

Name: _____ Date: _____ Class: _____

Stopped Motor Code

```
/*
```

This code is used to calibrate a servo to be stopped with a pulse width of 1500 micro seconds. The red wire of each servo goes to power and the black wire goes to ground. The white wire of each servo goes to one of the digital pins on the Arduino. It can also be used to rotate a servo clockwise or counterclockwise.

```
*/
```

```
//GLOBAL VARIABLES
```

```
int rightMotorPin =5; //select a digital pin for the right motor
```

```
int rightMotorPulseWidth = 0; //With this set to zero, motor should not move
```

```
//You can change the pulse width in milliseconds between 10 and 200, larger pulse width result in faster servo speeds. Positive numbers cause the servo to go clockwise and negative numbers cause the servo to go counter clockwise.
```

```
//SETUP
```

```
void setup()
```

```
{
```

```
  pinMode(rightMotorPin, OUTPUT); // configure the pin called rightMotorPin as an output
```

```
}
```

```
//LOOP
```

```
void loop()
```

```
{
```

```
  //Create appropriate pulse for the right motor
```

```
  digitalWrite(rightMotorPin, HIGH);
```

```
  delayMicroseconds(1500 - rightMotorPulseWidth);
```

```
  digitalWrite(rightMotorPin, LOW);
```

```
//low state of pulse needs to be on the order of 20 ms
```

```
delayMicroseconds(20000);
```

```
}
```

The Lunch-Bot Activity—Stopped Motor Code