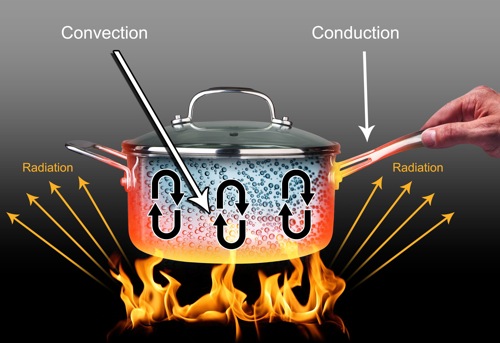
Thermal Energy Worksheet – Answer Key

1. Label the diagram with the following words: Conduction, Convection, and Radiation



Radiation

Radiation

Conduction

Convection

2. Draw an arrow indicating the flow of heat between the two objects:

a) Santa’s hand and cold milk b) bare feet and hot sidewalk c) pan and food

 [](http://upload.wikimedia.org/wikipedia/commons/f/fb/Healthy_feet.JPG) 

3. Circle the correct answer:

During the experiment today, the temperature of the water (increased/decreased) and the temperature of the ice cube (increased/decreased).

The water (gained/lost) heat and the ice cube (gained/lost) heat.

The heat traveled from the (ice cube/water) to the (ice cube/water).

The transfer of thermal energy through objects is (conduction/convection).

The transfer of thermal energy by waves is (conduction/radiation).

The transfer of thermal energy with currents is (convection/radiation).

Warm air and warm water (rises/falls) while cool air and cool water (rises/falls).

Thermal energy always travels from the (hotter/colder) object to the (hotter/colder) object.

The hotter object has (more/less) thermal energy than the colder object.

4. What would the graph of time vs. temperature of the water for the experiment in class today look like?

a) b)

c)