

Energy Sources Project

Each small group of students will be responsible for researching and presenting on an energy source that they pick from a hat. The energy sources include: *Biomass, Coal, Geothermal, Hydropower, Natural Gas, Nuclear, Petroleum, Propane, Solar, and Wind.*

I. Presentation

A. Power Point, Google Slides, or Prezi

1. Clean, well-constructed, and well-organized
2. Maximize readability
3. No more than 40 words per slide
4. At least 90% of slides must contain at least one picture, diagram, or graph
 - a) If you include a diagram or graph, be prepared to explain it
5. Slides that are overly wordy, hard to read, or contain typos or errors cannot receive full credit
 - a) These are bullet points, *not a script!*
6. Share presentations with natefulmer@lcfef.org via **your student Google Drive or email.**
7. The last slide will be used for the bibliography (see section “C” at the end of handout for details). Presentations without a bibliography will earn exactly *zero* points. Points will be deducted for incomplete bibliographies.

B. Content

1. History & Politics
 - a) Politics doesn't only refer to political controversy but also includes any relevant laws, acts, or organizations governing the production, use, and/or distribution of your energy source.
2. Science
 - a) Relevant physics, chemistry, biology, geology, etc.
 - b) What *is* your energy source?
 - c) Explain the physics used to convert your energy source into (typically) electrical energy
 - d) Fuel mass to energy output; i.e. how many joules of energy per kilogram? The average American household uses about 40 billion joules of energy per year. How much of your energy source would one need to power a home for a year?
3. Production & Use
 - a) What is production and use of your energy source at the state, national, and global levels?
 - b) How much do we import and export?
4. Pros & Cons
 - a) Why is your energy source an effective fuel?
 - b) How does the use of your energy source effect the environment/earth's climate?
 - c) What are the shortcomings of your source? What are possible solutions to these concerns, and how difficult or easy are those solutions to achieve?

C. Time

1. 5 - 7 minutes

D. Public Speaking

1. Do not read from note cards or power point
2. Keep eyes upward on the audience
3. Speak slowly and clearly
4. Be mindful of time remaining
5. Practice your presentation
6. Be deliberate about your speech

7. Maintain a formal tone
8. Avoid using “Ummm” or “So yeah”
9. Face the class, not the screen

II. Mandatory Bibliography

- A. Must include a minimum of 4 independent sources
- B. Neither Google nor Wikipedia count as sources, though you may use them to find additional resources
- C. MLA format

III. Points

- A. 500 exp

IV. Due Date

- A. Monday, July 8