

Materials:

Sugar	Hotplate
Salt	Disposable Aluminum Pan
Weighing Boats	Notebook, Pen/Pencil (for recording data)
Scoopula	

Safety:

Make sure to wear goggles and do not touch hot plate surface.

Move aluminum pans using potholders or oven mitts.

Procedure:

1. Preheat the aluminum pan to 300 degrees F. On most hot plates, this is the “high” setting.
2. Use the scoopula to pour approximately one tablespoon (17 grams) of salt into one of the disposable aluminum pans.
3. Making sure your scoopula is clean, pour approximately one tablespoon (12 grams) of sugar into the other disposable aluminum pan.
4. Place either pan on top of the pre-heated hot plate (if you have 2 hot-plates, you can do both salt and sugar pans at the same time).
5. Begin timer.
6. Observe the salt/sugar and record the time elapsed if/when it begins to melt.
7. Record the time elapsed if/when the substance has completely melted.
8. Allow at least 1 minute to elapse.
9. Remove pan from the hot plate (and replace with other pan if doing one substance at a time).
10. Turn off hot plate.
11. Clean lab area.

Optional Bunsen Burner Execution:

This lab can be executed with the use of Bunsen Burners instead of hot plates. If using Bunsen Burners, follow proper safety protocols such as pulling hair back and wearing goggles, and ensure that the test tubes being used are either Pyrex or Kimax with no chips or cracks.

Additionally, adjust the Bunsen flame so it is 5 to 7 centimeters high, a cool, blue flame, and make sure you're pointing the test tube away from everyone. When you're ready to start heating the substances, make sure you carefully time how long it takes for the salt or sugar to melt, giving them up to 1 minute each. Be careful not to burn either substance.