

Unit 2 Matter & Energy

Steel Wool Lab

Follow the procedure below and record your data and observations in your lab notebook.

Part 1:

1. Place a piece of steel wool on a paper plate.
2. Measure the total mass of the steel wool and paper plate.
3. Record the total mass as **INITIAL MASS** = _____ grams in your lab notebook.
4. Draw a picture of what steel wool currently looks like.
5. Observe the current color of the steel wool and record it in your notebook.
6. Carefully spread out the fibers of the steel wool to loosen them.
7. Place the steel wool back onto the paper plate and record the mass as **FINAL MASS** = _____ grams.

Critical Thinking Question: How did matter (the steel wool) change and how did it stay the same?

Part 2:

8. Use the final mass from Step 7 as the **INITIAL MASS** for this part of the experiment.
9. Wait for the teacher to help light your Bunsen Burner.
10. Use tongs to hold the steel wool over Bunsen burner flame.
11. Move the steel wool around slowly so that all of it is exposed to the flame.
12. Allow the steel wool to cool, and record observations in your lab notebook.
13. Place the steel wool back onto the paper plate and record the mass as **FINAL MASS** = _____ grams.
14. Record the current color of the steel wool and compare it to the color from Part 1 Step 5.

Critical Thinking Question: How is a physical change different than a chemical change?