

1. What are the basic processes involved in nuclear power plants to generate electrical power?
2. Describe the main components of the nuclear reactor and what they do.
3. What were the two biggest factors that led to both the Three Mile Island and Chernobyl nuclear power plant accidents?
4. Why did the plant in Chernobyl to experience two explosions?
5. What was the major difference for the Fukushima plant accident? What caused its reactors to explode?

Watch the video “Fusion Energy Explained,” <https://youtu.be/N4yWhA1mVxA>

6. Why is fusion power not currently used to generate electrical power?
7. What are some benefits of fusion as an energy source?

Article: The Alchemist’s Dream

Read the attached article, “The Alchemist’s Dream” and answer the following questions

8. The first controlled fission reaction was set up at the University of Chicago. What basic substances made up the pile?

9. What was the purpose of the cadmium sulfide solution?

10. What was the purpose of the graphite?

11. What material was used for the control rods?