

Circuit #7: Temperature Sensor

Code:

```
int temperaturePin = 0;

void setup() {

  //Serial comm. at a Baud Rate of 9600
  Serial.begin(9600);
}

void loop() {

  //Calls the function to read the sensor pin
  float temp = getVoltage(temperaturePin);

  //Below is a line that compensates for an offset
  //(see datasheet)
  temp = (temp - .5) * 100;

  //This line displays the variable temperature after all
  //the math
  Serial.println(temp);
  delay(1000);
}

//function that reads the Arduino pin and starts to convert //
it to degrees

float getVoltage(int pin) {
  return (analogRead(pin) * .004882814);
}
```