Read Analog Voltage

Code Club Challenge – 01-05

Setup:

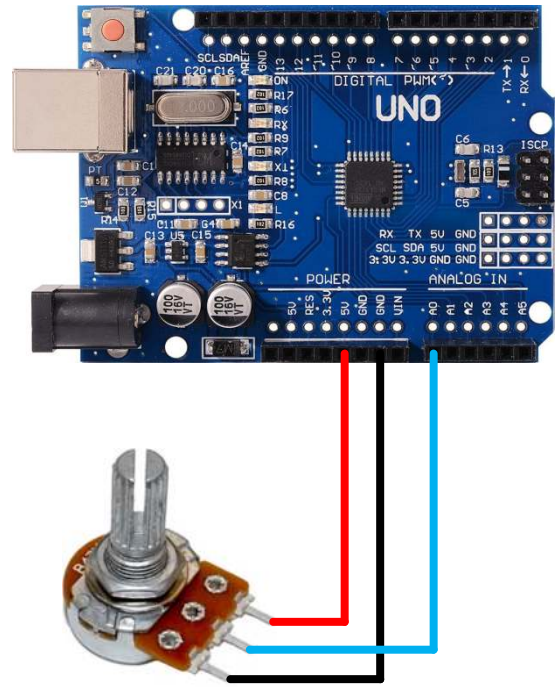
- Load the sketch from the IDE File/Examples/01.Basics/… menu
- Connect up your circuit as shown (disconnected from USB)
- Follow the tutorial at https://www.arduino.cc/en/Tutorial/ReadAnalogVoltage
- Display your results using the Serial Monitor and the Serial Plotter
- Show your understanding of the code by explaining it to your teacher

Code Challenges:

- Increase the baud rate to 19200 to make the data flow more responsively.
- Change the 'Serial.println()' code to format values as 1, 1.2, 1.23 etc

Can you:

- Explain how the circuit could be changed to read voltages larger than 5 volts?
- What precision does the 10-bit ADC give you. ie. 1 bit == ?.? volts
- Give examples of real life applications of this voltage reading circuit?



WARNING!

Always disconnect power before making/changing circuit connections