

CER: When driving in a sedan, what is the difference between colliding with an SUV versus a motorcycle?

GRAPHIC ORGANIZER

## Introduction (Paragraph 1):

What is the guiding/problem question? **When driving in a self driving car, is it better to collide with an SUV or a motorcycle?**

List scientific terms/vocabulary that can be used in your explanation.

**Inertia**

**Friction**

**Velocity**

**Newton's laws**

**Force**

**Mass**

**Acceleration**

**Claim (End of Paragraph 1):**

State the best explanation

## Evidence #1 (Paragraph 2): Newton's 1st Law or Inertia

Describe an activity, video, or discussion from class that supports your claim.

Safety car race

Spring scale box and cart

tablecloth

scooter

Identify what about the activity, video, or discussion supports the claim.

## Evidence #2 (Paragraph 3): Newton's Second Law

Describe an activity, video, or discussion from class that supports your claim.

$F=ma$

Scooters

Force, mass, and acceleration lab

Identify what about the activity, video, or discussion supports the claim.

## Evidence #3 (Paragraph 4): Newton's 3rd Law

Describe an activity, video, or discussion from class that supports your claim.

Khan academy reading  
scooters

Identify what about the activity, video, or discussion supports the claim.

## **Reasoning (Paragraph 5):**

Tie together your claim and the evidence you identified. This is the how or why your evidence supports your claim.

Give an everyday example of how this ***Scientific Principle*** applies to your life and how this ties back to our overall question.