

**LESSON NOTES**

**Subject: Basic Science**

**Week 12**

**Year/Level: 9**

<b>Strand</b>	1 : LIVING THINGS AND THE ENVIRONMENT
<b>Sub Strand</b>	1.2 : LIVNG TOGETHER
<b>Content Learning Outcome</b>	Discover and discuss the features of the environment in terrestrial and aquatic ecosystems and account for organisms adaptability to such environment for survival.

**Carrying out Tests on the Abiotic factors of the environment**

<b>Abiotic Factors</b>	<b>Tests Outline</b>
Temperature	Measure temperature using a thermometer.
Turbidity	Use a secchi disk to measure the turbidity of the water
Humidity	Place a strip of Cobalt chloride paper on leaf and record time taken for paper to turn pink
Salinity	Weigh empty beaker. Heat 100mL of seawater in weighed beaker until all water has evaporated. Work out salinity by using the formula below:  $\text{Salinity} = \frac{\text{mass of salt}}{100\text{mL of seawater}}$

**Interactions between Living Things**

- Living things (organisms) are not isolated in their environment.
- Organisms must interact with:
  - ✓ other individuals of their own species
  - ✓ other species
  - ✓ their physical environment.
- **Ecology:**
  - ✓ study of the interactions between organisms and their environment.

- ✓ encompasses all aspects of biology; from physiology to behavior, because any change within an organism has the potential to affect its relationship with the environment.
- ✓ ecological interactions can be studied at many different levels:
  - between an organism and its environment
  - between an organism and a group of organisms
  - between two groups.
- survival of an organism depends on its relationship and how it adapts to its environment.
- Organisms interact with each other all the time, whether we know it or not.
- Many of the interactions between species involve food:
  - ✓ competing for the same food supply
  - ✓ eating
  - ✓ avoiding being eaten.

**ACTIVITY:**

1. State the laboratory equipment used to measure the following:

a) Temperature? \_\_\_\_\_

b) Turbidity? \_\_\_\_\_

2. Define Ecology.

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3. State three ways in which ecological interactions can be studied.

a) \_\_\_\_\_

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b) \_\_\_\_\_

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c) \_\_\_\_\_

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...STAY SAFE...

