**Data collection sheet – the impact of extreme heat on your school**

The goal of your lesson today is to collect data on how different micro environments around your school affect the temperature of that location.

The aim is to consider;

* How those micro environments affect temperatures during EXTREME conditions such as a heatwave and:
* If those micro environments could be changed to make our school better adapted to heatwave conditions.

Task

1. Collect the data around your school in as many of the micro environment areas listed in the table as possible.
2. Locate the area on the map below and record the GPS coordinates. You can use a GPS logger or Google maps on your phone for this. If your school does not allow phone use, your teacher can provide the GPS coordinates later.
3. Record 5 different measurements at each location for Temperature. Remember, allow time for the thermometer to adjust.
4. Repeat the same process using the light meter.
5. To calculate the mean add the results in the row and divide by the number of results.

Map of your school site here

**TEMPERATURE DATA**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Temperature Measurement | | | | | | |  |
|  | Latitude | Longitude | 1 | 2 | 3 | 4 | 5 | Mean |
| Astroturf |  |  |  |  |  |  |  |  |
| The Ground shaded by a tree |  |  |  |  |  |  |  |  |
| Grass |  |  |  |  |  |  |  |  |
| Water features like ponds |  |  |  |  |  |  |  |  |
| Tarmac |  |  |  |  |  |  |  |  |
| Building colour - DARK |  |  |  |  |  |  |  |  |
| Building colour - LIGHT |  |  |  |  |  |  |  |  |
| Air conditioning units (outside part – Infrared thermometer only) |  |  |  |  |  |  |  |  |
| Door exits with heating units above |  |  |  |  |  |  |  |  |

**LIGHT DATA**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Light Measurement | | | | | | |  |
|  | Latitude | Longitude | 1 | 2 | 3 | 4 | 5 | Mean |
| Astroturf |  |  |  |  |  |  |  |  |
| The Ground shaded by a tree |  |  |  |  |  |  |  |  |
| Grass |  |  |  |  |  |  |  |  |
| Water features like ponds |  |  |  |  |  |  |  |  |
| Tarmac |  |  |  |  |  |  |  |  |
| Building colour - DARK |  |  |  |  |  |  |  |  |
| Building colour - LIGHT |  |  |  |  |  |  |  |  |
| Air conditioning units (outside part – Infrared thermometer only) |  |  |  |  |  |  |  |  |
| Door exits with heating units above |  |  |  |  |  |  |  |  |