**Short Essay: Can a Cardboard Car Travel as Fast as the Fastest Human?**

**Synopsis:**

The class record velocity for a cardboard car was 6.1m/s. Mr. Stapleton wants to create a cardboard rubber band car that will travel as fast as the fastest human – 12.4m/s. If there were no size or force restrictions, would this be realistically feasible? Write a short essay in which you analyze the “drivers and barriers” relating to the creation of such a car and make a reasoned prediction about whether or not such a car is realistically feasible. “Drivers” include design characteristics that might be able to help the car achieve this velocity. An obvious example of a driver would be the incorporation of an extremely strong rubber band force. “Barriers” are issues that will make it difficult for the car to achieve this velocity. An obvious example of a barrier is the potential for the wheels to spin out.

**Checklist:**

* Identify and describe multiple “drivers” that might help a car reach 12.4m/s.
* Identify and describe multiple “barriers” that will make it difficult for a car to reach 12.4m/s.
* Predict whether or not Mr. Stapleton’s car will achieve a 12.4m/s velocity.
* Support your prediction with logical reasoning.

**Grading:** Determined based on the checklist above.

**Feedback**: Feedback will be given using the school writing rubric.