## 2007 Mouse Trap Car Project RUBRIC

Student
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## I. MOUSETRAP CAR CONSTRUCTION AND DESIGN (20 pts possible)

16-20 points: Excellent application of design, construction and assembly.

11-15 points: Very good construction and assembly and very good attention to detail.

6-10 points: Good construction and assembly and some attention to detail.

1-5 points: Fair construction and assembly. Minimal attention to detail.

O points: Last minute project. No attention to detail.

II. MOUSETRAP CAR PERFORMANCE (30 pts possible) Note that significant points are not earned until your car reaches at least <u>5 meters</u>.

30 points: Final displacement is 10 m or greater

28 points: Final displacement is 9 m

26 points: Final displacement is 8 m

24 points: Final displacement is 7 m

22 points: Final displacement is 6 m

20 points: Final displacement is 5 m

10 points: Final displacement is 3 m

O points: Final displacement is less than 3 m

For students building for speed, your car must also travel for at least 3 m to receive any credit for performance, and at least 5 m to be able to race. Winner of the race will receive 35 points, and other students racing will receive points between 20 and 30 depending on placement. (35 for winner, 30 for second, 28, 26 for 3rd etc.)

## III. MOUSETRAP CAR PHYSICS ANALYSIS (45 pts possible)

**42-45 points:** Demonstrates <u>excellent</u> conceptual understanding of the physics principles behind a mousetrap car. Applies this understanding in conducting an excellent, meaningful investigation.

**38-43 points:** Demonstrates <u>good</u> conceptual understanding of the physics principles behind a mousetrap car. Applies this understanding in conducting a good investigation.

**31-37 points:** Demonstrates <u>minimal</u> understanding of physics principles behind a mousetrap car. Conducts a basic investigation.

**20–30 points:** Demonstrates <u>poor</u> conceptual understanding of the physics principles behind a mousetrap car. Does not fully apply this understanding in conducting a meaningful investigation.

NET PROJECT GRADE	