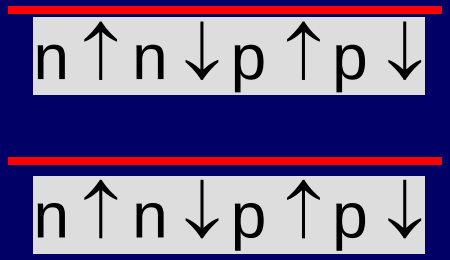
protons = # neutrons

Pauli Principle - neutrons and protons have spin like electron, and thus $m_s = \pm 1/2$.



Can get 4 nucleons into n=1 state. Energy will favor N=Z

But protons repel one another (Coulomb Force) and when Z is large it becomes harder to put more protons into a nucleus without adding even more neutrons to provide more of the Strong Force. For this reason, in heavier nuclei N>Z.