

Tier: _____ Score _____

- Tier 1: Teams with no violations of the rules _____
- Tier 2: Teams with any violations of the rules – **write what the violations were on the back of this page** _____
- Tier 3: Interference by a coach, parent or conversation with another team **DQ** _____

****Predicted Water Temperature: _____ °C

Student signature(s): _____

Keep the Heat B

2012 – San Diego Regional Competition

School _____ Team _____

Students _____ & _____

1. Written Test Score:

_____ Max = 50 pts

2. Plot Score

_____ Max = 10 pts

- _____ Plot labeled with school and student(s) names 2 pts
- _____ Title of plot is appropriate; X and Y axes are labeled 2 pts
- _____ Units and axes increments are appropriate 2 pts
- _____ One point for each data plot on a graph – or # graphs 4 pts max

Device: Set-up time (MAX = 5 min) _____

3. Heat Retention Score

$$\left[\frac{\text{Final Internal beaker water temp } ^\circ\text{C}}{\text{Final External beaker water temp } ^\circ\text{C}} - 1 \right] \times 50 = \underline{\hspace{2cm}}$$

4. Prediction Score

$$1 - \left| \frac{\text{Final Internal beaker water temp } ^\circ\text{C} - \text{Predicted Internal beaker water temp } ^\circ\text{C}}{\text{Final Internal beaker water temp}} \right| \times 25 = \underline{\hspace{2cm}}$$

TOTAL of FOUR scores: _____