Plan
 I am going to measure the size of various leaves from various trees with different heights and sizes. I am also going to find out the circumference of the tree and the length (measurements) of the branches.
In order to achieve this goal, the use of a Quadrat would be useful. Throw the Quadrant in three different positions; record what species of plants and bugs were found in that certified area of the Quadrant; measure the plants (preferably 10 plants) and count the leaves on each plant's branch.

Prediction
 I predict that the parts of the plants will absorb more sunshine, leaving a bigger quantity of leaves and a larger surface area of branches.
Since the leaves would increase, more bugs will be situated on that same leafs spot mainly because the suns ray of light help produce photosynthesis.

Apparatus
Thermometer: – Plays an important role in this experiment, because it justifies the temperature of the environmental area, in this case back school garden.

Compass: – A special man made device that would show the direction of trees, pointing in a certain direction.

Quadrat: – Another special equipment used in this experiment, which helps identify and clarify the sizes of classified trees and grass.

Meter Ruler: – Suggest roughly the sizes of the trees branches and the measurements of its thickness.

Method
In a group of 5, we decided to find a clear spot were the Quadrat could be thrown, in order to analyse our leaves and plants. After we threw the Quadrat three times, we managed to identify the individual plants

which consisted of smaller grass and more/less bugs. We then used the compass to direct us towards a tree in a certain area.
 Once we had finished clarifying the types of grass, we then decided to analyse a small tree. We measured it (branch length) with the meter ruler and counted the number of leaves. (Results in table beneath). After counting the number of leaves, we began to witness many bugs, especially ladybirds on the leaves, so we took that information into thought.

Table of Results

Branch Length	Number of Leaves	Condition
52	103	Lots of sun, nutrients, space to grow
122	107	Lots of sun, nutrients, space to grow
72	109	Lots of sun, nutrients, space to grow
67	111	Lots of sun, nutrients, space to grow

Analysis: - My Prediction was partly correct because it states the bigger the sunshine, the bigger the leaves. In reference to a more sunny area and a shady area, plants always need light for photosynthesis, so they occur only where there is sufficient light in the darkness they become etiolated. Different species differ on the amount pf light they need. For example many daisies like bright sunlight, whereas many species of Orchids prefer shady places.

Evaluation
Since the theory of LIGHT is correct in this experiment, the numbers of bugs still have a reason for appearing in certain areas of a garden and disappearing in certain places. This is because the areas with shade don't contain enough photosynthesis to keep a plant alive, which doesn't help a bug, when it needs to feeds on a plant. For example Bees get nectar and pollen from flowers (have a lot of sun rays) so the flowers

need to be situated in the right area, where there is sun and need to be flowered regularly. This process is known as the biotic environment.

Conclusion
As you can see from the Graph (above) the branches length doesn't need to have a huge amount of leaf dues to its conditions. This proves that the trees condition doesn't need to have a lot of sun or shade to have a huge number of leaves.