Alpha decay

$$^{238}_{92}U \rightarrow ^{234}_{90}Th + ^{4}_{2}a$$

$$^{A}_{Z}N \rightarrow ^{(A-4)}_{(Z-2)}N' + ^{4}_{2}a$$

Beta⁻ decay

$$^{137}_{55}Cs \rightarrow ^{137}_{56}Ba + ^{0}_{-1}e + \bar{\nu}_e$$

$$^{A}_{Z}N \rightarrow ^{A}_{Z+1}N' + ^{0}_{-1}\beta + \bar{\nu}_e$$

$$^{1}_{0}n \rightarrow ^{1}_{1}p + ^{0}_{-1}e + \bar{\nu}_e$$

↓ neutron ↓ proton ↓ antineutrino