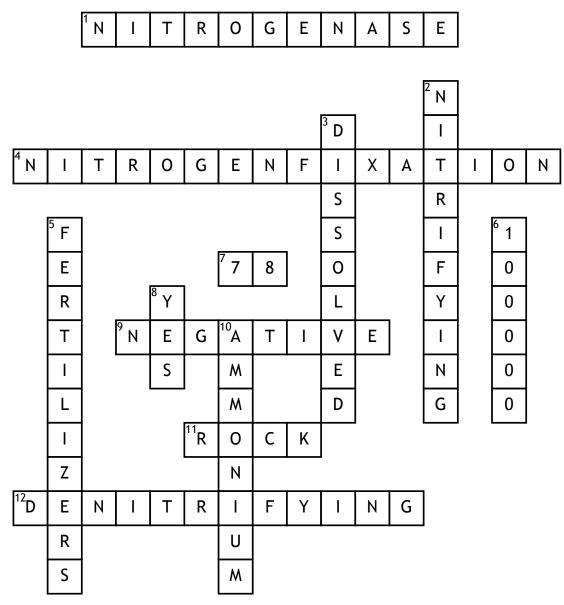
## Phosphorus and Nitrogen Cycles



## <u>Across</u>

 What is the only biological enzyme that can break Nitrogens triple bond?
 What process involves splitting nitrogen apart into a form that plants can utilize?
 What percent of the atmosphere does Nitrogen make up?

**9.** Fertilizers can have a \_\_\_\_\_ impact on ecosystems when large amounts of nitrogen and phosphorus are introduced.

11. Unlike many elements contained in the air, where is phosphorus commonly found?
12. What type of bacteria uses the enzyme nitrate reductase to metabolize nitrogen oxides and transform them back into nitrogen gas?

## <u>Down</u>

2. What type of bacteria takes ammonia and can convert it into nitrates and nitrites?
3. When water erodes phosphorus containing rocks, phosphates, are \_\_\_\_\_\_ into the water.

5. What man made invention requires phosphorus and nitrogen as part of its ingredients?
6. How long can a single atom of phosphorus be caught in a

**8.** Are the dissolved

phosphates in water able to be assimilated by plants? **10.** What form of nitrogen is used by plants?