



# Upward Bound Math Science Raspberry Pi Day!

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## ***Update and Upgrade the Pi***

-Connect to WiFi

-Open Terminal located in Task Bar and type the following commands:

- `sudo apt-get update`
- `sudo apt-get upgrade`

## ***Accessing the Git Repository***

-Connect to WiFi

-Open Terminal located in Task Bar and type the following commands:

- `dir`
- `cd Desktop`
- `git clone https://github.com/mjhale22/UBMSPI.git`

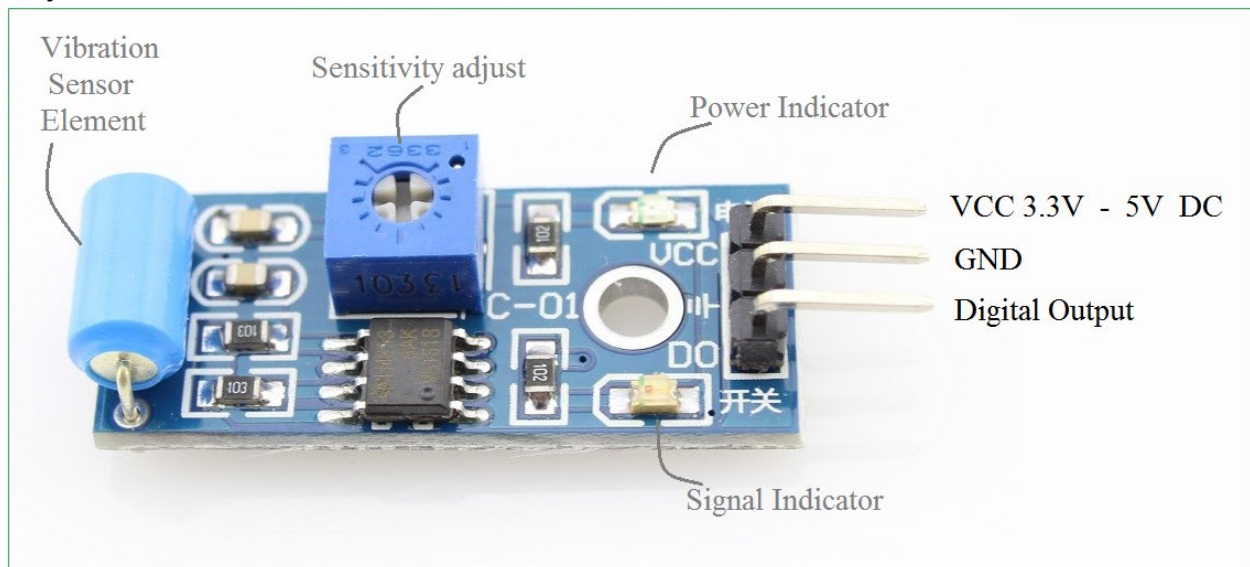
## ***Reinstall NOOBS from Recovery***

-On startup/reboot, hold Shift key when prompted

## ***Reinstall NOOBS from Download***

-[www.raspberrypi.org/documentation/installation/noobs.md](http://www.raspberrypi.org/documentation/installation/noobs.md)

## ***Sensor Layout***



## ***Day 1 Agenda***

- Housekeeping
- Distribute kits
- Connecting the Raspberry Pi
- Connecting to Wifi
- Taskbar Panel Settings
- Preferences > Mouse and Keyboard Settings
- Preferences > Raspberry Pi Configuration
  - VNC/Camera
- Desktop Preferences (Right click on Desktop)
- Updating and Upgrading the Pi
- What is GitHub / Accessing UBMSPI.git
  - <https://github.com/mjhale22/UBMSPI>
- Contents of the UBMSPI Git Repository
- Pin Layout/Leaf
- Breadboard / Resistors / LED / LED Blink ([tinyurl.com/PiCircuits](http://tinyurl.com/PiCircuits))
- Inputs Folder
- Temp/Humidity Sensor Python Walkthrough
  - Importing Libraries
  - Defining Variables
  - Hashtags
- Explore other sensors and Python codes
- Brainstorm Sensor Uses (Discuss Outputs)

## ***Day 2 Agenda***

- Review Day 1 Agenda
- Re-clone UBMSPI Git Repository
- Review Sensor Usage Brainstorm Document
- Outputs Folder
- Conditionals Folder
- Create your own project