is the melting point of ice in Fahrenheit and in Celsius?

6. Explain the difference between a thermal insulator and a thermal conductor.

7. Explain the differences between solids, liquids and gases in terms of behavior and properties.

8. Draw particle models for the 3 states of matter.

9. Relate state of matter to kinetic energy of the particles.

10. Describe your ice melting experiment – what happened and what did you learn from your observations?