**Name**

**Botany**

**Soils Lab Period**

**SOIL COMMUNITIES**

SOIL COMMUNITY: Two methods of determining if the soil contains living organisms.

METHOD ONE:

Examine under a microscope and record your observations with drawings and descriptions.

METHOD TWO:

Test to discover if microorganisms are present by determining if they are giving off carbon dioxide gas.

DAY ONE:

1. You need one 50ml container:

In the container place: 25 ml water + 25 soil + l g sugar

1. Cover and store over night ( 24-48 hours ).

DAY TWO:

1. Add two drops of phenolphthalein solution to each water sample.
2. Add 0.01 M Sodium Hydroxide solution, a drop at a time, to your sample. Swirl beaker after each drop.
3. Continue to add and count drops of Sodium Hydroxide to the beaker until a permanent light pink color is obtained.
4. Record the number of drops of Sodium Hydroxide needed to cause the color change for each beaker.