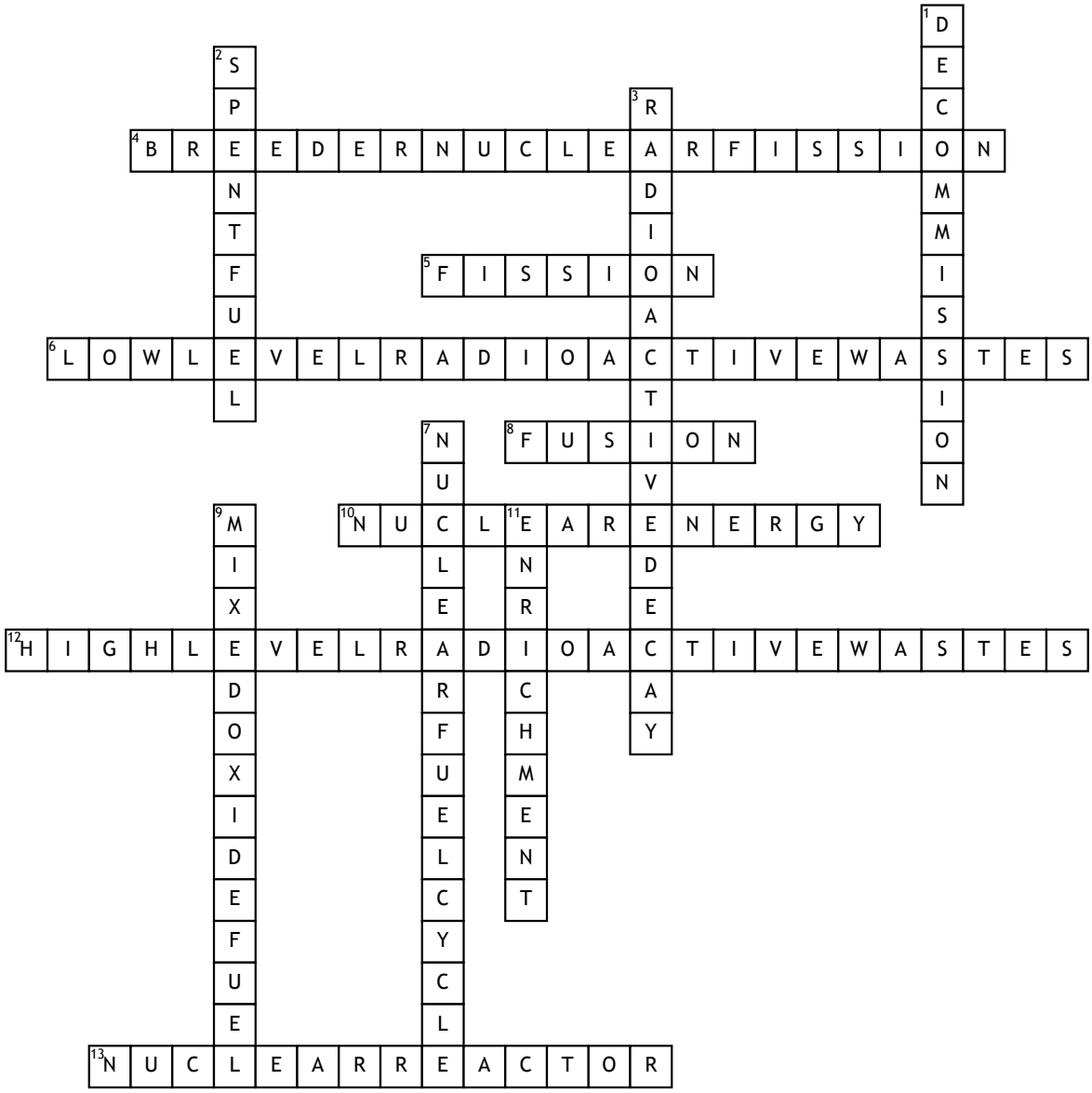
Name: _____ Date: _____

Nuclear Energy



Across

4. Type of nuclear fission in which nonfissionable U-238 is converted into fissionable Pu-239

5. The splitting of an atomic nucleus into two smaller fragments, accompanied by the release of a large amount of energy

6. Radioactive solids,liquids,or gases that give off small amounts of ionizing radiation

8. The joining of two lightweight atomic nuclei into a single,heavier nucleus, accompanied by the release of a large amount of energy

10. The energy released by nuclear fission or fusion

12. Radioactive solids, liquids,or gases that give off large amounts of ionizing radiation

13. A device that initiates and maintains a controlled nuclear fission chain reaction to produce energy for electricity

Down

1. To dismantle an old nuclear power plant after it closes

2. The used fuel elements that were irradiated in a nuclear reactor

3. The emission of energetic particles or rays from unstable atomic nuclei

7. Processes involved in producing the fuel used in nuclear reactors and in disposing of nuclear wastes

9. A reactor fuel that contains a combination of uranium oxide and plutonium oxide.

11. The process by which uranium one is refined after mining to increase the concentration of fissionable U-235