
Names

Energy Sources Project

Each small group of students will be responsible for researching an energy source that they pick from a hat. They will do a class presentation, build a physical model, and participate in a debate with another energy source. The energy sources include: Biomass, Coal, Geothermal, Hydropower, Natural Gas, Nuclear, Petroleum, Propane, Solar, and Wind.

● **Presentation with Visual** (PowerPoint, Prezi, Google Slides) **5– 7 minutes**

20 pts

History & Politics

Physics (as well as applicable Chemistry, Biology, Geology, etc.) of your Energy Source

Production & Use of Your Energy Source (including maps and/or charts)

- Southern California Production & Use
- National Production & Use
- Global Production & Use
- Imported/Exported
- Electricity Use (How? Why or why not?)

Answer the following topics:

- (1) Why is your energy source an effective fuel?
- (2) How does the use of your energy source effect the environment/earth's climate?
- (3) What is the fuel mass to energy output? (not applicable to geothermal, hydropower, solar, wind)
- (4) Explain the physics used to convert your energy source into electricity. (as applicable)
- (5) What are the shortcomings of your source? What are possible solutions to these concerns? How difficult or easy are these to achieve?

- A Question & Answer time will follow the presentation. Q & A time is not included in the 5 – 7 minutes.
- Presentation Format:
 - No more than 36 words per slide
 - At least one picture / diagram / graph per slide
 - No less than 34 size font
- Share all presentations with me at natefulmer@lcfef.org via **your student Google Drive**. Details provided in class.

Public Speaking Notes:

- Do not *read* from note cards or the power point
- Keep eyes upward on the audience
- Speak slowly and clearly
- Be mindful of time remaining
- Practice your presentation
- Be deliberate about your speech
- Maintain a formal tone
- Avoid using “Ummm” and “So yeah”
- Face the class, not the screen

