Name: ______________________

Candle Mystery

Pre-lab Questions
1. Do you think that you can shrink a gas? How?

2. When a flame is burning, does it heat up the gas around it and make the gas hot? How do you know?

3. Have you ever seen a hot air balloon in the sky before? Explain how you think the balloon actually gets lifted off of the ground:

Procedure
Your teacher will demonstrate a burning candle inside of a bottle. During the demonstration, write your observations for each scenario in the data table below. The demonstration will be shown more than once, but pay close attention, as it happens quickly!

<table>
<thead>
<tr>
<th>Step/situation</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>The bottle is placed over the candle</td>
<td></td>
</tr>
<tr>
<td>The candle flame goes out</td>
<td></td>
</tr>
</tbody>
</table>

Conclusion
Explain how temperature affected volume of the gas during this demonstration: