Name: ______________________

Global Warming in a Jar

Background
Temperatures around the world are increasing each year and this affects all living things on the planet. During climate change we have witnessed major natural disasters that have been linked to global warming. There are many factors that are causing global warming; for example, the advances in industry and technology are playing a major role.

Problem
Is global warming real?

Materials
- Pen and notebook (to write down your findings)
- Access to books from the library
- iPads/Computers to search online

Procedure
1. Observe as your teacher sets up the demonstration.
2. Write down the “before” temperatures for jar 1 and jar 2 in the data table below.
3. After your teacher starts the clock start your research. Use books and/or the internet to learn more about global warming. Record the information that you find important or interesting in the space provided below. Below are a few topics and questions that might be helpful:
   - What is Global Warming?
   - What is a climate?
   - What kinds of negative effects can global warming have on the planet?
   - What do gases have to do with global warming?
   - What are fossil fuels?
   - Can you explain the Greenhouse Effect?
4. When the time is up, write down the “after” temperature of jar 1 and jar 2.
5. Discuss as a class your findings and your conclusions about the demonstration.

Research Findings
Record important and/or interesting information about Global Warming below:
### Data

<table>
<thead>
<tr>
<th>BEFORE</th>
<th>AFTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAR 1</td>
<td>JAR 1</td>
</tr>
<tr>
<td><img src="image1.png" alt="Image of JAR 1" /></td>
<td><img src="image2.png" alt="Image of JAR 1" /></td>
</tr>
<tr>
<td>Temperature:___________________</td>
<td>Temperature:___________________</td>
</tr>
<tr>
<td>JAR 2</td>
<td>JAR 2</td>
</tr>
<tr>
<td><img src="image3.png" alt="Image of JAR 2" /></td>
<td><img src="image4.png" alt="Image of JAR 2" /></td>
</tr>
<tr>
<td>Temperature:___________________</td>
<td>Temperature:___________________</td>
</tr>
</tbody>
</table>

### Analysis

1. Which jar had the higher temperature? Why did it have a higher temperature?

2. What have you learn about global warming?

3. How did these jars represent the concept of global warming?

4. Is there anything we can do to reduce the impact of global warming?

5. Can you think of a project we can start at our school to help bring awareness to this issue?