

National Science Olympiad 2009 Junkyard Challenge C – Tipping the Scale

Team Number: C__ Team Name: _____

Student Names: _____ Final Score: _____

Do not write below this line.

Violations

1. Device is not autonomous	Y	N
2. Construction materials is not in an unmodified materials box $\leq 26\text{cm} \times 31\text{cm} \times 45\text{cm}$ with a lid that can be closed completely	Y	N
3. Required material does not significantly contribute to the A.D.	Y	N
4. Mystery material does not significantly contribute to the A.D.	Y	N
5. Unmodified materials do not remain unmodified throughout the competition	Y	N
6. Prohibited materials used	Y	N
7. AD exceeds 13 volts, or uses non commercial batteries	Y	N
8. Power tools are used	Y	N
9. Acid, bases, or flammable liquids are used	Y	N
10. "Warning" label laser used	Y	N
11. AD does not actually measure weight nor mass or student is not able to explain how the reading corresponds to their estimate	Y	N
12. Number of touches	_____	

Others

13. Participation Points Only (ie. Safety spectacles with side shields were not worn)	Y	N
14. Disqualified (notify the team and their coach as soon as possible)	Y	N

AD measurements

Estimated Mass – the mass of the Challenge Object in grams as cited by the students.	15. Mass 1	_____	16. Mass 2	_____
Official Mass – the mass of the Challenge Object in grams as cited by the judges.	17. Mass 1	_____	18. Mass 2	_____
19. Height – Distance in cm between the highest point of the AD and the lowest surface				_____
20. Length – longest horizontal dimension of the AD in centimeters				_____
21. Time – In whole seconds rounded down from start of timing to transfer of estimate				_____