**ALTERNATIVE ENERGY ADVERTISEMENT CAMPAIGN**

**INTRODUCTION**

Attention students! Our country needs your help in this national crisis. In accordance with current events, fossil fuels and nuclear energy sources pose many threats to the long-term environmental and economic well-being of our nation and country. Your generation is at great risk from this energy crisis that affects all of our lives. As future leaders of tomorrow our country needs your help in developing a long-term solution to this energy crisis. What forms of energy could our nation utilize so that we are not dependent on foreign resources? We need your attention to this matter immediately. Our country's future is depending on you!!

**TASK**

You are to investigate an alternative source of energy. You will have to research, make inferences, evaluate, and determine benefits and drawbacks of your assigned alternative energy source. You will then develop a commercial that explains how the energy is derived and utilized, advertises the benefits of the energy source, and discusses the negative costs associated with the energy. Since you are tasked with designing a commercial, you must communicate this information in a convincing manner that is suitable for your target audience (e.g., the general public).

**RESEARCH**

To become an expert in your field of alternative energy, you must gather information. Begin by using the given resources to choose your area of expertise. Be sure to answer the questions given, but do not limit your knowledge to them. Take good notes, and be prepared to defend your resource! (Note: You may be asked some of the following questions during your presentation.)

1. How is your resource used to generate power?

2. What is the history of your energy resource?

3. Where is it being used right now?

4. What are the positive benefits?

5. What are the negative consequences?

6. How efficient would this resource be compaired to fossil fuels?

7. Where would be the ideal location in the United States to set up your company?

8. Is this energy source available in your community?

9. Is it available in your state?

10. What is the cost of this energy source? Daily, yearly? Individual? Home? State? (ESTIMATE THESE NUMBERS IF NEEDED)   
11. How is this source provided to consumers?

12. How does it enter the house? The schools? How does it work?

13. How would it effect transportation?

14. Does it contribute to any form of pollution? land? water? air? noise? or does it help fix pollution?

15. Will it be easy to assimilate into our lives?

16. Can it work well with other forms of energy?

17. What is the source? What is the form? How does it interact with other forms of energy?--------Example: sun--> solar energy--> solar panels--> electrical energy

[Click Here for Resources](http://www.mms.isd194.k12.mn.us/~lynx/EnergyWebQuest/Resources.htm)

**Hydro electric resources**

* [EIA Kids Hydro-Electric Facts](http://www.eia.doe.gov/kids/energyfacts/sources/renewable/water.html)
* [TVA Kids Ocean Tide Facts](http://www.eia.doe.gov/kids/energyfacts/sources/renewable/ocean.html)
* [Hydro-Electric Power](http://www.nrel.gov/learning/re_hydropower.html)
* [Hydro Power Explained](http://www.tvakids.com/electricity/hydro.htm)
* [Clara.net Hydro Power](http://home.clara.net/darvill/altenerg/hydro.htm)
* [Other-Power Website on Water Wheels](http://www.otherpower.com/otherpower_hydro.html)
* [Energyquest](http://www.energyquest.ca.gov/story/chapter14.html)
* [Advantages and Disadvantages](http://www1.eere.energy.gov/windandhydro/hydro_ad.html)

Biomass resources

* [Clara.net Biomass](http://home.clara.net/darvill/altenerg/biomass.htm)
* [Energyquest](http://www.energyquest.ca.gov/story/chapter10.html)
* [EIA Kids Page on Biomass](http://www.eia.doe.gov/kids/energyfacts/sources/renewable/biomass.html)
* [The State of California and Biomass](http://www.re-energy.ca/t_biomassenergy.shtml)
* [The National Research of Energy Laboratory](http://www.nrel.gov/learning/re_biomass.html)
* [Dr. E's Laboratory](http://www.eere.energy.gov/RE/biomass.html)
* [Advantages/Disadvantages](http://library.thinkquest.org/20331/types/biomass/advant.html)
* Government and Economics  
    
  Solar Resources
* [Clara.net Solar](http://home.clara.net/darvill/altenerg/solar.htm#how)
* [Energyquest](http://www.energyquest.ca.gov/story/chapter15.html)
* [Solar Panels and your Home](http://www.mrsolar.com/)
* [Solar Panels](http://www.solarenergy.com/)
* [EIA Kids Page on Solar Energy](http://www.eia.doe.gov/kids/energyfacts/sources/renewable/solar.html)
* [Dr. E's Laboratory](http://www.eere.energy.gov/education/lessonplans/topic.cfm/topic_id=9)
* [Advantages/Disadvantages](http://library.thinkquest.org/20331/types/solar/advant.html)
* [Government and Economics](http://www.repp.org/geothermal/index.html)

Nuclear

* [Clara.net](http://home.clara.net/darvill/altenerg/nuclear.htm)
* [Energyquest](http://www.energyquest.ca.gov/story/chapter13.html)
* [EIA Kids Page on Nuclear Energy](http://www.eia.doe.gov/kids/energyfacts/sources/non-renewable/nuclear.html)
* [Where is Nuclear Power](http://www.umich.edu/~gs265/society/nuclear.htm)
* [HowStuff Works Nuclear Power](http://www.howstuffworks.com/nuclear-power.htm)
* [Nuclear Power in Minnesota](http://www.nei.org/resourcesandstats/documentlibrary/reliableandaffordableenergy/factsheet/statefactsminnesota/)
* [Nuclear Power Kids Zone](http://www.aecl.ca/kidszone/atomicenergy/nuclear/puzzle.asp)  
    
  Wind Energy Resources
* [Energyquest](http://www.energyquest.ca.gov/story/chapter16.html)
* [Wind Energy Utah](http://www.cc.utah.edu/~ptt25660/wind.html)
* [EIA Kids Page on Wind Energy](http://www.eia.doe.gov/kids/energyfacts/sources/renewable/wind.html)
* [Dr.E's Laboratory](http://www.eere.energy.gov/kids/wind.html)
* [Advantages/Disadvantages](http://library.thinkquest.org/20331/types/wind/advant.html)
* [Government and Economics](http://www.repp.org/geothermal/index.html)

Geothermal

* [Clara.net](http://home.clara.net/darvill/altenerg/wind.htm)
* [Slideshow of Geothermal](http://www.geothermal.marin.org/GEOpresentation/sld035.htm)
* [Clara.net Geothermal](http://home.clara.net/darvill/altenerg/geothermal.htm)
* [Geothermal Energy Explained](http://library.thinkquest.org/20331/types/geotherm/theory.html)
* [Geothermal Facts and Information](http://www.nrel.gov/learning/re_geothermal.html)
* [Maps, slideshows, etc on Geothermal Energy](http://geothermal.marin.org/)
* [Geothermal Resources, National Parks Page](http://www.nps.gov/yell/naturescience/geothermal.htm)
* [Energyquest](http://www.energyquest.ca.gov/story/chapter11.html)
* [Advantages /Disadvantages](http://library.thinkquest.org/20331/types/geotherm/advant.html)
* [Government and Economics](http://www.repp.org/geothermal/index.html)

Ethanol

Biodiesel

Recycled used oil

Fuel Cells

Hydrogen

Fusion

**ADVERTISEMENT**

Promote your alternative energy source in a way that is informative, convincing, and memorable. You may display your commercial in any way that you feel is most engaging (e.g., live performance, video, Prezi). Your commercial must effectively communicate the processes involved in utilizing the energy source as well as all costs and benefits associated with the energy.

Presentations must last a minimum of five minutes and not exceed 10 minutes. Present your advertisement in a formal, business professional method.

You will be competing with other people to sell your energy. Remember, if yours is chosen, you will become rich and famous (and receive some bonus points.)

**RUBRIC**

The project will be at total of 50 points.

RESEARCH (20 points)

* Topic chosen
* Webquest completed and shown to teacher
* Plan of how you will “sell” your energy source
* On-task abilities, quality behavior
* Gather additional information for presentation
* Finished advertisement presented to teacher
* Design of presentation delivered to teacher

PRESENTATION PREP (10 points)

* Presentation is completed
* Props, materials brought to class
* Scripts/research all gathered and organized
* On-task abilities, quality behavior

PRESENTATIONS (20 points)

* Presentation is a minimum of 5 minutes
* Advertisement, materials, all questions answered
* Information communicated in a creative, informative, convincing way.
* Format of commercial appropriately engages target audience.