Balloon Race – Physical Science Lab

Team Name: _____ Team #: _____

Competitor's Names: 1. _____ Balloon #: _____

2. _____

1. Determine the net upward force of the balloon:
Determine the mass of the supplied weight (5 points) _____

Determine the lifting force of the balloon (5 points) _____
Correct Units (5 points)

2. Determine the Weight-Area Density of the uniform material:
Determine the area of the material (5 Points) _____

Determine the mass of the material (5 Points) _____

Determine the density of the material (5 Points) _____
Correct Units (5 Points)

Run #1

3. Determine the mass you want for a slow rise
(5 points) _____

4. Area needed to achieve this mass
(5 points) _____
Correct Units (5 Points)

5. Hand the mass and the balloon to the Event Supervisor (**DO NOT ATTACH THE MASS TO THE BALLOON**)

Scoring – Run #1

Calculation score _____ ÷ highest Calculation score _____ X 50 = _____

Run #1 time _____ ÷ longest time _____ X 50 = _____

Final Score Run 1: _____

Run #2

3. Determine the mass you want for a slow rise
(5 points) _____

4. Area needed to achieve this mass
(5 points) _____
Correct Units (5 points)

5. Hand the mass and the balloon to the Event Supervisor (**DO NOT ATTACH THE MASS TO THE BALLOON**)

Scoring – Run #2

Calculation score _____ ÷ highest Calculation score _____ X 50 = _____

Run #2 time _____ ÷ longest time _____ X 50 = _____

Final Score Run 2: _____

Final Score: _____ **Rank:** _____