**Day 5: Programming Robot Movements Sheet Answer Key**

**Group Members:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Translating EMG Data to Robot Movements**

You will program both micro:bits in the [Micro:bit MakeCode editor](https://makecode.microbit.org/) online. Use the following tips to write your code:

* The micro:bit attached to your muscle sensor should be programmed to send EMG data to your robot using radio signals. Review the [micro:bit page on radios and pins](https://microbit.org/get-started/features/radio-and-pins) for more information.
  + Use an if-else statement to set a threshold for which numbers in the EMG data should trigger movement in your robot. If your data is over that threshold, it should send a specific radio signal, and if it’s below, it should send a different signal.
* The micro:bit attached to your robot should be programmed to move the robot forward based on the radio signals it receives. Review the [Cutebot wiki](https://www.elecfreaks.com/learn-en/microbitKit/smart_cutebot/cutebot_case01.html) for more information on programming the robot to move.

Paste screenshots of the code for each micro:bit below.

Code may vary. As long as the code accomplishes the task of moving the robot in response to EMG signals, it is acceptable. A sample program is shown below.

**Muscle Sensor Micro:bit Code:**

**A screenshot of a computer

Description automatically generated**

**Robot Micro:bit Code:**

A screenshot of a chat

AI-generated content may be incorrect.