# **SCORECARD: Bottle Rocket Truck (Grades 6-8)**

**+ DIRECTIONS**

Complete the chart below by circling the scores your design received for the criteria and writing the score down in the “Score” column. Calculate your score when testing is completed and decide as a team if you can improve your score.

|  |  |  |
| --- | --- | --- |
| **CRITERIA** | **POINTS** | **SCORE** |
| **3** | **2** | **1** | **0** |
| **COLLABORATION** |  | The design has elements contributed by all team members. | The design has elements contributed by two team members. | The design does not have elements from each team member. |  |
| **CRASH** | The truck did not crash. | The truck grazed the wall. | The truck hit the wall. | The truck hit the wall, and pieces came off. |  |
| **DISTANCE** | The truck traveled exactly 2.5 meters. | The truck traveled between 2.0 and 2.49 meters or 2.51 and 3.0 meters. | The truck traveled between 1.0 and 1.9 meters or 3.1 and 4.0 meters. | The truck traveled less than 1.0 meter or more than 4 meters. |  |
| **SELF-PROPULSION** | The truck did not receive any assistance after removing the thumb tack. | The truck required assistance to make minor adjustments after removing the thumb tack, i.e., re-align axles. | The truck required outside assistance to begin the initial movement after removing the thumb tack. | The truck did not have a self-propulsion mechanism. |  |
| **BUDGET USED** | $350 or less. | $351 – $399. | $400 – $500. | $501 or more. |  |
| **BONUS: PAYLOAD 1 (50mL)** | The truck traveled exactly 2.5 meters. | The truck traveled between 2.0 and 2.49 meters or 2.51 and 3.0 meters. | The truck traveled between 1.0 and 1.9 meters or 3.1 and 4.0 meters. | The truck traveled less than 1.0 meter or more than 4 meters. |  |
| **BONUS: PAYLOAD 1 (100mL)** | The truck traveled exactly 2.5 meters. | The truck traveled between 2.0 and 2.49 meters or 2.51 and 3.0 meters. | The truck traveled between 1.0 and 1.9 meters or 3.1 and 4.0 meters. | The truck traveled less than 1.0 meter or more than 4 meters. |  |
| **BONUS: PAYLOAD 1 (150mL)** | The truck traveled exactly 2.5 meters. | The truck traveled between 2.0 and 2.49 meters or 2.51 and 3.0 meters. | The truck traveled between 1.0 and 1.9 meters or 3.1 and 4.0 meters. | The truck traveled less than 1.0 meter or more than 4 meters. |  |
|  |  | **TOTAL SCORE** |  |