**ARDUINO BASICS**

### Arduino Uno Board

- **Digital Pins**
- **Pin 13 LED**
- **TX and RX LEDs**
- **Power LED**
- **ATmega microcontroller**
- **Analog in**

**Code:**
- `digitalRead()`
- `digitalWrite()`

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**TERMS TO KNOW:**

**Ground** (or earth) - is the reference point for measuring voltage in a circuit. Most circuits are grounded to prevent electrical issues.

**5V** (or 5 volt power) - is the simple power source for many basic circuits on an Arduino.

**Pins** - are openings on the Arduino circuit board that can be used for inputs and outputs. Pins are typically connected to the other components through wires. Arduinos have digital and analog pins.

**Current** - measured by amperes (amps), it is the amount of electrical charge going through a particular part of your circuit. Represented by an “A” symbol on diagrams.

**Voltage** - the difference in energy between one point in a circuit and another, measured in volts and represented by a “V” symbol.

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**OTHER RESOURCES**

- Arduino software, code and community: [arduino.cc](http://arduino.cc)
- Arduino guide: [http://guides.library.appstate.edu/electronics/arduino](http://guides.library.appstate.edu/electronics/arduino)
- Want inspiration? [Makezine.com](http://makezine.com) and [Instructables.com](http://instructables.com)
- Liked Arduino? Check out the Raspberry Pi next!

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**HAVE QUESTIONS?**

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