Date: 
Title: Emitters of heat - (Theme 4) 
Aim: To investigate how different coloured surfaces emit heat. 
Apparatus: Black can, shiny can, 2 temperature sensors, data logger, 2 stirrers, 2 lids, electric kettle.

Method:
1. Boil some water using the electric kettle. 
2. Pour very quickly the hot water in each can. 
3. Note the temperature of each can every 3 minutes on the data logger.

Results:

<table>
<thead>
<tr>
<th>Time (minutes)</th>
<th>0</th>
<th>3</th>
<th>6</th>
<th>9</th>
<th>12</th>
<th>15</th>
<th>18</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp (°C) Black can</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temp (°C) Shiny can</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Graph: Plot a graph of Temperature (°C) against time (minutes) for each can.

Precautions: List any precautions you have taken.

Conclusion:
1. Which can was cooling faster? How can this be concluded from your results?
2. What does this experiment show about how different coloured surfaces emit heat?