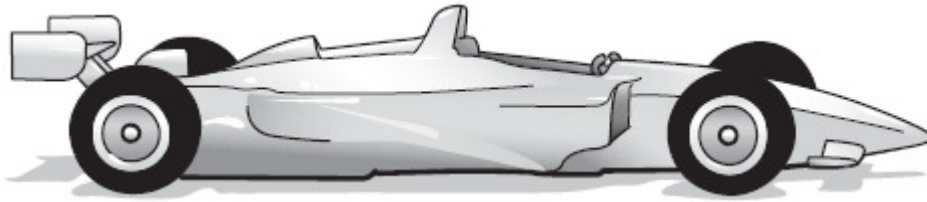


The diagram below shows a Formula 1 racing car. Many forces act together on the racing car so it can move safely at high speeds on a racetrack.

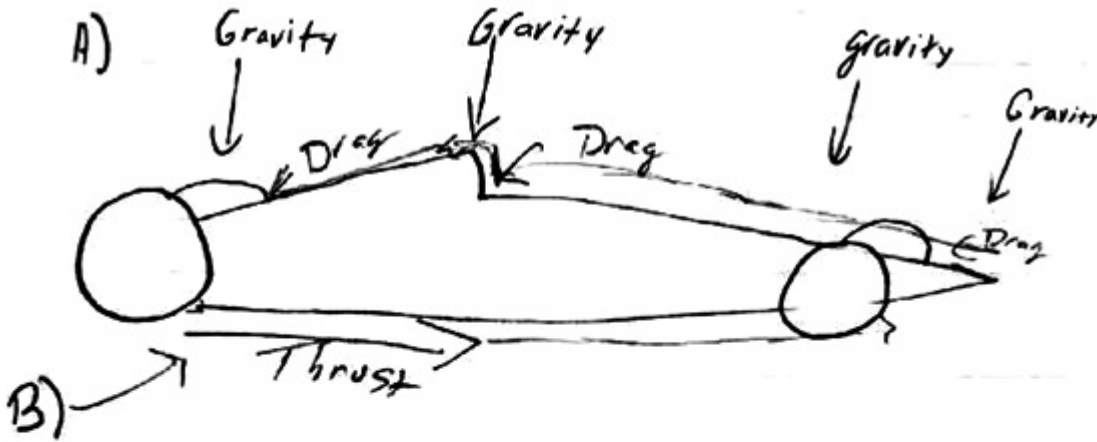


- a. Copy the simple diagram of a racing car shown below into your Student Answer Booklet.



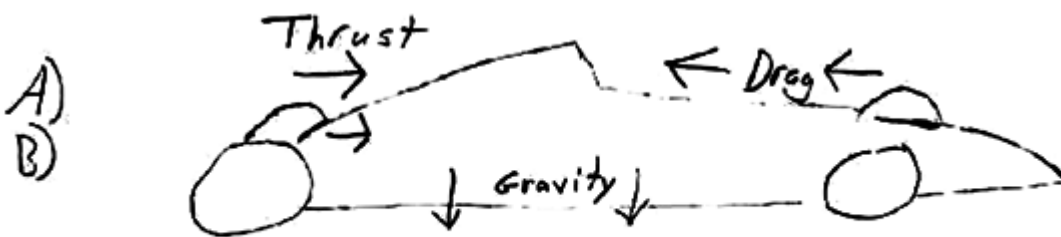
- b. Using your copy of the diagram, draw arrows to show how the forces of thrust, drag, and gravity act on the racing car as it moves forward on a racetrack. Label each arrow as thrust, drag, or gravity.
- c. Describe how **each** force that you labeled in part (b) acts on the racing car as it moves on a racetrack.

Scoring Guide - Score Point 4



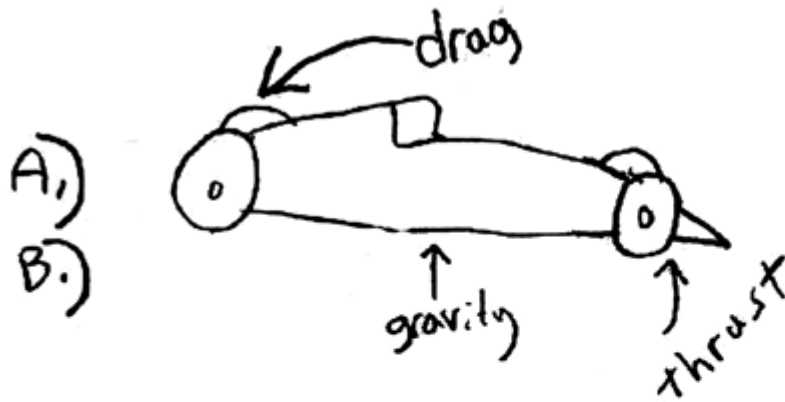
C) As The Racecar moves around The race track, The force of Thrust Moves The car forward at a certain Speed. The force of drag Slows The Car down, because it Is hitting The car in spots That are Not As Aerodynamic As they Could be And holding it back and gravity is keeping The Car on the Track So it doesn't fly Away into Space.

Scoring Guide - Score Point 4



C) Gravity pulls the car down. Drag acts a force pushing the opposite way the car is moving. The thrust propels the car forward on the race track

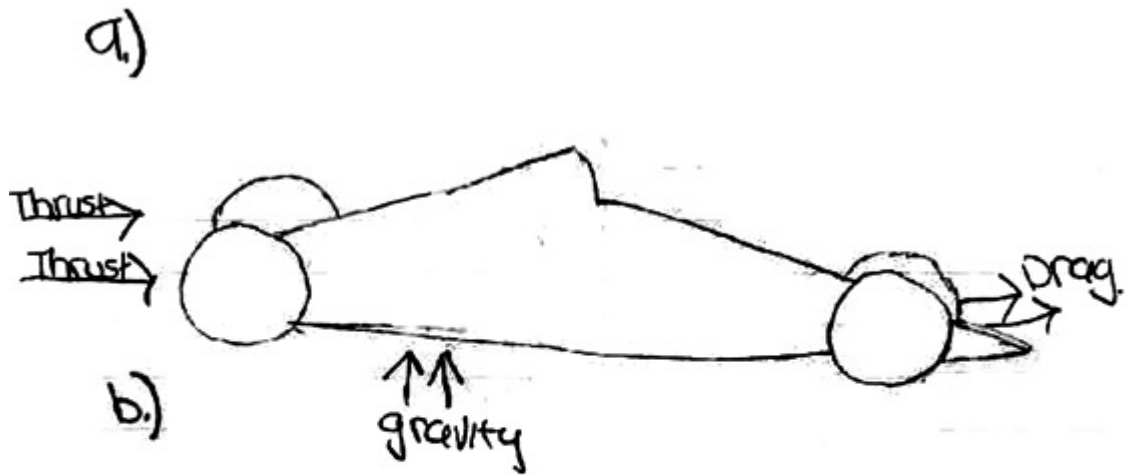
Scoring Guide - Score Point 3



A.)
B.)

C.) gravity holds the car down, and thrust moves the car forward, the drag is back which slows the car down a little depending on aerodynamics of the vehical.

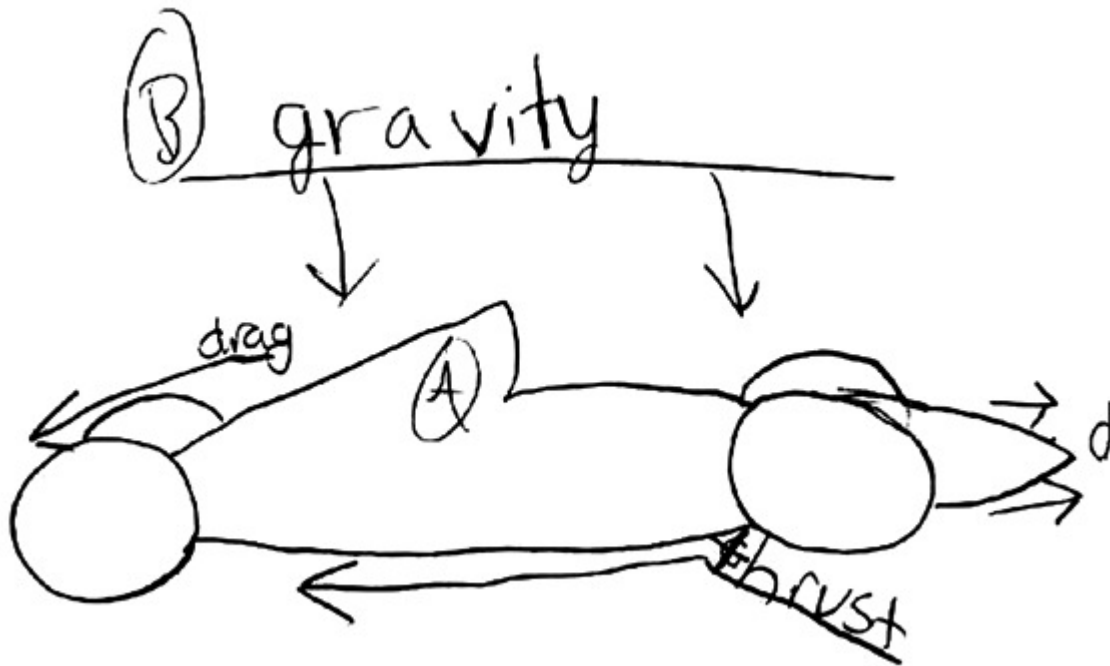
Scoring Guide - Score Point 2



a.)
b.)

C. Thrust makes it go forward. gravity keeps it to the ground and drag makes it keep going fast

Scoring Guide - Score Point 1



Scoring Guide - Score Point 0



A) I drew arrows on the tires because the tires are round so that tires roll. The more friction you have the faster you car will go.

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