**Persuasive Speech: Outline Worksheet**

***Directions:*** Use this worksheet as a **guide** to create your speech outline.

* The final product needs to be **typed, in 12-point Times New Roman font, double-spaced, have 1-inch margins, and include 6 internal source citations** (**at least** 1 per main point and 1 in the introduction) in APA formatting.
* Please retain the concept labels below.
* **Use Monroe’s Motivated Sequence**.
* On a **separate references page**, all source citations should be listed in APA style.

**Preparation**

1. General Purpose: Persuade
2. Specific Purpose: Persuade the audience on Nuclear Energy and its uses
3. Proposition & Type: Nuclear Energy is a good replacement for more traditional based fuels and is a safer alternative. (Logos)
4. Central Idea: Nuclear Energy is a good replacement for more traditional based fuels and is a safer alternative.

**Introduction (Attention)**

1. Attention Getting Device: Chernobyl
2. Thesis: Nuclear Energy is a good replacement for more traditional based fuels and is better for the environment
3. Credibility Statement: I gave a speech on this topic to the OEC for a competition I was a finalist for.
4. Justification/Significance: Energy is something everyone needs so becoming more efficient is something that could positively affect the country as a whole.
5. Preview of Main Points: Nuclear energy has some upsides to other types of electrical production mainly that it is more efficient, its better for the environment, and it’s safer.

Transition: First lets talk about the current problems of our current plan and solution

**Body**

1. Main Point (Major Claim/**Need**): Problems currently
   1. Sub Point (sub claim): Fossil Fuels, Wind, and Solar
      1. Grounds : As of February 2022 fossil fuels generated 60.8% of the U.S’s electricity with a majority coming from natural gas (38.3%) and coal (21.8%) 4. (U.S. Energy Information Administration)
      2. 454 tons of coal was used by the US to produce electricity in 2021 5. (U.S. Energy Information Administration)
         1. Warrant: This shows that the US uses a lot of fossil fuels when nuclear energy could make the same amount of electricity more efficiently.
      3. Grounds: more than 720,000 tons worth of wind turbines by 2040 and 78 million tonnes by the year 2050 will end up in landfills 6. (Harvard Business Review)
         1. Warrant: This shows that that the next biggest solutions, wind and solar, will eventually become a problem we have to solve

Transition: Now we see some of the problems of our current plan and solution lets move on to how nuclear energy can help.

1. Main Point (**Satisfaction**): Nuclear Energy
   1. Sub Point: Energy released
      1. Grounds: One uranium pellet, ½ in. height and diameter, contains an equivalent amount of energy to 1 ton of coal, 149 gallons of oil, and 17,000 ft3 of natural gas 1. (Center for Sustainable Systems @ University of Michigan)
         1. Warrant: This show how much more efficient uranium is compared to other energy sources.
   2. Sub Point: Enviroment
      1. Grounds: coal is the major source of radiation released into the environment from its waste called fly ash which contains uranium and thorium 2. (Yale Uni)
      2. Nuclear energy has a death rate of 0.03 per Terawatt hour while coal has a death rate of 24.62 – 32.72 depending on the type of coal used 3. (Our World in Data)
         1. Warrant: This shows how nuclear energy is good for both the environment and could remove harmful substances.

Transition: Nuclear energy has some clear upsides but lets put some things into perspective

1. Main Point (**Visualization**):
   1. A. Sub Point: Environment
      1. Grounds: Coal and Natural gas emissions down, less radioactive particles, less garbage from solar and wind.
         1. Warrant: Since we’d be cutting down on the emissions and the garbage from solar and wind we’d have a much better environment and less filled garbage heaps.
   2. Sub Point: Power
      1. Grounds: Nuclear power plants had a capacity factor of 92.7% in 2021 2. (Yale Uni)
         1. Warrant: Since this is a rough estimate of the uptime of reactors, it shows how efficient these reactors are

Transition: As I discussed…

**Conclusion**

1. Restate Thesis: Nuclear Energy is a good replacement for more traditional based fuels and is better for the environment
2. Summarize Main Points: Nuclear Energy is a good replacement for more traditional based fuels and is better for the environment
3. Close with Impact (**Call for action**): For those wanting to delve more into Nuclear Energy and getting involved with putting it as a forefront in political discussion the Nuclear Energy Institute has a lot of tools and resources to help you. <https://www.nei.org/home>

Sources

1. Center for Sustainable Systems @ University of Michigan. (2021). *Nuclear energy factsheet*. Nuclear Energy Factsheet. Retrieved October 30, 2022, from <https://css.umich.edu/publications/factsheets/energy/nuclear-energy-factsheet>

2. Rhodes, R. (2018, July 19). *Why nuclear power must be part of the Energy Solution*. Why Nuclear Power Must Be Part of the Energy Solution. Retrieved October 30, 2022, from <https://e360.yale.edu/features/why-nuclear-power-must-be-part-of-the-energy-solution-environmentalists-climate>

3. Ritchie, H., Roser, M., & Rosado, P. (2020, November 28). *Nuclear energy*. Energy. Retrieved October 30, 2022, from <https://ourworldindata.org/nuclear-energy>

4. U.S. Energy Information Administration. (2022, March 4). Frequently asked questions (faqs) - U.S. energy information administration (EIA). Frequently Asked Questions (FAQs) - U.S. Energy Information Administration (EIA). Retrieved October 31, 2022, from <https://www.eia.gov/tools/faqs/faq.php?id=427&amp;t=3#:~:text=In%202021%2C%20about%204%2C116%20billion,facilities%20in%20the%20United%20States.&amp;text=About%2061%25%20of%20this%20electricity,%2C%20petroleum%2C%20and%20other%20gases>.

5. U.S. Energy Information Administration. (n.d.). U.S. Energy Information Administration - EIA - independent statistics and analysis. Use of coal - U.S. Energy Information Administration (EIA). Retrieved October 31, 2022, from https://www.eia.gov/energyexplained/coal/use-of-coal.php

6. Atasu, A., Duran, S., & Wassenhove, L. N. V. (2021, June 18). *The dark side of solar power*. The Dark Side of Solar Panel. Retrieved November 1, 2022, from <https://hbr.org/2021/06/the-dark-side-of-solar-power>