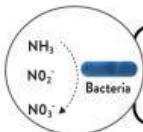




### Nitrogen Fixation

atmospheric nitrogen gas ( $N_2$ ) is converted into a compound such as \_\_\_\_\_

Plants get help from bacteria in the \_\_\_\_\_



### Nitrification

conversion of \_\_\_\_\_ into nitrites and then nitrates

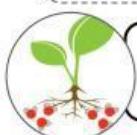
#### Nitrifying Bacteria

**Ammonia-nitrifying bacteria** - oxidizes ammonia ( $NH_3$ ), and leaves nitrites ( $NO_2^-$ ) as their waste product

• Use up ammonia and converts it to \_\_\_\_\_

**Nitrite-nitrifying bacteria** - oxidizes nitrites ( $NO_2^-$ ) and leaves nitrates ( $NO_3^-$ ) as their waste product

• Use up nitrites and converts it to \_\_\_\_\_

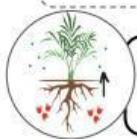


### Assimilation

an organism takes in nutrients that are then changed to make new \_\_\_\_\_

\_\_\_\_\_ are converted into \_\_\_\_\_ by two enzymes located in plant cells.

Ammonia is used to make things like proteins and \_\_\_\_\_.



### Denitrification

the conversion of \_\_\_\_\_ ( $NO_3^-$ ) into nitrogen gas ( $N_2$ )

**Denitrifying bacteria** - consume \_\_\_\_\_ as a source of energy, and release \_\_\_\_\_ ( $N_2$ ) as a waste product.

Nitrates are taken up by plants through their \_\_\_\_\_

Name \_\_\_\_\_

Word Bank: Nitrification Nitrogen Fixation Denitrification Assimilation

