CMOS Inverter

An inverter implements the NOT function:
A "0" input is changed into a "1" output
A "1" input is changed into a "0" output

When the input is "0", this "0" value is sent to each transistor. The upper (pMOS) transistor is "closed" (connected) and the lower (nMOS) transistor is "open" (not connected). Thus, the output is connected to "1" (Power).

When the input is "1", this "1" value is sent to each transistor. In this case, the pMOS transistor is "open" and the nMOS transistor is "closed". This results in the output being connected to "0" (Ground).