1．Assume 235U splits into two fragments with masses 100 and 132 and three neutrons. Find the masses of stable nuclides with these masses. What is the fission energy released by the fission of 1.0 kg of 235U?

2．If a natural uranium, thermal fission reactor is operating at a thermal power output level of 2 GW, calculate the total rate of consumption of 235 U（in kg y-1). Take the energy release per fission to be E = 200 MeV.

3. What is the meaning of delayed neutrons? What is the importance of delayed neutrons in a nuclear reactor?

1. Describe some design features of a pressurized water reactor.