

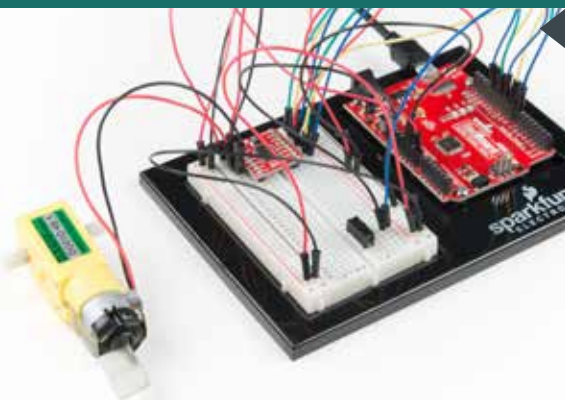
# Open the Arduino IDE

Connect the RedBoard to a USB port on your computer.

## Open the Sketch:

File > Examples > SIK-Guide-Code-master > **CIRCUIT\_5A-MOTOR BASICS**

Select **UPLOAD** to program the sketch on the RedBoard.



## WHAT YOU SHOULD SEE

Flip the switch. The motor will spin at the speed set by the motor speed variable (default is 0). Open the Serial Monitor, type any number from 30 to 255 or -30 to -255, and then press Enter. Changes in speed will be hard to notice. Send 0 to stop the motor.

## PROGRAM OVERVIEW

1 Check to see if a command has been sent through the Serial Monitor. If a command has been sent, then set the motor speed to the number that was sent over the Serial Monitor.

2 Check to see if the switch is ON or OFF.

**A:** If the switch is ON, drive the motor at the motor speed.

**B:** If the switch is OFF, stop the motor.

## CODE TO NOTE

### PARSING INTEGERS:

`Serial.parseInt();`

`.parseInt()` receives integer numbers from the Serial Monitor. It returns the value of the number that it receives, so you can use it like a variable.

### SERIAL AVAILABLE:

`Serial.available();`

This command checks how many bytes of data are being sent to the RedBoard. If it is greater than 0, then a message has been sent. It can be used in an **if** statement to run code only when a command has been received.