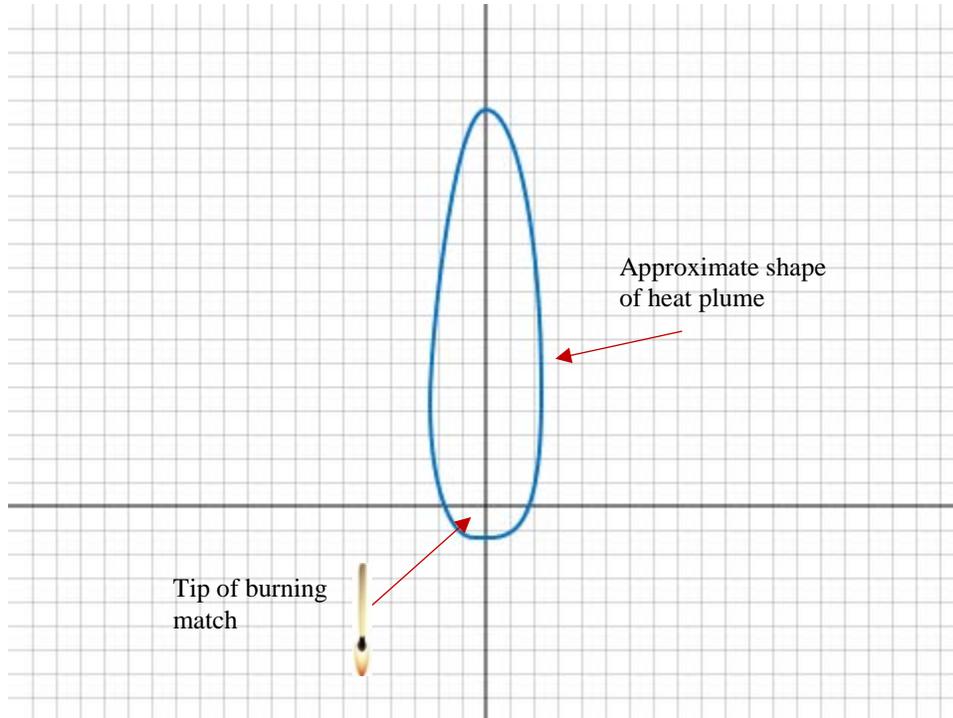


Handout H02-1. Answer Key to Experiment 1. Explain where the heat goes.

4.



5. Underneath your sketch, answer these questions using complete sentences:

- a) **When you burn a match in still air, where does most of the heat go? Use the results of your experiment in your explanation.** Most of the heat goes upwards. Some of it goes down and sideways. Results may look something like this. This graph of the heat plume shows that heat could be felt from 20 cm above, 8 cm from the sides, and only 3 cm from below.
- b) **How would you expect this pattern to change if there is a slight breeze in the air?** The flame and the heat plume are likely to lean in the direction of any air movement. Wind is not likely to make the heat plume lean over very far though, because it will probably extinguish the match first (by blowing the heat away from the fuel).