

Worksheet – Chapter 5: Introduction to Arduino

Multiple-choice questions

1. Arduino is a _____.
a) Software b) Microcontroller c) Website d) Database
2. The ATmega328P chip on Arduino acts as the _____.
a) Body b) Brain c) Keyboard d) Battery
3. The pins used for sensing the outside world are called _____.
a) Digital Pins b) Analog Pins c) Power Pins d) USB Pins
4. The built-in LED on Arduino usually connects to pin number _____.
a) 5 b) 8 c) 13 d) 2
5. The software used to write code for Arduino is called _____.
a) MS Word b) Arduino IDE c) Chrome d) Excel

Fill in the blanks

1. Arduino can take input from various _____.
2. A microcontroller can convert measurements into _____ signals.
3. The black chip at the center of the Arduino board is called _____.
4. _____ pins take sensor readings over a range of values.
5. To program Arduino using Python, we install the _____ library.

True/False

1. Arduino can perform input, processing and output operations. (True/False)
2. Digital pins measure values in a continuous range. (True/False)
3. USB cable is needed to connect Arduino to a computer. (True/False)
4. Arduino IDE cannot upload code to the board. (True/False)
5. Sensors help Arduino understand its surroundings. (True/False)

Match the following

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|-----------------|-----------------------------------|
| A. ATmega328P | 1. Used to power Arduino |
| B. Digital Pins | 2. Brain of Arduino |
| C. Analog Pins | 3. Give ON/OFF signals |
| D. Power Pins | 4. Read range-based sensor values |
| E. USB Port | 5. Connects Arduino to computer |

Short answer questions

1. What is Arduino?
2. What are sensors used for?
3. What is the function of digital pins?
4. Why is the Arduino IDE important?
5. What is the difference between analog and digital pins?