Materials List

 **FLIGHT BASED:**

|  |  |  |  |
| --- | --- | --- | --- |
| **SENSOR** | **QUANTITY** | **COST** | **FUNCTION:** |
|  |  |  |  |
| **CAMERA:**CMOS Camera - 640x480 SEN-08667 | 3 | $9.95/29.85 | To be placed above each petri and capture growth of the petri directly across from the camera. C code examples found online |
| **TEMP/HUMIDITY:**Humidity and Temperature Sensor - HIH6130 Breakout | 1 | $28.95 | This will record the data to a single output of our temperature and humidity as these conditions greatly affect growth rate of yeast. Arduino code found online |
| **CARBON DIOXIDE SENSOR:**To be obtained through Alli | 1 | TBD | All living cells perform cellular respiration. In order to ensure our yeast is growing, we can regularly monitor levels of CO2. Nee to obtain help with code. |
| **LED LIGHTING:** |  |  |  |
| **GROWTH MEDIUM/AGAR:** |  |  |  |
| **PETRI PLATES:** |  |  |  |
| **YEAST:** |  |  |  |

– SparkFun - $29.95 – yeast growth would accelerate in a warm, moist environment. We will collect this information to practice our data collection, and also to monitor conditions to keep them as close as possible.

**Lights**

**Carbon Dioxide Sensor –**