**Chapter 17 Nonrenewable Resources**

Lesson 4 Nuclear Power

1. What is a positive of nuclear power? Negative?
   1. What percent of U.S. electricity comes from nuclear power?
   2. France is the leading country in reliance on nuclear power. What percent of France’s energy comes from nuclear power?
2. What is nuclear energy?
3. What is nuclear fission?
   1. In nuclear fission, the nuclei of large atoms such as uranium or plutonium is bombarded with neutrons. What are the byproducts of this collision?
   2. How can nuclear fission result in a huge explosion?
4. What is a nuclear reactor?
5. How is electricity created in a nuclear power plant?
6. By what percentage do scientists estimate nuclear power generation reduces the emission of greenhouse gases worldwide when compared to the combustion of fossil fuels?
7. List 3 costs of nuclear power?
   1. What famous disaster occurred in Ukraine in 1986 concerning nuclear power?
      1. After the explosion, what was released into the atmosphere and carried by wind to distant locations that caused people to develop cancer and other conditions?
   2. What is meltdown?
   3. What is nuclear waste?
   4. As of now, how is nuclear waste dealt with?
   5. What method would make more sense in dealing with nuclear waste rather than storing at multiple plants, potentially creating multiple areas where a nuclear hazard could develop?
      1. Where has the U.S. proposed doing this at?
8. What is nuclear fusion?
   1. What has made it thus far impossible to generate power through the process of nuclear fusion?
   2. What would serve as fuel in a nuclear fusion reactor?