# Plant Diversity Worksheet (Test for Chemical Parameters)

Secondary 5

Group: \_\_\_\_\_

Date: \_\_\_\_\_

Objective: To study the content in soil

## Chemicals and apparatus:

Ammonia Test solution	Test tube with graduation mark	
Nitrate Test solution	Measuring Cylinder (100 mL)	
Nitrite Test solution	Beaker (50 mL)	
Distilled Water	Spatula	
Soil Sample	Electronic balance	

### **Procedure:**

- 1. Add 50 mL of distilled water into a beaker.
- 2. Collect 10 g soil sample from the Environmental Trail.
- 3. Add the soil sample into the beaker of distilled water and mix the solution.
- 4. Filter out the insoluble substances in soil and collect the filtrate.
- 5. Pour the 5 mL of filtrate into 3 test tubes with graduation mark respectively.
- 6. Add each test solution, according to its instructions, into one of the test tubes.
- 7. Record the concentration of ammonia, nitrite and nitrate in the results table.

#### **Results:**

Test Solution	Ammonia	Nitrite	Nitrate
Chemical Formula			
Concentration in solution of soil sample			

### **Discussions:**

1. From your findings, which element is found in soil?

2. Why the element mentioned in Q1 is important for plant growth?