

PVNet Introduction to Arduino – Vocabulary List #1

1. **Arduino:** An open-source microcontroller platform used to build electronic projects.
2. **Microcontroller:** A small computer on a single chip that controls electronic devices.
3. **Sketch:** The program written and uploaded to an Arduino board.
4. **IDE:** Integrated Development Environment used to write and upload Arduino code.
5. **Pin:** A physical connection point on the Arduino for input or output.
6. **Digital Pin:** A pin that reads or writes HIGH or LOW signals.
7. **Analog Pin:** A pin that reads varying voltage levels as numeric values.
8. **PWM:** Pulse Width Modulation used to simulate analog output.
9. **Voltage:** The electrical potential difference measured in volts.
10. **Ground (GND):** The reference point in a circuit where voltage is zero.
11. **Breadboard:** A tool for building circuits without soldering.
12. **Resistor:** A component that limits the flow of electrical current.
13. **LED:** Light Emitting Diode that produces light when powered.
14. **Current:** The flow of electric charge through a circuit.
15. **Loop():** A function that runs repeatedly in an Arduino program.
16. **Setup():** A function that runs once when the Arduino starts.
17. **Library:** Prewritten code that adds extra functionality.
18. **Serial Monitor:** A tool to send and receive data between Arduino and computer.
19. **Baud Rate:** The speed of serial communication.
20. **Input:** Data sent into the Arduino from a sensor or device.
21. **Output:** Data sent from the Arduino to control a device.
22. **Sensor:** A device that detects physical changes like light or temperature.
23. **Actuator:** A device that performs an action, such as a motor.

- 24. Condition:** A logical test that controls program flow.
- 25. Variable:** A storage location for data in a program.
- 26. Constant:** A fixed value that does not change.
- 27. Boolean:** A data type with true or false values.
- 28. Compile:** The process of checking code for errors.
- 29. Upload:** Sending code from the computer to the Arduino.
- 30. Shield:** An add-on board that expands Arduino functionality.