**Investigating how the distribution of plants is affected by light intensity.**

You are going carry out a continuous belt transect from under the canopy of a tree into open space to investigate the distribution of plants whilst considering light intensity.

**Method.**

1. Run a tape from the fence out towards the library and lay the tape on the ground.
2. Starting at the fence (0m), place your quadrat down.
3. Observe and identify the plant species within the quadrat. You will need to use the key to identify any unknown plant species.
4. Record the percentage cover of the different plant species within the quadrat.
5. Move the quadrat to 0.5m and repeat steps 3-4.
6. Do this belt transect for 5m.

**Results**

Put your results into your results table over leaf

**Results sheet**

Date and weather conditions ……………………………………………………………………………………………………………………………………………………………………

Other observations

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Distance from tree fence (m)** | **Light reading (Lux)** | **Bare ground (%)** | **Moss**  **(%)** | **Common mouse-ear**  **(%)** | **Dandelion**  **(%)** | **Greater plantain**  **(%)** | **Fine-leaved grasses**  **(%)** | **Other**  **(%)** | **Total number of different species** | **Extra notes and observations** |
| 0.0 |  |  |  |  |  |  |  |  |  |  |
| 1.0 |  |  |  |  |  |  |  |  |  |  |
| 2.0 |  |  |  |  |  |  |  |  |  |  |
| 3.0 |  |  |  |  |  |  |  |  |  |  |
| 4.0 |  |  |  |  |  |  |  |  |  |  |
| 5.0 |  |  |  |  |  |  |  |  |  |  |

**Conclusion:**

Write a conclusion below. You should include detail on:

* Plant diversity (number of species) in relation to the light intensity
* Distribution of plant species in relation to light intensity
* Consider any other abiotic factors that could have affected your results

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**Evaluation**

Write an evaluation below. You should consider the following:

* Were your results reliable and why?
* Was there any bias in your results and if so how could this have been avoided?
* What improvements would you make to this investigation? Include any follow up work that you could do.

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