



UNIVERSITY OF  
CAMBRIDGE

**cognia™**

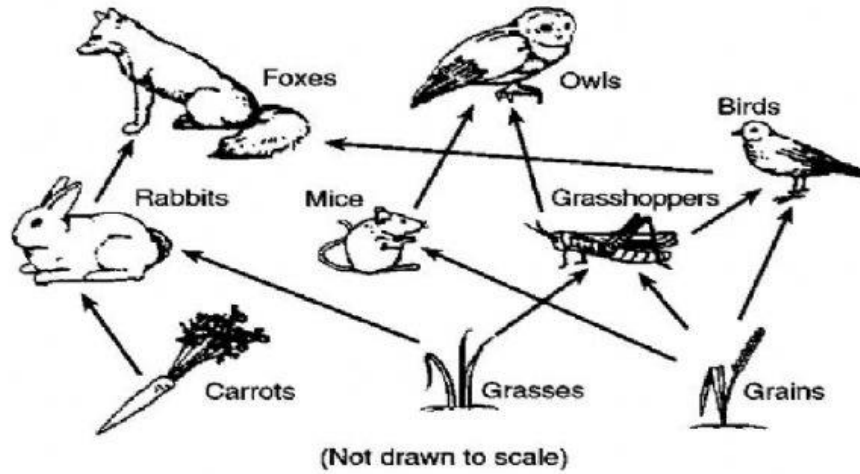


# GRADE – 7 REVISION

TR – ASMA BEGUM

 **LIVEWORKSHEETS**

3. Study the food web below.



Classify the organisms in the food web into the correct groups in the table below.

Prey	Predator	Prey and Predator

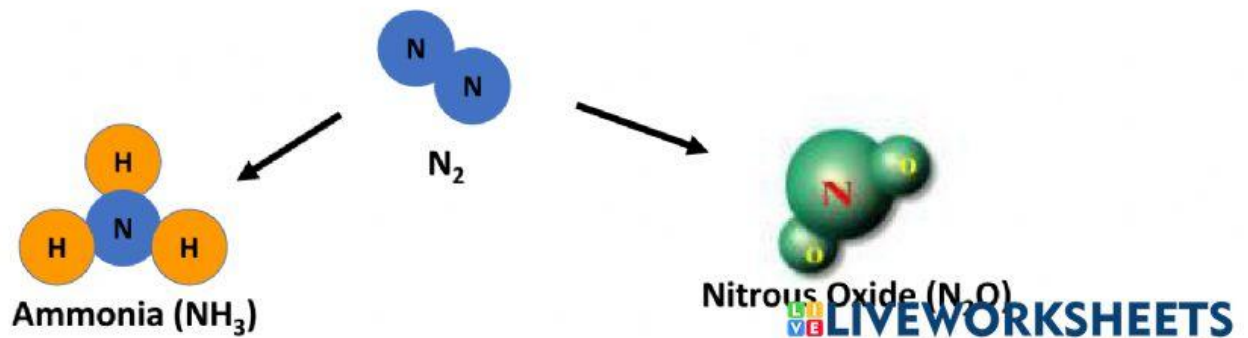
# What is Nitrogen?

- ❖ Nitrogen makes up about 78% of our atmosphere.
- ❖ Nitrogen in the atmosphere it is mostly in the form of \_\_\_\_\_, which is a compound that plants and animals cannot use.
- ❖ The process of converting nitrogen into compounds that can be used by plants and animals is called the \_\_\_\_\_.
- ❖ Nitrogen is an essential component of \_\_\_\_\_. The building blocks of life.
- ❖ There are four important processes of the Nitrogen cycle.

**1. Nitrogen fixation, 2. Ammonification, 3. Nitrification, and 4. Denitrification**

# Process 1: Nitrogen Fixation

\_\_\_\_\_ is the process in which the  $N_2$  compound in the atmosphere breaks and combines with other compounds. The nitrogen is \_\_\_\_\_ when it combines with \_\_\_\_\_ or \_\_\_\_\_.



# Three ways to “fix” Nitrogen

❖ Main process: Special \_\_\_\_\_ convert the nitrogen gas ( $N_2$ ) to ammonia ( $NH_3$ ), which only \_\_\_\_\_ plants can use (peas, beans).

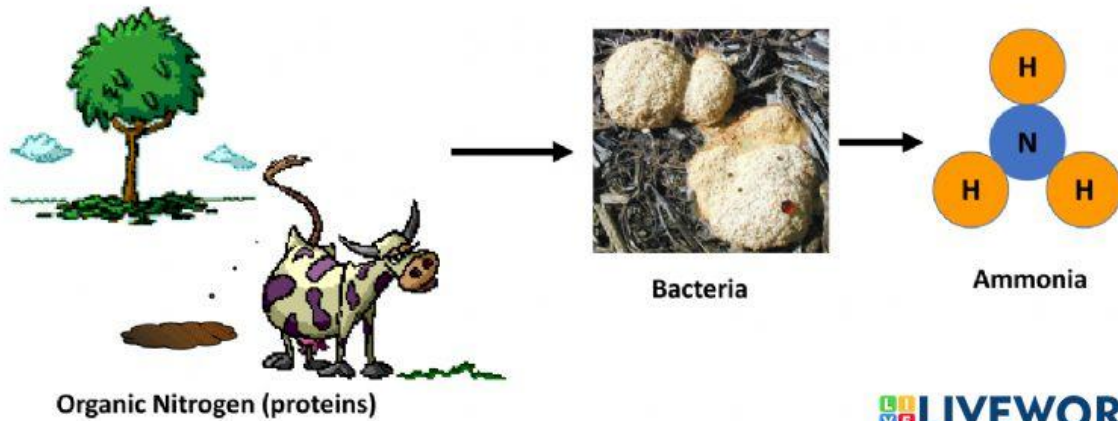


❖ \_\_\_\_\_ strikes convert  $N_2$  to oxides of nitrogen [ $N_2O$  or  $NO_3$ ].

❖ In Haber process atmospheric nitrogen can be converted to \_\_\_\_\_  $NH_3$  (a fertilizer)

## Process 2: Ammonification

\_\_\_\_\_ - After all the living organisms have used the \_\_\_\_\_, decomposer bacteria convert the nitrogen to \_\_\_\_\_.



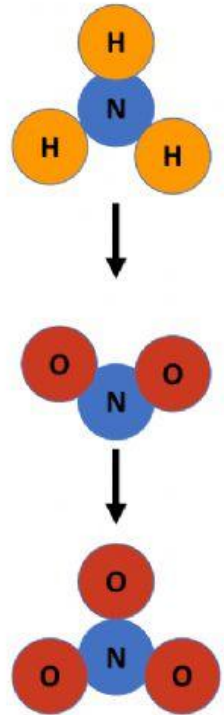
## Process 3: Nitrification

\_\_\_\_\_ is the process that converts ammonia ( $\text{NH}_3$ ) into \_\_\_\_\_ and \_\_\_\_\_ which most \_\_\_\_\_ can use.

Note: Ammonia comes from both \_\_\_\_\_ fixation and \_\_\_\_\_.

Which organism in soil can do it?

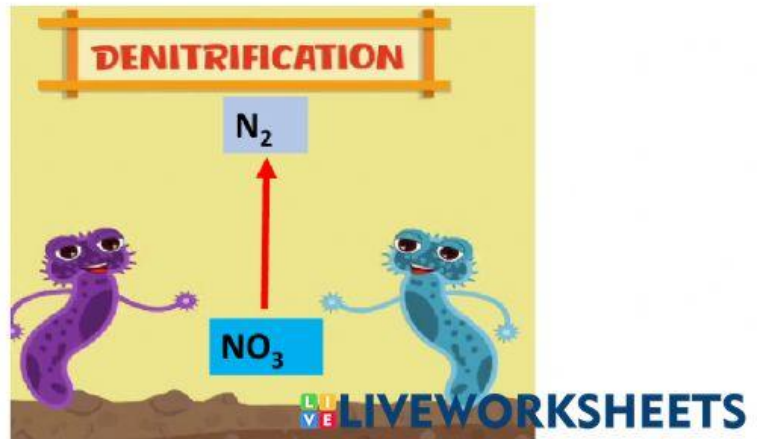
Ans: \_\_\_\_\_



## Process 4: Denitrification

\_\_\_\_\_ : Process in which nitrogen compounds  
\_\_\_\_\_ back into atmospheric nitrogen ( $N_2$  or  $N_2O$ ).

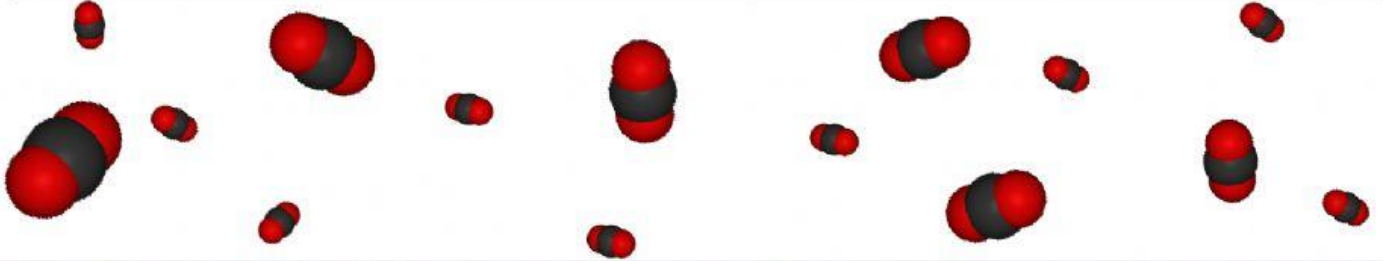
The main process is performed by \_\_\_\_\_  
in the soil.





# Why do biologists care about Carbon?

- \_\_\_\_\_ is the main constituent of all living cells.
- Living things need \_\_\_\_\_ to make most of the molecules in our body (fats, carbohydrates, nucleic acids (DNA) and proteins)



Carbon is abundant in the air as \_\_\_\_\_  $CO_2$ .