**IEEE’s Hands on Practical Electronics (HOPE)**

**Week 7: MOSFETs (nFET)**

**Objective:**
Learn how NMOS work

**Materials:**
- 1 Breadboard
- 1 9V Battery
- 1 1kΩ Resistor
- 1 nMOS
- 1 LED

Build the following circuit:

![Circuit Diagram]

**Questions:**

1. When you connect the gate to $V_{\text{HIGH}}$ is the LED on or off?

2. Is current through the transistor on or off?

3. When you connect the gate to $V_{\text{LOW}}$ is the LED on or off?

4. Is the current through the transistor on or off?