



Name \_\_\_\_\_

# Creative Engineering: An Introduction to Arduinos



## The Basics

1. An Arduino is a type of \_\_\_\_\_ that acts like the "brain" for electronic projects.
2. The four essential parts of an Arduino build are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and the wires that connect them.
3. Inputs are also called \_\_\_\_\_ and are like our senses (eyes and ears) because they gather information from the world.
4. Outputs are also called \_\_\_\_\_ and are like our muscles because they perform actions based on the Arduino's instructions.
5. An example of an input mentioned in the video is a \_\_\_\_\_, and an example of an output is a \_\_\_\_\_.

## Electricity and Circuits



Name \_\_\_\_\_

6. Electricity is simply \_\_\_\_\_ moving.
7. An electrical circuit is compared to a \_\_\_\_\_ for electrons to travel on.
8. A \_\_\_\_\_ acts like a gate in the circuit, stopping the flow of electrons.
9. A circuit is complete when electrons can flow from the \_\_\_\_\_ terminal to the \_\_\_\_\_ terminal of the battery.

## Programming and Building

10. The software used to program an Arduino is called the \_\_\_\_\_.
11. An Arduino program is called a \_\_\_\_\_.
12. The two main sections of a program are the \_\_\_\_\_, which runs once, and the \_\_\_\_\_, which runs continuously.
13. You don't need to know how to code from scratch because there are many \_\_\_\_\_ of code available online that you can copy and paste.
14. A \_\_\_\_\_ is a temporary platform used to easily prototype and test a circuit without soldering.
15. For mass production, you would create a custom \_\_\_\_\_ that packages all the components together.