Exploring Energy Conversions with Alternative Vehicles

Name_____

Phenomenon: Watch the phenomenon of the solar car running. Ask three questions about what you see.

1.

2.

3.

Day 1

Take a tour of Utah's alternative fueling stations at this website.

Then answer the following questions from the website.

Where is the closest fueling station to your home?_____

How many fuel or charging stations are in Utah in the following categories?

Biodiesel _____

Hydrogen _____

Compressed Natural Gas_____

Liquefied Natural Gas Electric ___

Ethanol _____

Here are some more optional websites to discover more about alternative fuels and fuel efficiency in Utah and beyond.

Utah Office of Energy Development

Utah Transit Authority, Trip Planner

Utah Department of Transportation, TRAVELWiseTM

U.S. Department of Energy, Alternative Fuels Data Center

U.S. Department of Energy, Fuel and Emissions Calculators

Cost analysis

Pick three types of cars to research from this list: Gas, diesel, electric, hybrid, natural gas, propane, and Hydrogen

Criteria

The energy source for car	Cost of car	Repair Costs	Cost of fuel	Seating space, durability, acceleration	Fuel availability

Day 2 Research the potential environmental effects of each of the cars you picked. Remember to look at the raw materials it would take to produce that car.

Criteria	Environmental impact

Summary:

Make a **claim** concerning the automobile you think is most practical under current conditions.

What **evidence** for this research supports your claim?

What **reasoning** did you use?