

Name \_\_\_\_\_ Teacher \_\_\_\_\_ Date \_\_\_\_\_

## Activity 4.2: Observing Ethanol Burning

Use this worksheet to complete the ethanol burning investigation and to record your observations, measurements, and class results.

**A. Steps in the investigation:** *Check the box as you complete each step.*

1.  Add ethanol to an open glass Petri dish.
2.  Turn on a digital scale so that it reads “0” g. Place the Petri dish with ethanol on the scale. Record the mass of the ethanol and Petri dish in Part C.
3.  Fill another Petri dish with fresh blue BTB. Record the time and color of the BTB in Part C.
4.  Place the Petri dish with BTB next to the Petri dish with ethanol. Be sure the large container fits on top of the two dishes.
5.  Light the ethanol with the lighter. Then, immediately put the large container on top of both the glass Petri dish with burning ethanol and the Petri dish of BTB. Observe: the flame will go out quickly inside the container
6.  After about 20 minutes, remove the container. Observe the color of the BTB. Record this in Part C.
7.  Place the Petri dish with ethanol on the digital scale and record the mass in Part C.

**B. Observations during the investigation:** *Record your macroscopic-scale observations below. Use drawings and/or words.*

**C. Measurements during the investigation:** *Record your measurements in the table.*

<i>Measurements Before</i>	<i>Measurements After</i>
<b>Mass of Petri dish with ethanol before</b>	<b>Mass of Petri dish with ethanol after</b>
Time: _____	Time: _____
Mass: _____ g	Mass: _____ g
	<i>Change in mass:</i> _____ g
<b>Color of BTB before</b>	<b>Color of BTB after</b>
Time: _____	Time: _____
Color of BTB: _____	Color of BTB: _____
	<i>Change in color:</i> _____

**D. Results for the whole class:** *Make notes about how the observations and measurements of other groups compared to yours. Describe patterns in your class data.*

**1. Changes in mass of the Petri dish with ethanol:**

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**2. Changes in color of BTB:**

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