## Hybrid Vehicles (2015-16)

Name \_\_\_\_\_

**Directions:** Go to the website (<u>www.fueleconomy.gov</u>) and look for 2015-16 hybrid vehicles.

## Vehicles:

Chevrolet Spark Ford C-Max Ford Fusion Ford Focus Volkswagen Jetta Kia Optima Hyundai Sonata Toyota Avalon Toyota Camry Acura RLX

Capture the following information for each hybrid and its closest gasoline counterpart. Remember, one barrel = 42 gallons of gasoline, and 1 gallon of gas produces 20 pounds of  $CO_2$  emissions.

Vehicle	#1:			(hybrid) Price: \$			
EPA	EPA	EPA	Annual	Annual Petroleum	Annual Tons of		
City	Hwy	Comb.	Fuel Cost	Consumption (Bar.)	CO <sub>2</sub> Emitted		
Vehicle #1:				(hybrid) Price: \$			
EPA	EPA	EPA	Annual	Annual Petroleum	Annual Tons of		
City	Hwy	Comb.	Fuel Cost	Consumption (Bar.)	CO <sub>2</sub> Emitted		
Vehicle #2:				(hybrid) Price: \$			
EPA	EPA	EPA	Annual	Annual Petroleum	Annual Tons of		
City	Hwy	Comb.	Fuel Cost	Consumption (Bar.)	CO <sub>2</sub> Emitted		

Vehicle	#2:		(hybrid) Price: \$			
EPA	EPA	EPA	Annual	Annual Petroleum	Annual Tons of	
City	Hwy	Comb.	Fuel Cost	Consumption (Bar.)	CO <sub>2</sub> Emitted	
Vehicle #3:				(hybrid) Price: \$		
EPA	EPA	EPA	Annual	Annual Petroleum	Annual Tons of	
City	Hwy	Comb.	Fuel Cost	Consumption (Bar.)	CO <sub>2</sub> Emitted	
Vehicle #3:				(hybrid) Price: \$		
EPA	EPA	EPA	Annual	Annual Petroleum	Annual Tons of	
City	Hwy	Comb.	Fuel Cost	Consumption (Bar.)	CO <sub>2</sub> Emitted	

## **Analysis and Conclusion**

1. Which of your three vehicles had the best overall mileage, which had the worst?

2. Which of your hybrid vehicles had the best overall mileage?

3. Which of your gasoline vehicles had the best overall mileage?

4. Compare the price of the hybrid with the best overall mileage with its gasoline counterpart. Is their an extra cost for the hybrid? Is the extra cost justified? Explain why or why not.

5. Which of your three vehicles had the lowest amount of CO<sub>2</sub> being emitted? Did you notice any difference between hybrids and gasoline vehicles in regards to their emissions? Why the difference? Explain.

6. Are their any hybrids that you investigated that don't seem to be "worth" the car manufacturers' time and expense (i.e. not enough mileage improvement)? Explain why.

7. Why might that car manufacturer still produce that vehicle? Explain.

8. In 2008, there where 7 cars, 4 trucks, and 10 suvs that were Hybrids. Today there are 9 cars and 1 suv, Why? What ha changed since 2008? Is this a sustainable trend?

9. How many electric vehicles did you see when researching? In 2008 there was only 1 electric car, do you believe this to be a trend? Why? What is a drawback to an all electric vehicle?