Water Project Documentation

**Parts List/ To Buy**

The Arduino we are using, we need 4: <https://www.amazon.com/ARCELI-Digispark-Development-Kickstarter-ATTiny167/dp/B07KBFNXMC/ref=sr_1_1?keywords=digispark+pro&qid=1571411723&sr=8-1>

The light sensor we need 15:

<https://www.adafruit.com/product/1384>

The temperature Probe we need one pack of 5:

<https://www.amazon.com/Vktech-Waterproof-Digital-Temperature-DS18b20/dp/B00EU70ZL8/ref=sr_1_3?keywords=DS18B20&qid=1571412670&sr=8-3>

The Molex connectors:

<https://www.amazon.com/Hilitchi-Housing-Connector-Adapter-Perfectly-Compatible/dp/B015Y6JOUG/ref=sr_1_10?keywords=molex&qid=1571412741&sr=8-10>

Vertical sliding Switch:

<https://www.amazon.com/LIYUDL-Position-Vertical-Switch-SS12D00G3/dp/B075TYP6C5/ref=sr_1_26?hvadid=12092202914&hvbmt=be&hvdev=c&hvqmt=e&keywords=vertical+slide+switch&qid=1572214992&sr=8-26#customerReviews>

**Schematic/Parts Pinout,**

1. Battery connector
2. Temperature probe -pinout: <https://external-content.duckduckgo.com/iu/?u=https%3A%2F%2Ftse2.mm.bing.net%2Fth%3Fid%3DOIP.awUXVL5WOeqGfPSrxxb7ewAAAA%26pid%3DApi&f=1>
3. Light sensor
4. Real Time clock - DS3231 - pinout: <https://components101.com/modules/ds3231-rtc-module-pinout-circuit-datasheet>
5. Micro SD Storage Expansion Board Mciro SD TF Card - pinout: <https://www.instructables.com/id/Micro-SD-Card-Tutorial/>
6. Arduino Tiny - pinout : <http://digispark.s3.amazonaws.com/DigisparkProDiagram2.png>
7. Power switch - Pinout: <https://www.amazon.com/microtivity-IM231-3-pin-Slide-Switch/dp/B008CZIFQG/ref=sr_1_2?keywords=Vertical+Slide+Switch&qid=1572024991&s=electronics&sr=1-2>

**Board Layout/ Pinout:**

1. Temp sensor pinout: PA7 (D5)
2. Light sensor pinout: PA3 (A9)
3. Micro SD pinout: (SC - PB3 (D4), (Mosi - PA4 (Mosi), (Miso - (PA2 (Miso)), (SCK- PA5(SCK)))
4. RT Clock - pinout: ((SDA - PB0 (SDA)), (SCL PB2 (SCL)))