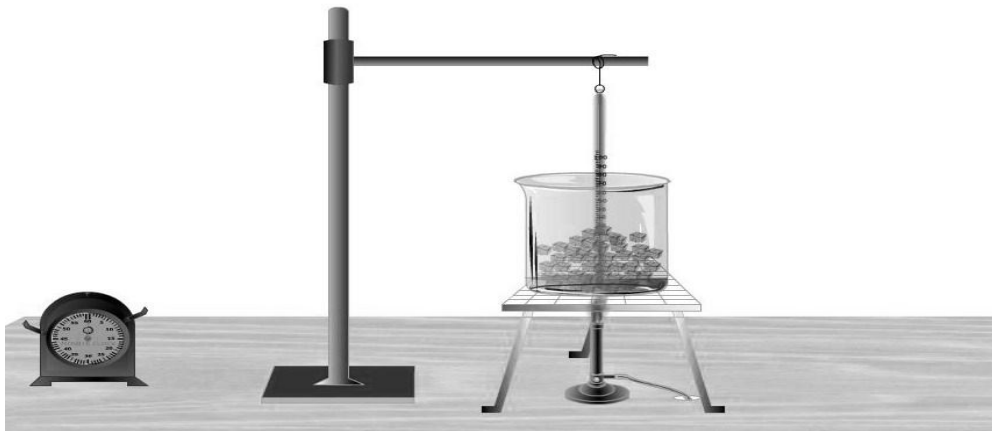


Latent Heat
Student Worksheet



Part1:

In this part you are given a thermometer, heater, ice, beaker and a stop watch.

1. Perform an experiment to measure the temperature of ice as it melts down until it evaporates. Record the temperature and indicate the state of matter every minute throughout the process.

Part 2:

In this part you are given the following devices, try to use them wisely!!

Thermometer, heaters, beaker, water and a piece of coin.

7. If we heated a cup of cold ocean water and the whole ocean water of the north pole so they both reach a specific temperature which of them do you think would absorb more heat energy to reach that temperature?

Simulate the situation with an experiment to answer the question.

8. Why is the cheese in a pizza hotter than its crust even though they are coming out from the same oven? Similarly, why is the sand at the beach hotter than the sea when both are heated by the same sun?

Simulate the situation with an experiment to answer the question.

9. Compare the change in the temperature of a body when heated by different heat sources, for example with a match and an oven. Will the body reach the same temperature when heated by the two different heat sources? Explain.

Simulate the situation with an experiment to answer the question.

After answering the questions (7, 8 & 9) go back to question 6 in part 1 and see if would now answer it differently.

Part 3:

In this part you are given a thermometer, calorimeter and a balance.

10. What are the following instruments used for? What do they measure?

Thermometer:

Calorimeter:

Scale balance:

11. Using the devices above, calculate the latent heat of fusion of ice (Hint: remember to apply the law of conservation of energy).

