The Essentials for Survival

Background
Just as with any job, in order to be a skilled and successful chemist you must not only understand the tools that you have available to you but also, you must be able to use them properly. Today, you will be introduced to these tools, and you will be able to explore both their structure and function.

Once introduced to the equipment, you will decide which piece of equipment you believe would be most beneficial for survival on a desert island. You will present your decision in the form of a CER.

Remember: C= Claim, E= Evidence, R= Reasoning

Pre-lab Questions
1. List every piece of lab equipment that you can think of:

2. Which piece of lab equipment that you listed do you think is most important?

3. Why did you choose this piece of equipment?

Objective
Identify which piece of lab equipment you believe would be the most beneficial to your survival when stranded on a desert island. Support your claim with solid evidence and thoughtful reasoning.

Materials
- Various lab equipment

Safety
- If any glassware is broken, please tell the teacher immediately. Do not attempt to clean it up yourself. Your teacher will place the glassware in the broken glassware container.
Procedure
You will be traveling to each lab station today with your group, but the assignment will be completed on an individual basis. At each lab station you will find a stack of cards. These are descriptions of each piece of equipment. You will also find a sample of each piece of equipment.

1. Your first job is to match the equipment with its description.
2. Your second job is to individually choose which piece of equipment from each station you believe would be most useful for survival if stranded on a desert island.
3. Record your choices in the data table below.
4. Before moving on to the next station, shuffle the description cards and place them in a pile for the next group to use.

Results

<table>
<thead>
<tr>
<th>Lab Station number</th>
<th>Selected Lab Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Choose the item that you believe will be the most useful for survival on a desert island.</td>
</tr>
<tr>
<td></td>
<td>- Record the name and a brief description of the tool you have chosen.</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>
Analysis
1. Select **ONE** piece of lab equipment from all of your choices listed in the table above to take with you if you were stranded on a desert island.

2. What sets this tool apart from the others?

3. Why does it make sense to choose this tool?

Now take your answers to the questions above and turn them into a solid CER.

- C=

- E=

- R=

**Group Analysis**
- Each member of your group will share their CER response created.
- Peer edit each other’s work for both quality of the CER and tool choice.
- After each CER has been read and edited, as a group, decide and select **ONE** of the tools that your entire group would choose to take to the desert island.

**Conclusion**
As a group, write a solid and complete CER to support your decision.
- C=
• E=

• R=

Finally, write your CER on your group’s white board, and prepare to share your CER with the class.

*Remember, in order to be a good group member, you must participate fully and listen when others are presenting and provide meaningful feedback.