

Week 2 Quiz

1. Which Arduino function can be used to read information from a sensor?

- a) analogWrite()
- b) tone()
- c) digitalRead()
- d) digitalWrite()

2. A photoresistor:

- a. changes voltage according to light level
- b. increases or decreases current through a wire
- c. stores an image
- d. changes resistance according to light level

3. A voltage divider is:

- a. a component that reduces voltage by a known factor
- b. a component acts as a power supply for a number of components
- c. a circuit that contains resistors connected in series
- d. the combination of a set of resistive sensors

4. True or False: a voltage-controlling sensor can be read by an Arduino using the analogRead() function.

- True
- False

5. In order to perform On-Off actuation, the following Arduino command might be used:

- a. digitalRead()
- b. tone()
- c. digitalWrite()
- d. #include

6. The function of a Digital to Analog Converter is:

- a. to generate an analog voltage from digital signals
- b. to allow analog current to be controlled by a digital number
- c. to produce a waveform with an analog frequency
- d. to accept both digital and analog inputs

7. Which Arduino command is used to generate a pulse width modulated signal?

- a. `analogWrite()`
- b. `tone()`
- c. `digitalRead()`
- d. `digitalWrite()`

8. The duty cycle of a signal describes:

- a. its frequency
- b. its voltage level
- c. its peak voltage difference
- d. the fraction of time it is high