

Subject: Science

Activity - Playing with Cards

Chapter- Microorganisms

Class: VIII

Duration:30 minutes

Nature of the activity: Group

Learning Outcome: Students will be able to analyse the various steps involved in fixing Nitrogen from the abiotic world into the biotic world and removing nitrogen from the biotic world into the abiotic world.

What we have to do?

To analyse the cards and rearrange them to create Nitrogen Cycle.

What do we need?

Cards, A4 size sheet and Coloured Pen (to make Arrows).

What you need to know?

Nitrogen Cycle depicts the methods by which Nitrogen is fixed in the Biotic world and the methods by which it is returned back to the Abiotic World.

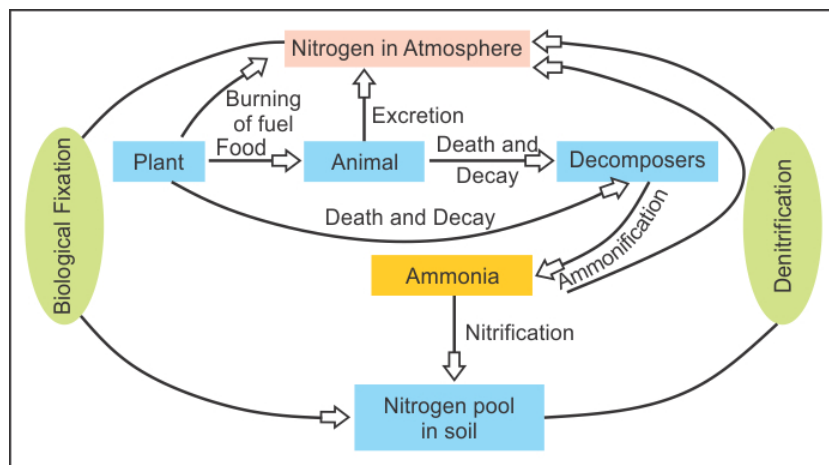
How do we proceed?

- **Teacher's Activity:**

Teacher will arrange Activity Kits, one kit will be given to a group of 2 students.

- **Student's Activity:**

Analyse the cards given to you carefully. Synthesise the knowledge about the Nitrogen Cycle and create the Nitrogen Cycle.



What do we observe?

What have you learnt?

Nitrogen is fixed in the soil by two ways - _____ and _____.

Plants and animals take part in the nitrogen cycle to _____.

What more can we do?

Find out about other Biogeochemical Cycles (like Oxygen Cycle, Carbon Cycle, Water Cycle) and draw a flow chart to represent the cyclic flow of the element in nature.

EXTENDED LEARNING WORKSHEET:

1.What is a Biogeochemical Cycle?

2.List the methods by which Nitrogen is fixed in the soil. Name the micro-organism responsible for the process, if any.

3. List the methods by Nitrogen is removed from the soil. Name the micro-organism responsible for the process, if any.

4.What do do you understand by denitrifictation, ammonifictaion and nitrification?

5.How do microorganism help in agriculture?
