

## STUDENT WORKSHEET: NITROGEN CYCLE

[https://www.youtube.com/watch?v=leHy-Y\\_8nRs](https://www.youtube.com/watch?v=leHy-Y_8nRs)

[http://www.pbslearningmedia.org/asset/lsp07\\_int\\_nitrogen/](http://www.pbslearningmedia.org/asset/lsp07_int_nitrogen/)

What do living things use nitrogen and phosphorous for?

What is the molecular formula for the pure gas form of Nitrogen?

Some organisms can “fix” nitrogen gas into other forms. What enzyme do these organisms use to break down the nitrogen gas?

Name 3 types of organisms that can convert Nitrogen gas into Ammonia?

An overview of nitrogen fixation is shown below. Label each molecule in the process.



In what other two ways can atmospheric nitrogen be broken into usable forms?

Denitrification is the process by which nitrate is converted to back into nitrogen and oxygen. This is the opposite process from nitrogen fixation, which is what allows this to be called a CYCLE.

Nitrate                      Nitrogen gas      Oxygen gas



Draw the nitrogen cycle:

