**Task**

In this WebQuest, you will be researching **alternative methods of generating energy** used for electricity and heating in your home. You will also research **methods to conserve and reduce the use of water, heat and electricity** in your home. Once you have completed your research, you will write several paragraphs that will explain your findings and label a blueprint for your home. The blueprint should label energy-saving techniques used in each room of the home.

At the end of the project, you will share your paragraphs and blueprint with the class.

**Process**

Use the resources listed below to learn about the latest techniques and ideas for energy conservation and energy efficiency.

[www.eia.doe.gov/kids](http://www.eia.doe.gov/kids)

[www.energystar.gov/](http://www.energystar.gov/)

[www.howstuffworks.com](http://www.howstuffworks.com)

[www.tvakids.com/electricity/conservation.htm](http://www.tvakids.com/electricity/conservation.htm)

www.energy.gov

Your research will be used to **label your blueprint of your home** and **write the following paragraphs** (at least 5 sentences):

Paragraph 1: Alternative Methods for Generating Electricity

* What energy resource would be best for generating electricity for your home? Defend your choice using research you found. Please cite the websites you used.

Paragraph 2: Alternative Methods for Heating the Home and Water

* What energy resource would be best for heating the home? The water in the home? Defend your choice using the research you found. Please cite the websites you used.

Paragraph 3: Conserving Water

* What are some ways your home will conserve water? Include techniques and/or special equipment that is needed.

Paragraph 4: Conserving Heat

* What are some ways your home will conserve heat? Include techniques and/or special equipment that is needed.

Paragraph 5: Conserving Electricity

* What are some ways your home will conserve electricity? Include techniques and/or special equipment that is needed.

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| **Grading Criteria** | **4-5** | **6-7** | **8-9** | **10** | **Points** |
| **Research** | The project was not completed. Research was not evident. | It appears that some effort was made to complete the project, but ideas are missing and research is weak. | The project was completed, but some information was incorrect and more research was needed. | The project was completed with great attention to detail and thorough research. |  |
| **Essay** | The essay was not complete. | The essay was complete, but some of the questions were not addressed. | The essay was thorough, but some ideas need additional supporting information. | It is clear that much research went into the essay. The results show a high degree of creativity supported by research. |  |
| **Blueprint** | The blueprint was sloppy and not well prepared. | The blueprint included key ideas but lacked information. | The blueprint shows a real attempt to include necessary information. | Blueprint is visually engaging; ideas are clearly labeled. |  |
| **Presentation** |  | The presentation was incomplete. | The presentation was complete and some preparation was apparent. | The presentation was complete and clearly expressed with detail. Preparation and practice were clearly shown. |  |
| **Participation** |  | You did not participate much or at all with the project. | Your participation was acceptable but you got side-tracked or distracted at times. | Your participation was full on and you did a great job with the project. |  |