

required to produce thermal neutrons.
Elastic scattering

[PHY456] Which of the following is used as a fuel in a nuclear reactor?
235U

[PHY456] To shut the reactor down, the operator merely reduces K_{∞} making the reactor _____
Subcritical

[PHY456] To maintain the specified power level during the operation of a reactor, the operator adjusts the value of K_{∞} from super critical to _____ level.
Critical

[PHY456] Nuclear reactors are devices which are designed so that the _____ can proceed in a controlled manner.
Fission reaction

[PHY456] Natural uranium is not used as a fuel, because if it is used it will be difficult to make the nuclear reactor _____
Critical

[PHY456] A moderator should be a light nucleus in addition to having a _____
small neutron capture cross-section

[PHY456] How many main types of nuclear reactors do we have with respect to the energy of the neutrons?
2

[PHY456] A nuclear reactor with a large fission rate by thermal neutrons is called _____
thermal reactor

[PHY456] To increase the power being produced by a reactor, the operator increases K_{∞} such that, K_{∞} becomes _____
super critical