

## Lesson 6: Steps to Improving Air Quality



Name: \_\_\_\_\_

Period: \_\_\_\_\_

**Oklahoma Department of Environmental Quality**

Date: \_\_\_\_\_



Poor air quality costs money in terms of healthcare and the number of days lost at work. Therefore, government agencies, energy and gas companies, car manufacturing facilities, and many other organizations are taking greater measures to address the issue.

The production and use of Energy Star appliances, electronics, building products, heating and cooling systems, and water heaters is on the rise and many states offer tax incentives for the purchase of such products. Also, hybrid and alternative fuel vehicles are making a greater appearance in the public sector and more auto companies are offering vehicle retrofitting from petroleum to alternative fuel sources such as natural gas, propane, or clean diesel.

Using the U.S. Department of Energy's fuel economy and alternative fuels data web sites, <http://www.fueleconomy.gov/feg/current.shtml>, <http://www.fueleconomy.gov/feg/hybridtech.shtml>, <http://www.afdc.energy.gov/fuels/index.html>, <http://www.afdc.energy.gov/fuels/electricity.html> and other approved sources, conduct independent or group research on the alternative fuel vehicles pictured below.

- a. In the table provided, give a brief description about each of the alternative fuel types
- b. List four advantages and four disadvantages associated with the use of each fuel type
- c. Review the advantages and disadvantages listed for each alternative fuel type and write a page detailing which type you believe to be the most practical. Use details recorded in the table and *additional research* to support your conclusion.

### Alternative Fuel Vehicles

Fuel Type & Description	Advantages	Disadvantages
 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> <p>Ethanol-Powered Vehicles</p> </div>		

**BIODIESEL**

Biodiesel  
Vehicles



Compressed  
Natural Gas  
Vehicles



**PROPANE**

Propane-  
Powered  
Vehicles





Hydrogen-  
Powered  
Vehicles



Hybrid Electric Vehicles

