## Hybrid Vehicles (2015-16)

Name $\qquad$
Directions: Go to the website (www.fueleconomy.gov) 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 $\mathrm{CO}_{2}$ emissions.

Vehicle \#1: $\qquad$ (hybrid) Price: \$
EPA EPA EPA Annual Annual Petroleum Annual Tons of
City Hwy Comb. Fuel Cost Consumption (Bar.) $\mathrm{CO}_{2}$ Emitted

Vehicle \#1: $\qquad$ (hybrid) Price: \$

| EPA | EPA | EPA | Annual | Annual Petroleum | Annual Tons of |
| :--- | :--- | :---: | :---: | :---: | :---: |
| City | Hwy | Comb. | Fuel Cost | Consumption (Bar.) | $\mathrm{CO}_{2}$ Emitted |

Vehicle \#2: $\qquad$ (hybrid) Price: \$
EPA EPA EPA Annual Annual Petroleum Annual Tons of

City Hwy Comb. Fuel Cost Consumption (Bar.) $\mathrm{CO}_{2}$ Emitted

Vehicle \#2: $\qquad$ (hybrid) Price: \$

| EPA | EPA | EPA | Annual | Annual Petroleum | Annual Tons of |
| :--- | :--- | :---: | :---: | :---: | :---: |
| City | Hwy | Comb. | Fuel Cost | Consumption (Bar.) | $\mathrm{CO}_{2}$ Emitted |

Vehicle \#3: $\qquad$ (hybrid) Price: \$
EPA EPA EPA Annual Annual Petroleum Annual Tons of
City Hwy Comb. Fuel Cost Consumption (Bar.) $\mathrm{CO}_{2}$ Emitted

Vehicle \#3: $\qquad$ (hybrid) Price: \$
EPA EPA EPA Annual Annual Petroleum Annual Tons of City Hwy Comb. Fuel Cost Consumption (Bar.) $\mathrm{CO}_{2}$ 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 $\mathrm{CO}_{2}$ 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?
