

30. The nuclei of  $^{238}\text{U}$  can capture neutrons and beta-decay. With large amount of neutrons available due to the fission of  $^{235}\text{U}$ , the probability for this process is substantially increased, resulting in a much higher decay rate for  $^{238}\text{U}$  and causing the depletion of  $^{238}\text{U}$  (and relative enrichment of  $^{235}\text{U}$ ).