

### Summary of Radioactive Decay Processes

Type of radioactive decay	Particle emitted	Change in mass number	Change in atomic number
Alpha decay	${}^4_2\text{He}$	Decreases by 4	Decreases by 2
Beta decay	${}^0_{-1}\beta$	No change	Increases by 1
Positron emission	${}^0_1\beta$	No change	Decreases by 1
Electron capture	X-ray photon	No change	Decreases by 1
Gamma emission	${}^0_0\gamma$	No change	No change