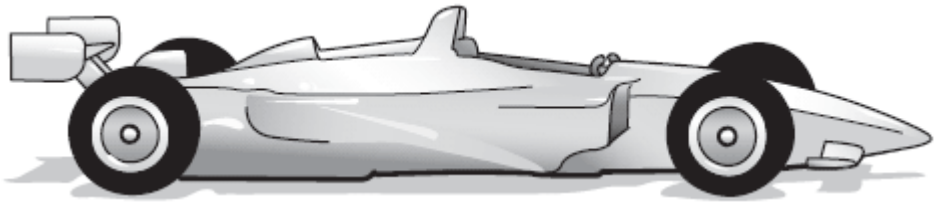
Name: _____ Section: _____ Date: _____

OPEN RESPONSE
Drag, Thrust, and Gravity

- 2007 Spring Release, Science and Technology/Engineering - Grade 8; Question 39: Open-Response; Reporting Category: Technology/Engineering
- Engineering Standard: 6.4 - Identify and explain lift, drag, friction, thrust, and gravity in a vehicle or device, e.g., cars, boats, airplanes, rockets.

The diagram below shows a Formula 1 racing car. Many forces act together on the racing car so it can move safely at high speeds on a racetrack.



a. Copy the simple diagram of a racing car shown below into your Student Answer Booklet.

b. Using your copy of the diagram, draw arrows to show how the forces of thrust, drag, and gravity act on the racing car as it moves forward on a racetrack. Label each arrow as thrust, drag, or gravity.

c. Describe how each force that you labeled in part (b) acts on the racing car as it moves on a racetrack

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OPEN RESPONSE CHECKLIST:

_____ I read the questions twice (at least)

_____ If there is an A, B, C, etc. type question, then I wrote A, B, C in my answer and started each section on a new line.

_____ I re-phrased the question in each of my answers.

_____ I used correct and scientific vocabulary in each section and DEFINED the word. List the scientific vocabulary words you used in the space below:

_____

_____

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_____ I re-read the question again to make sure I answered all parts of the question. (Hint: Look for the word **"and"** in the question. That usually means there is a second part)

_____ I re-read my response to make sure it sounds like it is written in the English language. There are no confusing phrases or parts.

_____ I re-read my response to make sure that my handwriting is legible. I erased and corrected any parts that were difficult to read.